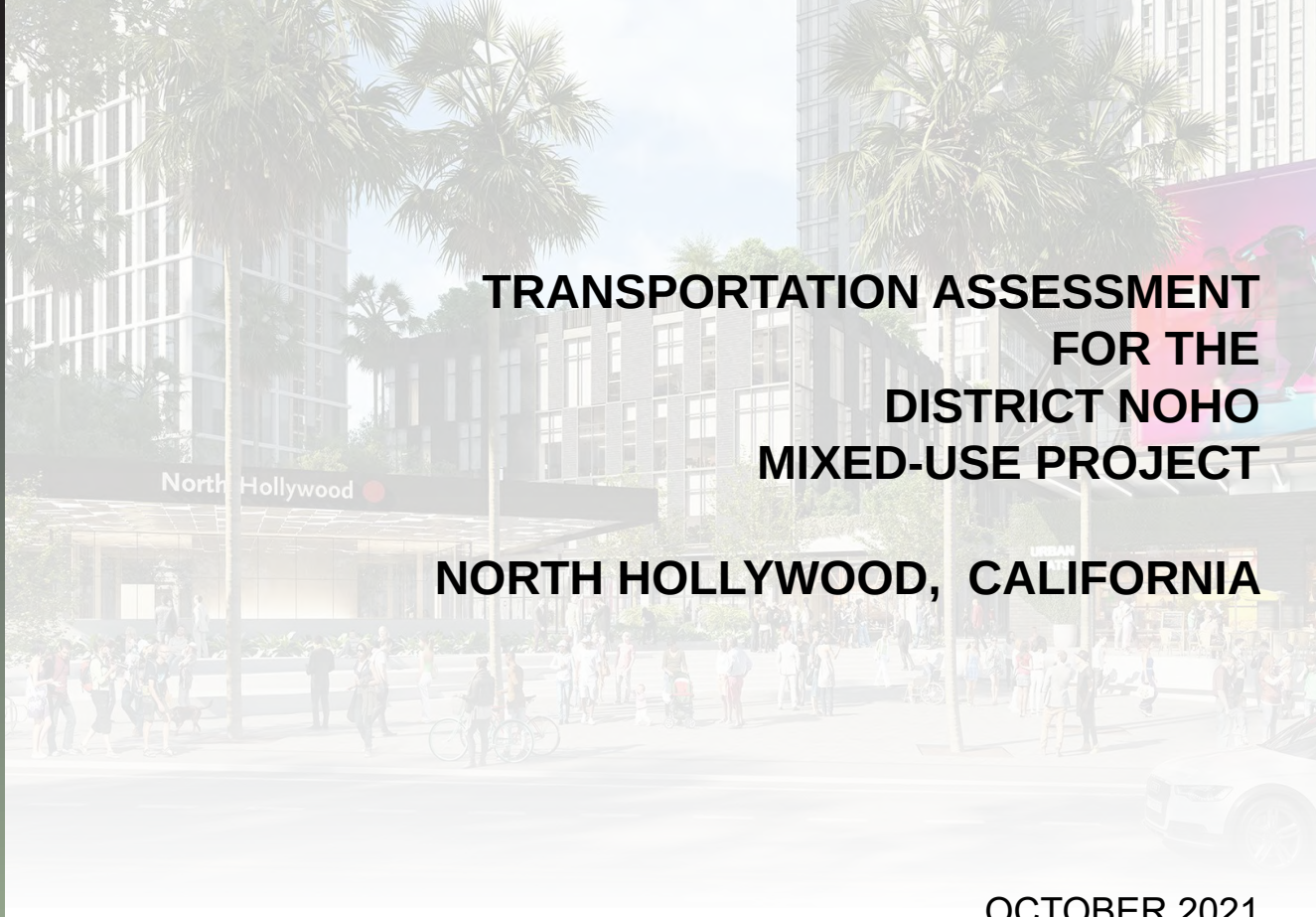
Appendix R

Transportation

Appendix R.1

Transportation Study



TRANSPORTATION ASSESSMENT FOR THE DISTRICT NOHO MIXED-USE PROJECT

NORTH HOLLYWOOD, CALIFORNIA

OCTOBER 2021

PREPARED FOR

NOHO DEVELOPMENT ASSOCIATES, LLC

PREPARED BY

Gibson transportation consulting, inc.

TRANSPORTATION ASSESSMENT FOR THE DISTRICT NOHO MIXED-USE PROJECT

NORTH HOLLYWOOD, CALIFORNIA

October 2021

Prepared for:

NOHO DEVELOPMENT ASSOCIATES, LLC

Prepared by:

GIBSON TRANSPORTATION CONSULTING, INC.
555 W. 5th Street, Suite 3375
Los Angeles, California 90013
(213) 683-0088

Ref: J1752

Table of Contents

Executive Summary

1. Introduction 1
   - Project Description 1
   - Analysis Methodology 10
   - Organization of Report 11

2. Project Context 23
   - Existing Street System 23
   - Pedestrian, Bicycle, and Transit Facilities 27
   - Public Transit Service 28
   - Regional Transportation 28
   - Future Cumulative Conditions 29

3. Transportation Assessment Screening 52
   - Project Trip Generation 52
   - Screening for CEQA Analyses 52
   - Screening for Non-CEQA Analyses 53

4. CEQA Transportation Threshold T-1: Consistency with Policy Analysis 57
   - Significance Criteria 57
   - Plans, Programs, Ordinances, and Policies 58
   - Summary 67

5. CEQA Transportation Threshold T-2.1: VMT Analysis 68
   - VMT Guidelines 68
   - VMT Analysis Methodology 70
   - Project VMT Analysis 75
   - Cumulative VMT Analysis 81

6. CEQA Transportation Threshold T-3: Geometric Design and Land Use Hazards Analysis 87
   - Significance Criteria 87
   - Driveway Design Guidelines 88
   - Project Hazards Analysis 89
   - Cumulative Analysis 95

7. CEQA Freeway Safety Analysis 99
   - City Analysis Methodology 99
   - City Freeway Safety Analysis 100
   - Caltrans Safety Review 101

8. Non-CEQA Analysis: Pedestrian, Bicycle, and Transit Access Assessment 105
   - Existing Infrastructure 105
   - Project Effects on Infrastructure 107
   - Project Effects on Volume 111
   - Project Features and Recommended Actions 112

Table of Contents (cont.)

9. Non-CEQA Analysis: Project Access, Safety, and Circulation Evaluation 118
   - Analysis Overview 118
   - Operational Evaluation Overview 119
   - Project Traffic 119
   - Existing and Future Traffic Volumes 123
   - Operating Conditions 126
   - Passenger Loading Evaluation 132
   - Proposed Improvements and Recommended Actions 134

10. Non-CEQA Analysis: Project Construction Assessment 200
   - Evaluation Criteria 200
   - Project Setting 201
   - Project Construction Details 202
   - Effects of Project Construction 206
   - Construction Management Plan 210

11. Non- CEQA Analysis: Residential Street Cut-Through Analysis 214
   - Residential Street Segment Selection 214
   - Analysis Methodology 216
   - Residential Street Cut-Through Analysis 217
   - Recommended Actions 223

References

Appendix A: VMT Calculator Output
Appendix B: CEQA Threshold T-1 Tables
Appendix C: Los Angeles Municipal Code Parking Requirements
Appendix D: Pedestrian Trip Generation Estimates
Appendix E: Highway Capacity Manual Worksheets
Appendix F: Memorandum of Understanding
Appendix G: Traffic Volume Adjustments
Appendix H: Traffic Counts
Appendix I: Intersection Lane Configurations
Appendix J: Transportation Improvement Memorandum
Appendix K: Construction Forecasts

List of Figures

NO.

1	Project Site Plan Overview	12
2	Conceptual Ground-Level Project Site Plan	13
3	Conceptual Plan for Consolidated Transit Center	14
4	Vehicular Site Access	15
5	Pedestrian Site Access	16
6	Proposed Bicycle Facilities	17
7	Roadway Designations within Study Area	33
8	Roadway Modal Priorities & High Injury Network	34
9	Pedestrian Destinations within Study Area	35
10	Pedestrian, Bicycle, and Transit Infrastructure within Study Area	36
11	Existing Transit Service within Study Area	39
12	Locations of Related Projects	40
13	Estimated Project-Related Pedestrian Activity	96
14	Safe Routes to School Map for Lankershim Elementary School	97
15	Regional Project Trip Distribution – Residential Trips	138
16	Regional Project Trip Distribution – Office Trips	139
17	Regional Project Trip Distribution – Retail and Restaurant Trips	140
18	Analyzed Intersections	141
19	Project Phase 1 Only Peak Hour Traffic Volumes	142
20	Project Full Buildout Only Peak Hour Traffic Volumes	146
21	Existing Conditions (Year 2020) Peak Hour Traffic Volumes	150
22	Related Project Only Peak Hour Traffic Volumes	154
23	Future without Project Conditions (Year 2026) Peak Hour Traffic Volumes	158
24	Future without Project Conditions (Year 2037) Peak Hour Traffic Volumes	162
25	Future with Phase 1 Conditions (Year 2026) Peak Hour Traffic Volumes	166
26	Future with Full Buildout Conditions (Year 2037) Peak Hour Traffic Volumes	170
27	Anticipated Sidewalk and Lane Closures	212
28	Residential Neighborhoods and Street Segments	225

List of Tables

NO.

1	Project Assessor Parcel Numbers	18
2	Project Development Summary	19
3	Mobility Plan 2035 Street Designations	20
4	Roadway Dedications, Vacations, and Waivers	21
5	Existing Sidewalk Segment Conditions	41
6	Locations of Bus Stops in Project Vicinity	47
7	Existing Transit Service within Study Area	48
8	Related Projects	49
9	Transportation Assessment Screening – CEQA Analyses	54
10	Transportation Assessment Screening –Non- CEQA Analyses	55
11	Project VMT Analysis	83
12	VMT Analysis for Individual Project Land Uses - Phase 1	84
13	VMT Analysis for Individual Project Land Uses – Full Buildout	85
14	Project VMT Analysis with Land Use Exchange	86
15	Project Vehicular Access Summary	98
16	Freeway Off-Ramp Queuing Safety Analysis – Year 2026	103
17	Freeway Off-Ramp Queuing Safety Analysis – Year 2037	104
18	Project Effects on Infrastructure	114
19	Project Effects on Volumes	117
20	Project Trip Generation Rates	174
21	Project Trip Generation Estimates by Block	175
22	Project Trip Generation Summary	180
23	Project Trip Generation with Land Uses Exchange	181
24	Intersections Proposed for Analysis	182
25	Intersection Level of Service Definitions	183
26	Existing Conditions (Year 2020) Intersection Levels of Service	184
27	Future Conditions (Year 2026) Intersection Levels of Service	187
28	Future Conditions (Year 2037) Intersection Levels of Service	190
29	Future Conditions (Year 2026) Intersection Queues	193
30	Future Conditions (Year 2037) Intersection Queues	196
31	Project Construction Schedule	213
32	Residential Street Cut-Through Traffic Estimates - Northwest Neighborhood	226
33	Residential Street Cut-Through Traffic Estimates - Northeast Neighborhood	227
34	Residential Street Cut-Through Traffic Estimates - Southeast Neighborhood	228

Executive Summary

This report presents the transportation assessment for the proposed development of a transit-oriented mixed-use project (Project) located at and around the Los Angeles County Metropolitan Transportation Authority (Metro) North Hollywood Metro Station (Project Site) in the North Hollywood community of the City of Los Angeles (City). The analyses conducted in this report comply with requirements set forth by the Los Angeles Department of Transportation (LADOT).

PROJECT DESCRIPTION

NoHo Development Associates, LLC (Applicant) proposes to develop four distinct Parcels characterized as a series of Blocks, along with several private streets, as shown in Figure ES-1.

- Parcel 1, on the northeast corner of Lankershim Boulevard & Chandler Boulevard and comprising Blocks 1 through 6 and Block 0 East, would include primarily residential buildings, several with ground-floor retail and restaurant uses, and some office space. It would be divided by private extensions of Klump Avenue and Elmer Avenue and a new private east-west street known as District Way.
- Parcel 2, on the southwest corner of Lankershim Boulevard & Chandler Boulevard and comprising Block 8, would include an office building with ground-floor retail and restaurant uses.
- Parcel 3 on the northwest corner of Lankershim Boulevard & Chandler Boulevard and comprising Block 0 West, would construct a new Consolidated Transit Center serving the Metro G (Orange) Line busway and local and regional bus routes, and providing portals to the Metro B (Red) Line subway.
- Parcel 4 on the northeast corner of Tujunga Avenue & Chandler Boulevard (North) and comprising Block 7, would include affordable housing.

In total, the Project would consist of up to 1,527 residential units (including 1,216 market-rate units and 311 affordable units), 580,374 square feet (sf) of office space, and approximately 105,125 sf of local-serving retail and restaurant uses. The Project includes a potential land use exchange in which up to 75,000 sf of retail and restaurant uses could be replaced with an equal amount of office space. The Project's proposed land uses are summarized by Block in Table ES-1.

The Project would provide up to 3,313 vehicle parking spaces for new development and also proposes to provide at least 750 parking spaces for Metro users to replace parking spaces displaced by the Project on Parcel 1[1][2]. As assumed in this report, the Metro parking may be provided at the West Lot, located on Chandler Boulevard (North) to the west of Tujunga Avenue, and the East Lot, located on Chandler Boulevard between Fair Avenue and Vineland Avenue. This analysis conservatively assumes development of up to 1,189 parking spaces for Metro users, including 274 on-site spaces and 915 off-site spaces between the West Lot and East Lot. The Project would also provide up to 1,158 bicycle parking spaces and secure bicycle parking for at least 100 bicycles at one or more Metro Bike Hubs.

The Project would provide vehicular access to each of the Blocks as necessary. No Project vehicular driveways would be provided from Lankershim Boulevard or Chandler Boulevard (with the exception of East Lot and West Lot which have limited driveway options). Pedestrian and bicycle access would be provided separate from vehicular access at nearly all Blocks. The Project also proposes passenger loading areas on Lankershim Boulevard, Chandler Boulevard, and on District Way.

The Project would provide sidewalks wide enough to meet the requirements of *Mobility Plan 2035: An Element of the General Plan* (Los Angeles Department of City Planning, September 2016) (Mobility Plan 2035) adjacent to all Blocks to promote a high-quality pedestrian experience. It also proposes several new crosswalks, including across Lankershim Boulevard at Chandler Boulevard (North), and across Tujunga Avenue at Chandler Boulevard (North) and Chandler Boulevard (South).

The Project proposes to implement a two-way bicycle route on District Way, which is a low-volume shared street accommodating vehicles, pedestrians, and bicyclists, and two-way Class IV bicycle lanes on Fair Avenue between District Way and Chandler Boulevard. It would also allow for the installation of upgraded Class IV bicycle lanes on westbound Chandler Boulevard, northbound

[1] It is at Metro's discretion whether to replace Metro parking displaced by the Project. The Metro parking provisions described above reflect Metro's current plans.

[2] The Project's potential construction of Metro parking at the East Lot and/or West Lot are two of several potential Metro projects that the Project may implement on behalf of Metro during Project construction. The others include an extension of the Project's proposed two-way Class IV protected bicycle lane on Fair Avenue north to Cumpston Avenue and vehicle gates on Tujunga Avenue where the Metro G (Orange) Line crosses as part of the Metro Orange Line Improvements Project.

Lankershim Boulevard between Chandler Boulevard and Chandler Boulevard (North), and westbound Chandler Boulevard (North). Plans for these facilities are not finalized, and Metro, LADOT, and the Applicant will continue to coordinate these improvements.

CEQA TRANSPORTATION THRESHOLDS

The Project meets the City's screening criteria requiring the following four California Environmental Quality Act (CEQA) transportation thresholds:

- Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies
- Threshold T-2.1: Causing Substantial Vehicle Miles Traveled (VMT)
- Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use
- Freeway Safety Analysis

Threshold T-1: Consistency with Policy Analysis

Threshold T-1 reviews whether the Project would conflict with any adopted programs, plans, ordinances, or policies addressing transportation. The Project was found not to conflict with, and in many cases to actively support, the City's programs, plans, ordinances, and policies addressing the circulation system. Therefore, the Project would not result in a significant impact under CEQA Threshold T-1 and no mitigation measures are required. When considered along with other developments in the area, the Project was similarly found not to result in cumulatively significant impacts under Threshold T-1.

Threshold T-2.1: VMT Analysis

The Project's VMT analysis was conducted using the City's VMT Calculator tool, which calculates daily VMT per capita and VMT per employee while factoring in area-specific travel behaviors and trip lengths and anticipated internal trip-making between the Project's various land uses. The

Project was found not to exceed any of the City's established thresholds of significance for VMT, and, therefore, no mitigation measures are required. The Project would also not result in a cumulatively significant impact under Threshold T-2.1.

Nonetheless, The Project would incorporate a number of transportation demand management (TDM) measures, including some inherent in the Project design and some that would be incorporated into the Project's operation:

- Reduced parking supply
- Promotions and marketing
- Pedestrian network improvements
- Traffic calming improvements
- Implement on-street bicycle facilities
- Bicycle parking per the Los Angeles Municipal Code (LAMC)

These TDM measures would further reduce Project VMT per capita and VMT per employee.

Threshold T-3: Geometric Design and Land Use Hazards Analysis

The Geometric Design and Land Use Hazards Analysis seeks to identify potential safety conflicts between vehicles, pedestrians, and bicycles as well as operational delays or capacity reductions resulting from the design or placement of Project access points. The Project access points were designed to comply as much as feasible with City design guidelines from LADOT's *Manual of Policies and Procedures* (December 2008, Updated 2020) (MPP) Section 321:

- The Project driveways are all located on non-arterial streets, though access to the East Lot and West Lot would be to Chandler Boulevard and Chandler Boulevard (North), respectively, which are the only options for access to those parcels.

- The driveways are spaced apart in excess of MPP guidelines whenever possible. On some low-volume streets, passenger vehicle access is placed adjacent to commercial loading access, but the safety impacts were found to be insignificant.

- The driveway widths are generally at or below the maximum width in the MPP.

- There would be no unusual obstacles to clear visibility for drivers entering and exiting the driveways.
- Separate bicycle and pedestrian access is provided.

Based on these factors and the general pedestrian, bicycle, and transit orientation of the Project, no significant impact would occur, and no mitigation measures are required. Similarly, the Project would not contribute to a cumulatively significant impact.

Freeway Safety Analysis

The City requires that freeway off-ramps be analyzed for safety impacts related to vehicle queues if a project adds at least 25 peak hour trips to the off-ramp. The Project would add 25 peak hour trips to several off-ramps within the Study Area. An analysis of ramp queuing based on future traffic conditions with the Project in operation indicated that the City's thresholds of significance would not be exceeded and, therefore, the Project would not result in a significant safety impact.

NON-CEQA TRANSPORTATION ANALYSES

This report also includes four types of non-CEQA transportation analysis:

- Pedestrian, Bicycle, and Transit Access Assessment
- Project Access, Safety, and Circulation Evaluation
- Project Construction
- Residential Street Cut-Through Analysis

Pedestrian, Bicycle, and Transit Access Assessment

This section assesses the Project's effects on pedestrian, bicycle, and transit circulation in the vicinity of the Project Site. Generally, the Project would provide substantial improvements to pedestrian, bicycle, and transit facilities. It would generate additional pedestrian, bicycle, and

transit activity, but the existing and proposed facilities would be sufficient to accommodate such increase in activity.

Project Access, Safety, and Circulation Evaluation

This section provides a comprehensive analysis of the Project's effects on intersection delay and queuing in the vicinity of the Project Site. The Project is estimated to generate a total of 1,354 trips during the morning peak hour and 1,432 trips during the afternoon peak hour when complete. These trips would travel throughout the roadway system.

A total of 39 intersections were analyzed in detail. Traffic counts were collected in the Fall of 2019, representing Existing Conditions. Future Conditions traffic volumes were estimated by applying annual growth factors to Year 2037 (the latest anticipated completion of the Project) and adding traffic from other proposed development projects in the vicinity ("Related Projects"). Under Future without Project Conditions, a total of 30 of the 39 intersections were forecast to operate at level of service (LOS) D or better (i.e., under capacity) during both the morning and afternoon peak hours. With the addition of Project traffic, six additional intersections were forecast to operate at LOS E or F (i.e., at or above capacity). The Project additionally would add to vehicle queuing at many of the analyzed intersections, and at some would cause or exacerbate queues exceeding available turn pockets.

This section also concluded that the Project proposed passenger loading areas are sufficient to accommodate demand for both Project uses and the Consolidated Transit Center.

Project Construction

The Project's construction is estimated to occur over a period of years with varying levels of intensity. While construction would result in some disruption to regular operations for vehicles, pedestrians, bicyclists, and transit riders for varying lengths of time, a Construction Management Plan would be developed to minimize the effects of construction and to ensure adequate safety and notification measures were maintained throughout the construction period.

Residential Street Cut-Through Analysis

The residential street cut-through analysis sought to identify the potential for the Project to cause traffic to divert from arterial streets onto local residential streets. LADOT identified thresholds for an excessive burden on a residential street.

This report analyzed local residential streets in three neighborhoods near the Project Site. It identified five streets in two neighborhoods where the Project could exceed the minimum threshold for an excessive burden. The Applicant would fund and coordinate implementation of a neighborhood traffic management plan (NTMP) for the two affected neighborhoods in the amount of $200,000 (up to $100,000 per affected neighborhood).

TRANSPORTATION IMPROVEMENTS

The Project would implement a variety of improvements to the transportation system, including some that are inherent in the Project's design and operation and others that were identified as a result of the analyses in this report.

Project Design Features

- Consolidated Transit Center: The Project would design and construct the Consolidated Transit Center to integrate bus and rail services at one purpose-built location. The Project would also construct new Metro parking to replace the existing supply removed from Parcel 1.

- New and Upgraded Pedestrian Infrastructure: The Project would install or upgrade pedestrian infrastructure at several locations. All public sidewalks adjacent to the Project Site would be widened where necessary to meet or exceed the width standards from Mobility Plan 2035. The Project would repaint existing crosswalks that would be affected by Project changes to curbs and would install new crosswalks at the following locations:

    - Across the south leg of Tujunga Avenue & Chandler Boulevard (North)
    - Across the north leg of Tujunga Avenue & Chandler Boulevard (South)
    - Across the south leg of Lankershim Boulevard & Chandler Boulevard (North)
    - Across the west leg of District Way & Fair Avenue

- New Bicycle Infrastructure: The Project proposes to install a new two-way bicycle route through the Project Site on District Way. It would also improve the westbound bicycle lane on Chandler Boulevard (North) between Tujunga Avenue and Lankershim Boulevard to a Class IV facility separated by bollards and would install a bicycle crossing signal across Lankershim Boulevard at Chandler Boulevard (North). The Project would install a new two-way Class IV facility separated by bollards on the east side of Fair Avenue between District Way and Chandler Boulevard. The Project would provide bicycle parking at each block along with parking for Metro Bike Hubs and Metro's Bikeshare or similar first mile / last mile transit options.

- TDM Program: The Project would incorporate various measures to encourage alternative transportation and reduce VMT and vehicle trips, including:

    - Reduced parking supply
    - Promotions and marketing
    - Pedestrian network improvements
    - Traffic calming improvements
    - Implement on-street bicycle facilities
    - Bicycle parking per LAMC

- Passenger Loading Areas: The Project proposes to provide on-street passenger loading areas on Lankershim Boulevard, Chandler Boulevard, and District Way.

Additional Improvements to Address Project Traffic Effects

Based on the results of the residential street cut-through analysis, the Project would provide $100,000 for an NTMP to provide traffic calming measures on Beck Avenue, Camelia Avenue, Cumpston Street, Blakeslee Avenue, and Weddington Street.

The Project would prepare a detailed Construction Management Plan, including street closure information, a detour plan, haul routes, and a staging plan, to minimize the effects of Project construction on the surrounding area.

Based on the results of the intersection operational analysis, the Project would implement various improvements, subject to the agreement detailed in Appendix J:

- Closed Circuit Television monitoring cameras and connections to the City's Automated Traffic Surveillance and Control system at:

    - Colfax Avenue & Burbank Boulevard
    - Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard
    - Colfax Avenue & Chandler Boulevard

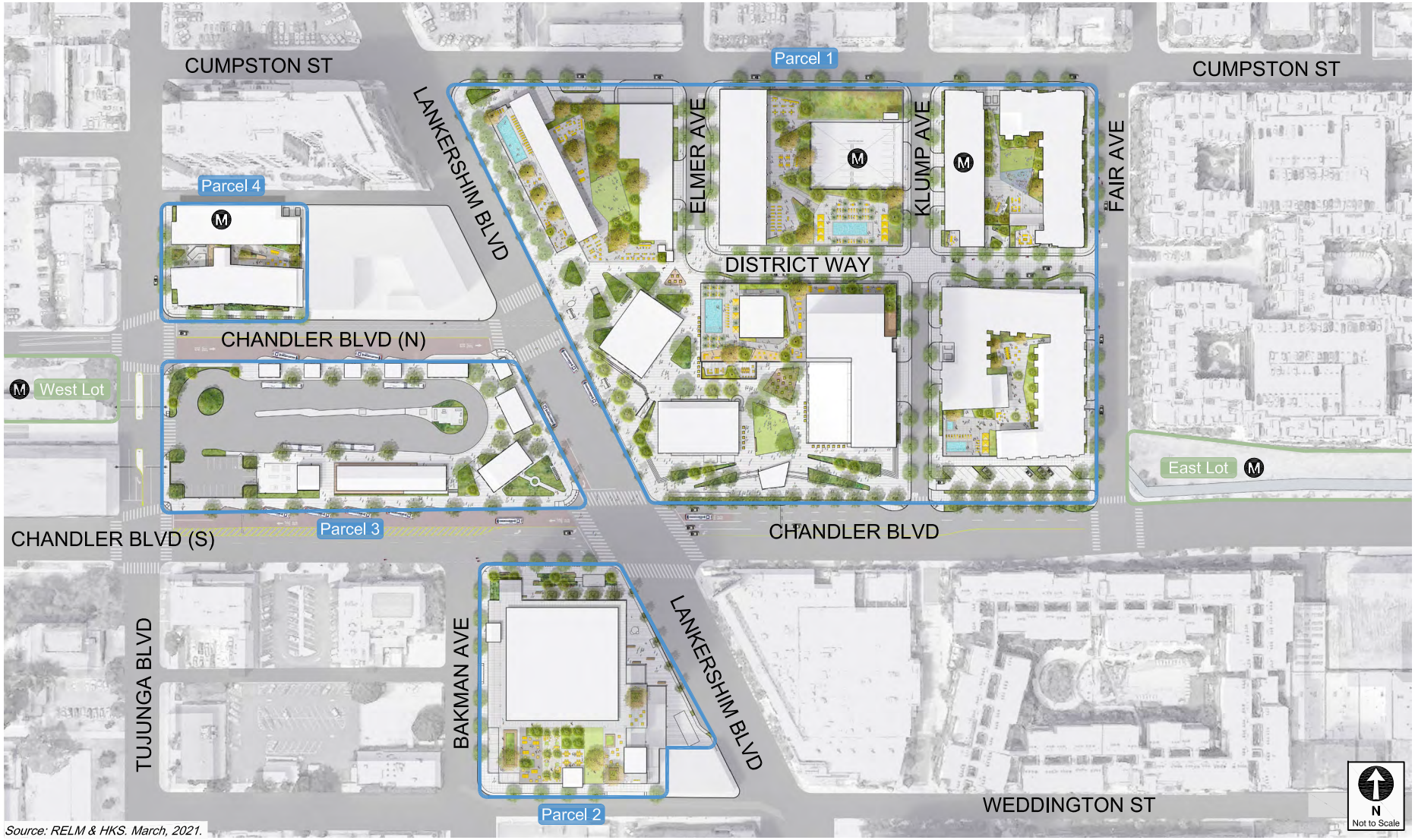
- Lankershim Boulevard & Magnolia Boulevard

- GridSmart pedestrian safety crossing controls providing modified signal timing to improve pedestrian safety at:
  - Lankershim Boulevard & Cumpston Street
  - Lankershim Boulevard & Chandler Boulevard (North)
  - Lankershim Boulevard & Chandler Boulevard

- Protected-permissive left-turn signal phasing at:
  - The southbound left turn from Lankershim Boulevard to Cumpston Street
  - The westbound left turn from Magnolia Boulevard to SR 170 southbound

- Upgraded Americans with Disabilities Act compliant pedestrian ramps at the intersection of Bakman Avenue & Weddington Street

- An extended northbound left-turn pocket from Lankershim Boulevard to Burbank Boulevard



Source: RELM & HKS. March, 2021.

LEGEND

Project Site Parcels

Potential Off-Site Metro Parking Areas

Proposed Metro Parking

PROJECT SITE PLAN OVERVIEW

FIGURE ES-1

TABLE ES-1
PROJECT DEVELOPMENT SUMMARY

Description	Block 0 West	Block 0 East	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8 [a]	West Lot	East Lot	Total
Land Uses													
Affordable Housing *(units)*	-	-	-	-	160	-	-	-	151	-	-	-	**311**
Market-Rate Housing *Mid-Rise (units)*	-	-	-	-	-	194	-	-	-	-	-	-	**194**
Market-Rate Housing *High-Rise (units)*	-	-	313	309	-	-	400	-	-	-	-	-	**1,022**
Office [b, c] *(square feet)*	709	-	-	-	-	-	91,345	-	-	488,320	-	-	**580,374**
Retail [c] *(square feet)*	1,643	-	10,507	2,975	-	12,425	2,575	-	-	0	-	-	**30,125**
Restaurant [c] *(square feet)*	2,839	3,658	7,985	-	-	13,325	15,227	13,024	-	18,942	-	-	**75,000**
Parking													
Project Parking Spaces	2	-	532	389	90	323	798	-	5	1,174	-	-	**3,313**
Metro Parking Spaces	-	-	-	145	40	-	-	-	89	-	520	395	**1,189**
Project Bicycle Parking Spaces	-	-	264	172	78	152	260	-	110	122	-	-	**1,158**
Metro Bike Hub Spaces [d]	-	40	-	-	-	-	-	-	66	-	-	-	**106**

Notes:

[a] For future flexibility, 10,734 sf of retail space was analyzed as restaurant (a higher trip generator) in Blocks 4 and 8.

[b] Block 8 office space includes potential future conversion of 124 parking spaces into 87,300 sf of office space, in a hypothethical case in which office parking demand permanently dropped. This scenario would require subsequent City approval for a reduced parking supply.

[c] The Project may exchange up to 75,000 sf of retail and restaurant uses for 75,000 sf of office uses.

[d] Metro Bike Hubs provide secure bicycle parking for transit riders.

Chapter 1
Introduction

This report presents the transportation assessment for the proposed development of a mixed-use transit-oriented development project (Project) located at and around the Los Angeles County Metropolitan Transportation Authority (Metro) North Hollywood Metro Station (Project Site) in the North Hollywood community of the City of Los Angeles (City). The methodology and base assumptions used in the analysis were established in consultation with the Los Angeles Department of Transportation (LADOT) and in conformance with *Transportation Assessment Guidelines* (LADOT, July 2020) (TAG).

PROJECT DESCRIPTION

Project Site Information

The Project Applicant is NoHo Development Associates, LLC. Entitlement applications were filed with the Los Angeles Department of City Planning (LADCP) on December 5, 2019 and have been assigned Case Numbers CPC-2019-7239-GPAJ-VZCJ-HD-SP-SN-BL; CPC-2019-7240-DA; VTT-82868; and ENV-2019-7241-EIR. The Project Site is located in City Council District 2. In total, the Project Site is approximately 15.90 acres over four distinct parcel groups:

- Parcel 1, approximately 10.70 acres, bounded by Cumpston Street to the north, Fair Avenue to the east, Chandler Boulevard[3] to the south, and Lankershim Boulevard to the west
- Parcel 2, approximately 1.80 acres, bounded by Chandler Boulevard to the north, Lankershim Boulevard to the east, Weddington Street to the south, and Bakman Avenue to the west

[3] For the purposes of this report, Chandler Boulevard is referred to as Chandler Boulevard east of Lankershim Boulevard. West of Lankershim Boulevard, where Chandler Boulevard has north and south roadways, it is referred to as Chandler Boulevard (North) and Chandler Boulevard (South).

- Parcel 3, approximately 2.70 acres, bounded by Chandler Boulevard (North) to the north, Lankershim Boulevard to the east, Chandler Boulevard (South) to the south, and Tujunga Avenue to the west

- Parcel 4, approximately 0.70 acres, bounded by an alley to the north, private property to the east, Chandler Boulevard (North) to the south, and Tujunga Avenue to the west.

The Project may also be supported by two off-site parcels that may be developed by Metro with dedicated Metro parking areas:

- West Lot, approximately 1.00 acres, bounded by Chandler Boulevard (North) to the north, Tujunga Avenue to the east, the Metro G (Orange) Line busway[4] to the south, and private property to the west

- East Lot, approximately 1.80 acres, bounded by private property to the north, Vineland Avenue to the east, Chandler Boulevard to the south, and Fair Avenue to the west

The locations of the Project Site and off-site parcels are shown in Figure 1. The Project Site is assigned a variety of Assessor Parcel Numbers in the Los Angeles County Assessor's records. These are summarized in Table 1.

The Project would be constructed on a series of Blocks. It would also include private extensions of Elmer Avenue and Klump Avenue and the installation of a new east-west publicly accessible private street, District Way, through Parcel 1. A conceptual ground-level Project Site plan is shown in Figure 2.

Project Land Uses

The Applicant proposes to develop a mixed-use transit-oriented development consisting of up to 1,527 residential units (including 1,216 market-rate units and 311 affordable units) and 685,499 square feet (sf) of commercial uses comprised of retail, restaurant, and office uses. The commercial square footage would consist of approximately 105,125 sf of local-serving retail and restaurant (assumed to be up to 30,125 sf of retail and 75,000 sf of restaurant for the purposes

[4] The Metro Orange Line was renamed Metro G Line in 2019. This report uses Metro's transitional naming convention of Metro G (Orange) Line.

of this assessment) and 580,374 sf of office[5]. The Project's proposed land uses are summarized by Block in Table 2.

Alternatively, the Project includes a potential land use exchange of up to 75,000 sf of retail and restaurant uses for up to 75,000 sf of office space should future market conditions warrant. In this scenario, there could be up to 655,374 sf of office space and 30,125 sf of retail and restaurant space (assumed to be all restaurant space for the purposes of maintaining a conservative analysis). This exchange would not alter the physical design of buildings nor the distribution of square footage within the various Blocks, as space that is currently contemplated as retail or restaurant would instead be used as office.

Consolidated Transit Center

The Project would also construct a new Consolidated Transit Center serving both the Metro G (Orange) Line busway and the other local and regional bus routes that stop at the North Hollywood Metro Station. It would maintain two existing portals (one on each side of Lankershim Boulevard) to the Metro B (Red) Line subway[6] and construct one new portal on the west side of Lankershim Boulevard. The Metro B (Red) Line runs beneath Lankershim Boulevard and provides service to Hollywood, Koreatown, downtown Los Angeles, and Union Station. New above-ground parking structures for transit users may also be constructed on the West and East Lots[7].

The Consolidated Transit Center would be constructed on Block 0 West over the location of the existing Metro G (Orange) Line terminus. When completed, the Consolidated Transit Center would not only continue to serve the Metro G (Orange) Line, but it would also provide 16 dedicated bus loading spaces to serve LADOT Commuter Express and other local and regional bus lines

[5] This total includes 87,300 sf of office floor area that could be created through the conversion of four levels of parking structure on Block 8 to office uses. While this floor area is not reflected in the present design of Block 8, the parking structure on that Block is designed to be convertible to habitable uses. In order to provide the most conservative analysis reflecting an eventual conversion of that parking area to office uses, this report includes this floor area throughout its analysis.

[6] The Metro Red Line was renamed the Metro B Line in 2019. This report uses Metro's transitional naming convention of Metro B (Red) Line.

[7] For the purposes of this report, it was conservatively assumed that the required parking spaces for Metro users would be provided on the West and East Lots. Should additional parking for transit users be provided within the Project Blocks, parking at the West Lot or East Lot may not be necessary.

around the perimeter of the property. Chandler Boulevard (North) would be modified to allow general traffic to travel westbound only with a bus-only lane in the eastbound direction. Chandler Boulevard (South) would be modified to allow general traffic to travel eastbound only with a bus-only lane in the westbound direction. The Consolidated Transit Center would also provide six off-street bus layover spaces to allow drivers to take breaks. Including retention of the historic Lankershim Depot, which was restored and reopened as a Groundwork Coffee store in 2017, the Consolidated Transit Center would provide approximately 2,839 sf of restaurant uses. It would also provide 1,643 sf of retail space and a 709 sf security office. The Consolidated Transit Center, which was designed in consultation with Metro[8], is shown in Figure 3.

Open Space

The Project includes approximately 210,700 sf of open space. In particular, three areas of the Project Site provide seating near commercial areas to encourage dining, shopping, and socializing. The Promenade would provide approximately 31,600 sf of open space on Parcel 1 along the edges of the intersection of Lankershim Boulevard & Chandler Boulevard. The Transit Square would provide approximately 40,600 sf of open space within Block 0 East on the east side of Lankershim Boulevard. The NoHo Square would provide approximately 19,100 sf of open space adjacent to the Promenade and would include a lawn and tree canopy. Together, these open areas would provide an attractive, safe, and convenient place for interaction between residents, office workers, transit riders, and pedestrians.

Parking

The Project would provide up to 3,313 vehicle parking spaces for new development. The parking spaces for new development would primarily be provided in subterranean and, in some cases, podium structures, including under residential and office buildings. The Project would also provide up to 274 vehicle parking spaces for Metro users on-site as part of a commitment to provide at least 750 parking spaces for Metro to replace the spaces displaced by the Project. Additional Metro parking spaces that may be provided off-site would primarily be provided in a two-level

[8] The Project would be reviewed and approved by the Metro Board of Directors following entitlement.

parking structure at the East Lot and a four-level parking structure at the West Lot. While 750 Metro parking spaces ultimately will be provided, since the final location of those spaces is not yet determined, this analysis conservatively assumes development of up to 1,189 parking spaces for Metro users, including 274 on-site spaces and 915 off-site spaces between the East Lot and West Lot.[9] The parking spaces provided at each Block are summarized in Table 2.

The Project would also provide a total of up to 1,158 bicycle parking spaces for Project uses (970 long-term and 188 short-term), secure parking for at least 100 bicycles at one or more Metro Bike Hubs, as well as designated locations for Metro's Bikeshare short-term rental program or similar first mile/ last mile transit options.

Project Access and Infrastructure

Vehicle Access. As previously described, the Project includes the installation of District Way, a new east-west publicly accessible private street through Parcel 1 and connecting to Fair Avenue. It would also include the extension of Elmer Avenue from Cumpston Street to District Way and Klump Avenue from Cumpston Street to Chandler Boulevard. Primary vehicular access to all Blocks within Parcel 1 (i.e., Blocks 1 through 6) would be from these local streets internal to the Project Site, with the exception of a residential driveway and a separate service access to Block 4 and access to a small surface parking lot south of Block 4, all on Fair Avenue. There would be no vehicular access to any Block from Lankershim Boulevard, Tujunga Avenue, or Chandler Boulevard. The West Lot would access Chandler Boulevard (North), as that is its only street frontage. The East Lot would have a full-access driveway on Chandler Boulevard and an exit-only driveway to Fair Avenue north of Chandler Boulevard. Figure 4 shows vehicular access points throughout the Project Site.

Passenger Loading. In addition to vehicular access, the Project proposes multiple dedicated on-street passenger loading areas around the Project Site, as shown in Figure 4. A portion of a turnout on the south side of District Way west of Klump Avenue would be designated for passenger loading. On northbound Lankershim Boulevard north of Chandler Boulevard (North), a curb currently designated for taxi operations is proposed to be modified to allow pick-up or drop-

[9] 915 off-site spaces represent 750 net new spaces, after accounting for 165 existing spaces at the East Lot that would be replaced.

off by transportation network companies (TNCs) such as Uber and Lyft. There would also be a designated passenger loading area on westbound Chandler Boulevard west of Klump Avenue in a turnout. LADOT does not currently support modifying the existing taxi zone on Lankershim Boulevard, and the proposed turnout on Chandler Boulevard may be affected by the City's Chandler Bikeway Project, described in greater detail in Chapter 2. However, the Applicant will continue to coordinate with LADOT to explore curbside management strategies, Americans with Disabilities Act (ADA) ramp compliancy, and passenger loading zone options prior to Project occupancy.

Pedestrian Access and Infrastructure. The Project is conceived as a pedestrian precinct that addresses the need for vehicles but prioritizes the pedestrian experience. A network with sidewalks with a minimum width of 12 feet are organized around the Blocks, connecting publicly accessible open spaces with activated ground-floor street frontages to create a high-quality pedestrian experience. Pedestrian access to the buildings would be provided at multiple points throughout the Project Site separated from vehicular access as shown in Figure 5. The Project would also provide or maintain high-visibility crosswalks at the following locations:

- New crosswalk across the south leg of Lankershim Boulevard & Chandler Boulevard (North) to connect Parcel 1 with the Consolidated Transit Center and maintained crosswalks across the north and west legs of the intersection
- Maintained crosswalks across the north, east, and west legs of Lankershim Boulevard & Chandler Boulevard (South) due to changes to curbs and roadway striping
- New crosswalk across the south leg of Tujunga Avenue & Chandler Boulevard (North) to connect Block 0 West with the West Lot and maintained crosswalks across the north and east legs of the intersection
- New crosswalk across the north leg of Tujunga Avenue & Chandler Boulevard (South)
- New crosswalk across the west leg of District Way & Fair Avenue on the eastern edge of Parcel 1

Bicycle Access and Infrastructure. Access points to Project bicycle parking spaces at each Block are shown in Figure 5. The existing and proposed bicycle infrastructure at the Project Site is shown in Figure 6. As shown, the Project would implement two-way Class IV[10] bicycle lanes separated from vehicular lanes by bollards on the east side of Fair Avenue between District Way

[10] Class IV bicycle lanes, also known as cycle tracks, are physically separated from vehicular traffic.

and Chandler Boulevard and a two-way route on District Way, which is a low-volume shared street accommodating vehicles, pedestrians, and bicyclists. It would continue through a shared plaza in Parcel 1 from the west end of District Way to Lankershim Boulevard. The Project would also improve the westbound bicycle lane on Chandler Boulevard (North) between Tujunga Avenue and Lankershim Boulevard to a Class IV facility separated by bollards and would install a bicycle crossing signal across Lankershim Boulevard at Chandler Boulevard (North).

Additionally, the construction of the East Lot by Metro would require the removal of the existing two-way off-street bicycle path through the existing surface parking lot between Fair Avenue and Vineland Avenue. Pending an agreement between Metro and LADOT, this route may be replaced with a protected Class IV westbound bicycle lane on the north side of the street while converting the existing eastbound bicycle lane on the south side of the street to a Class IV facility. Alternatively, it may be replaced with a Class IV two-way on-street bicycle lane on the north side of Chandler Boulevard between Fair Avenue and Vineland Avenue while leaving the eastbound bicycle lane on the south side unchanged.

The existing eastbound bicycle lanes on Chandler Boulevard (South) from Tujunga Avenue to Lankershim Boulevard and on Chandler Boulevard from Lankershim Boulevard to Fair Avenue would not be affected by the Project, and the Project would not preclude the City from improving those facilities.

As part of its Chandler Bikeway Project, the City may install a Class IV westbound bicycle lane on the north side of Chandler Boulevard between Vineland Avenue and Lankershim Boulevard and on the east side of Lankershim Boulevard from Chandler Boulevard to Chandler Boulevard (North), as shown in Figure 6. As these plans are not yet finalized, Metro, LADOT, and the Project Applicant will continue to coordinate bicycle infrastructure and improvements within and adjacent to the Project Site.

Roadway Dedication Requirements

Mobility Plan 2035: An Element of the General Plan (LADCP, January 2016) (Mobility Plan 2035) provides street designations and required right-of-way (ROW) and roadway widths for streets

throughout the City, as summarized in Table 3. The Project Site borders a number of public roadways, including:

- Lankershim Boulevard, a Boulevard II
- Chandler Boulevard, a Boulevard II (including North and South sections)
- Tujunga Avenue, an Avenue II
- Cumpston Street, a Collector
- Bakman Avenue, a Local Street
- Fair Avenue, a Local Street
- Weddington Street, a Local Street

The Project would dedicate property and improve the adjacent sidewalk and roadway at six locations. It also requests that certain public ROW be vacated and granted to the Project Site at three locations (the Project would include reconstructing the road and sidewalk), where in some cases existing dedications are in excess of Mobility Plan 2035 requirements. At several locations, the Project requests a waiver of dedications that would be otherwise necessary to reach full street standard half-ROW or sidewalk width. The proposed dedications, vacations, and waivers are summarized in Table 4 and described in detail in Chapter 4.

Transportation Demand Management Measures

The Project proposes to incorporate several transportation demand management (TDM) features to help reduce vehicle miles traveled (VMT) and vehicle trips to and from the Project Site consistent with City and State of California (State) transportation and greenhouse gas (GHG) policies and objectives. The following measures would be incorporated into the Project to reduce VMT and vehicle trips:

- Reduced parking supply
- TDM promotions and marketing
- Pedestrian network improvements
- Traffic Calming Improvements
- Implement on-street bicycle facilities

- Bicycle Parking per Los Angeles Municipal Code (LAMC)

These features are discussed in detail in Chapter 5.

Existing Land Uses

The four Project parcels are currently used as follows:

- Parcel 1 provides a surface parking lot for Metro users, a Metro B (Red) Line subway portal, and a local bus plaza and layover area with 14 bus stalls.
- Parcel 2 provides a surface parking lot for the existing adjacent commercial building (which is not a part of the Project and would remain) at the southeast corner of Parcel 2.
- Parcel 3 is comprised of the Metro G (Orange) Line busway station, a Metro B (Red) Line subway portal, the historic Lankershim Depot Building, and industrial/warehouse buildings on the northwest corner.
- Parcel 4 currently provides several small industrial/warehouse buildings.

In total, the four parcels comprise approximately 50,836 sf of structures and 1,098 surface parking spaces. Additionally, the West Lot is currently developed with a 25,691 sf industrial/warehouse building and the East Lot currently provides 165 surface parking spaces for Metro users. All existing uses would be replaced with the exception of the historic Lankershim Depot Building, which would be relocated within Parcel 3.

Project Schedule

Project construction is expected to begin in 2022 and could be completed as early as 2030 (under an aggressive construction schedule) or could extend until Year 2037. For the purposes of the analyses in this report, the Project was divided into two Phases. Phase 1 was assumed to be completed in Year 2026 and includes construction of Block 0 West (the Consolidated Transit Center), Block 0 East, and Blocks 5/6, 7, and 8. Full Buildout of the Project was assumed to be completed in Year 2037 and includes the additional development of Blocks 4, 3, 2, and 1 in succession.

The Consolidated Transit Center construction would be complete before the existing bus station on Parcel 1 is disrupted by construction of Block 5/6. A construction sequencing plan has been developed that would allow continuous operation of Block 0 West for Metro G (Orange) Line boardings and alightings, including temporary relocation of those activities to the perimeter of Block 0 West while the internal portions of the Consolidated Transit Center are constructed. The temporary Metro G (Orange) Line detour would consist of a clockwise circumnavigation of Block 0 West and would not affect other streets.

ANALYSIS METHODOLOGY

There are two broad categories of transportation analysis required by the City in the TAG. The first category, found in TAG Section 2, relates to potential transportation impacts under the California Environmental Quality Act (CEQA). Should a project exceed thresholds identified in the TAG, its impact would be considered significant under CEQA and, thus, would require any feasible mitigation measures be implemented to reduce the impact below the threshold of significance. The CEQA thresholds identified in the TAG are consistent with City thresholds and with State CEQA guidance.

The other category of analysis, non-CEQA transportation analysis found in TAG Section 3, reviews transportation issues relating to safety, access, and congestion as they may be affected by construction or operation of a project.

The TAG identifies specific screening criteria in Sections 2 and 3 to determine whether each type of CEQA and non-CEQA transportation analysis is required for a particular project. Screening criteria for each type of analysis are described and applied to the Project in Chapter 3. As detailed therein, the Project is subject to the following City thresholds and analyses.

<u>CEQA Analyses</u>

- Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies
- Threshold T-2.1: Causing Substantial Vehicle Miles Traveled
- Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use
- Freeway Safety Analysis

Non-CEQA Analyses

- Pedestrian, Bicycle, and Transit Access Assessment
- Project Access and Circulation Evaluation
- Project Construction
- Residential Street Cut-Through Analysis

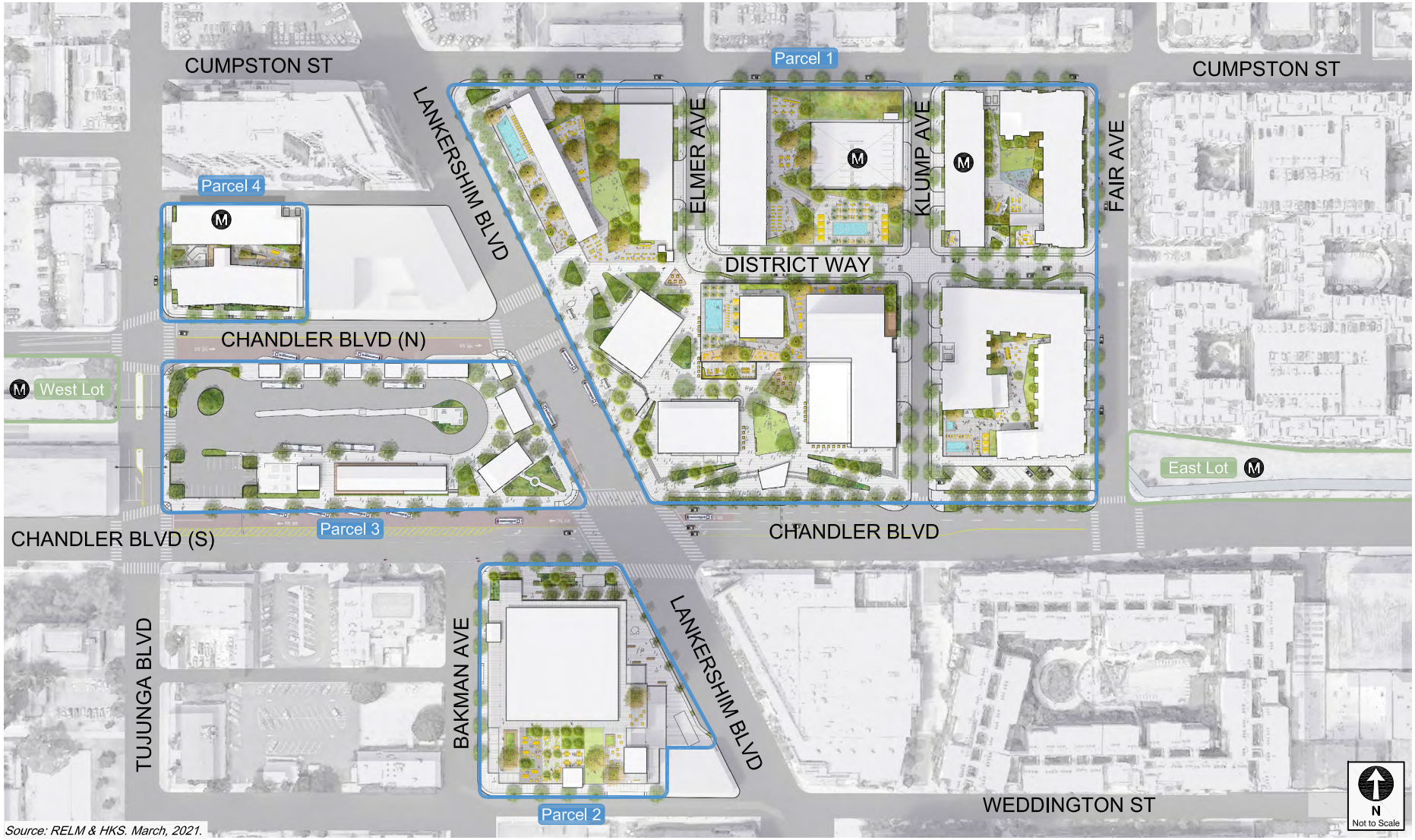
In addition, this report includes a discussion of Project parking requirements and supply.

ORGANIZATION OF REPORT

This report is divided into 11 chapters:

1. Introduction
2. Project Context
3. Transportation Assessment Screening
4. CEQA Threshold T-1: Consistency with Policy Analysis
5. CEQA Threshold T-2.1: VMT Analysis
6. CEQA Threshold T-3: Geometric Design and Land Use Hazards Analysis
7. CEQA Freeway Safety Analysis
8. Non-CEQA Analysis: Pedestrian, Bicycle, and Transit Access Assessment
9. Non-CEQA Analysis: Project Access, Safety, and Circulation Evaluation
10. Non-CEQA Analysis: Project Construction Assessment
11. Non-CEQA Analysis: Residential Street Cut-Through Analysis

The appendices contain supporting documentation and additional details supporting the technical analyses.



Source: RELM & HKS. March, 2021.

LEGEND

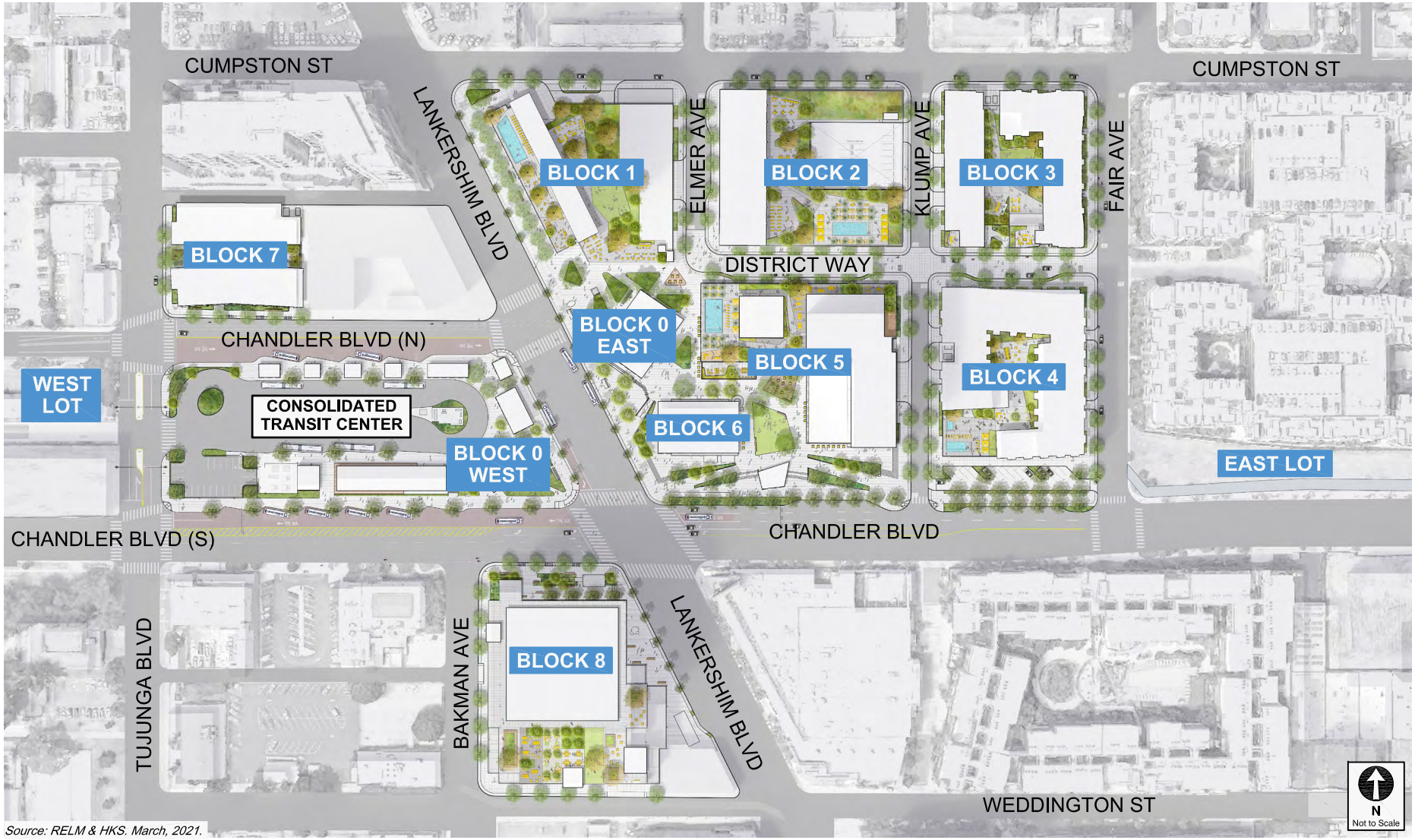
Project Site Parcels

Potential Off-Site Metro Parking Areas

Proposed Metro Parking

PROJECT SITE PLAN OVERVIEW

FIGURE 1



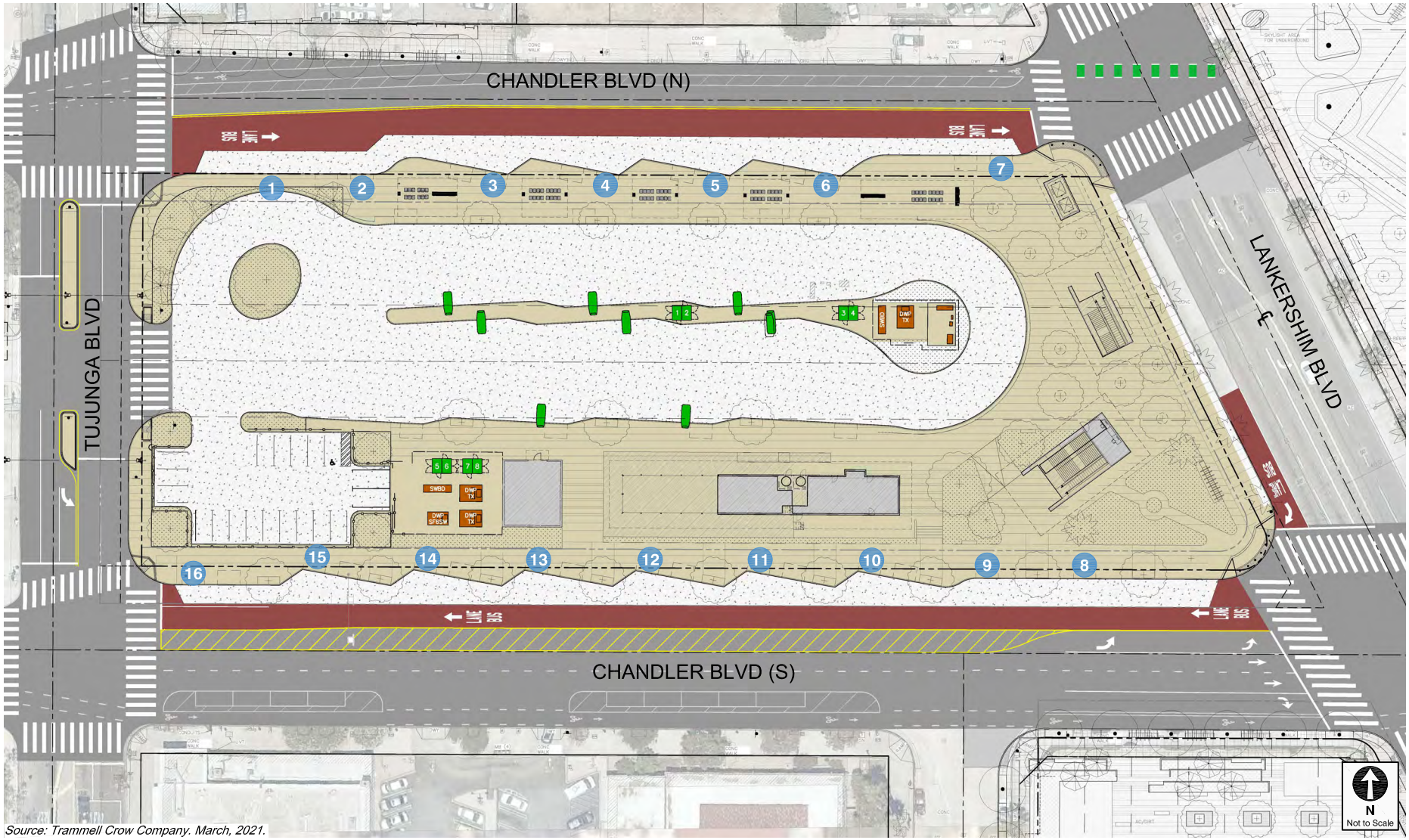
Source: RELM & HKS. March, 2021.

LEGEND

Block Number

CONCEPTUAL GROUND-LEVEL PROJECT SITE PLAN

FIGURE 2



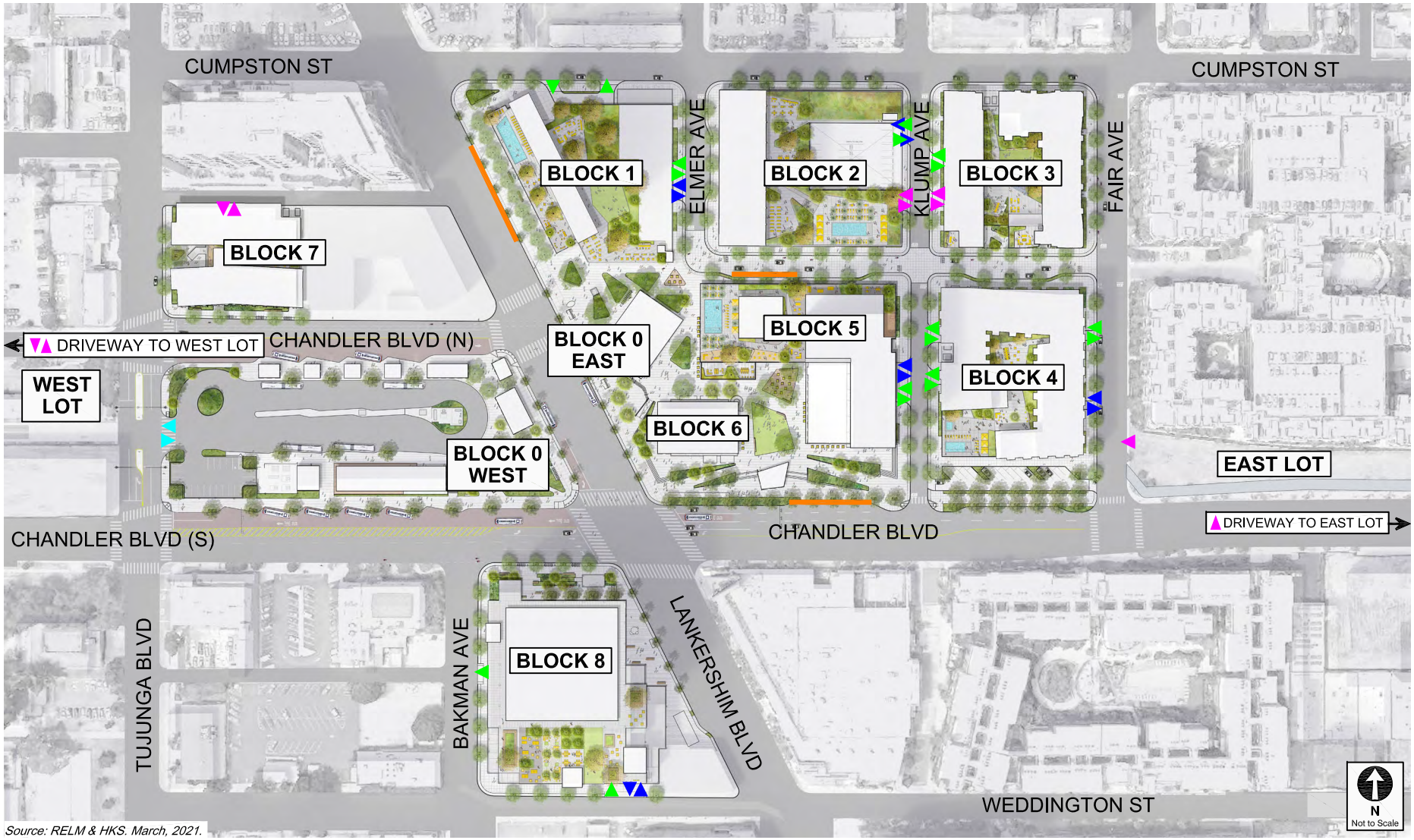
Source: Trammell Crow Company. March, 2021.

LEGEND

Local Bus Loading Area

CONCEPTUAL PLAN FOR CONSOLIDATED TRANSIT CENTER

FIGURE 3



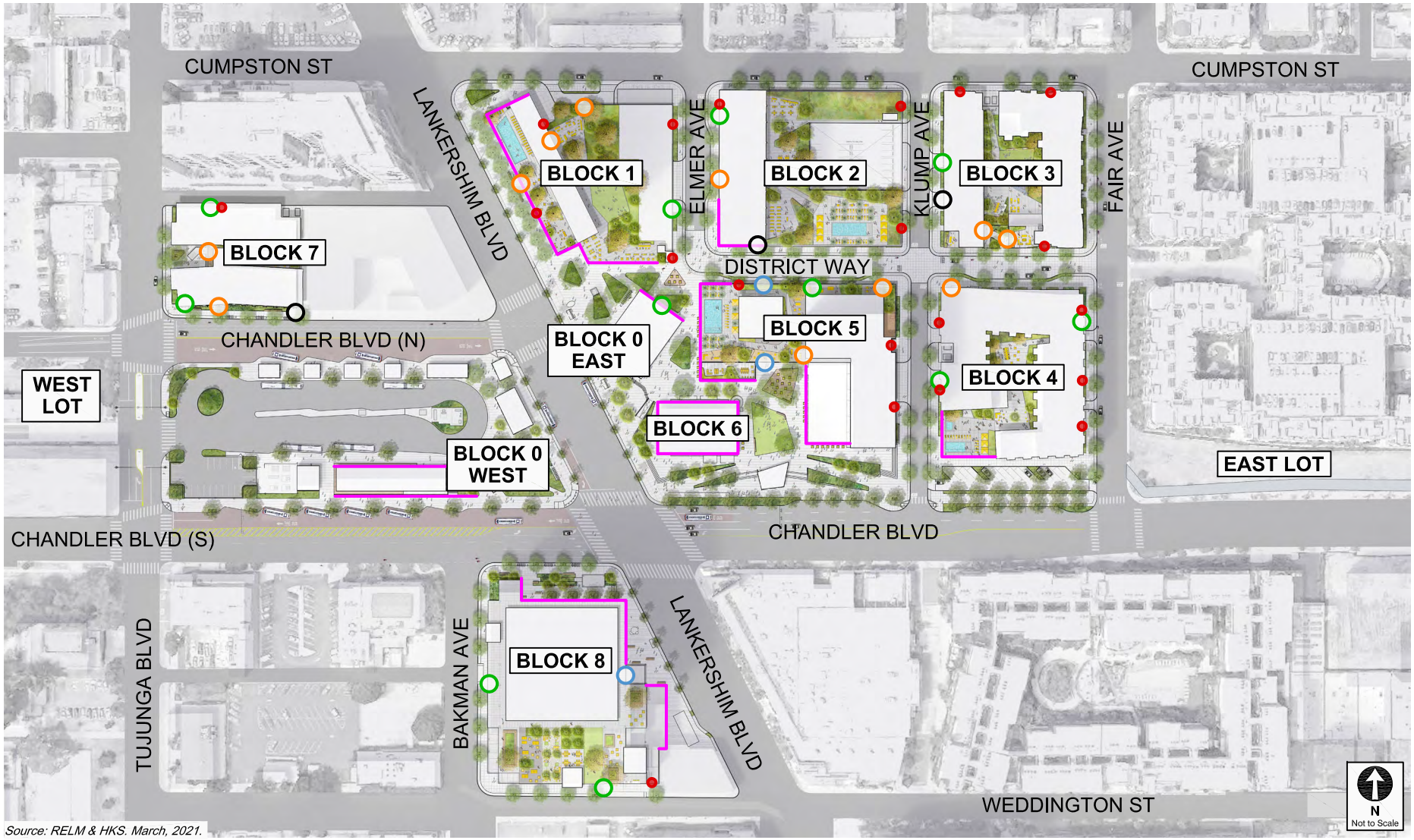
Source: RELM & HKS. March, 2021.

LEGEND

Transit | Metro Parking | Residential, Retail, Office | Commercial Loading | Proposed Passenger Loading

VEHICULAR SITE ACCESS

FIGURE 4



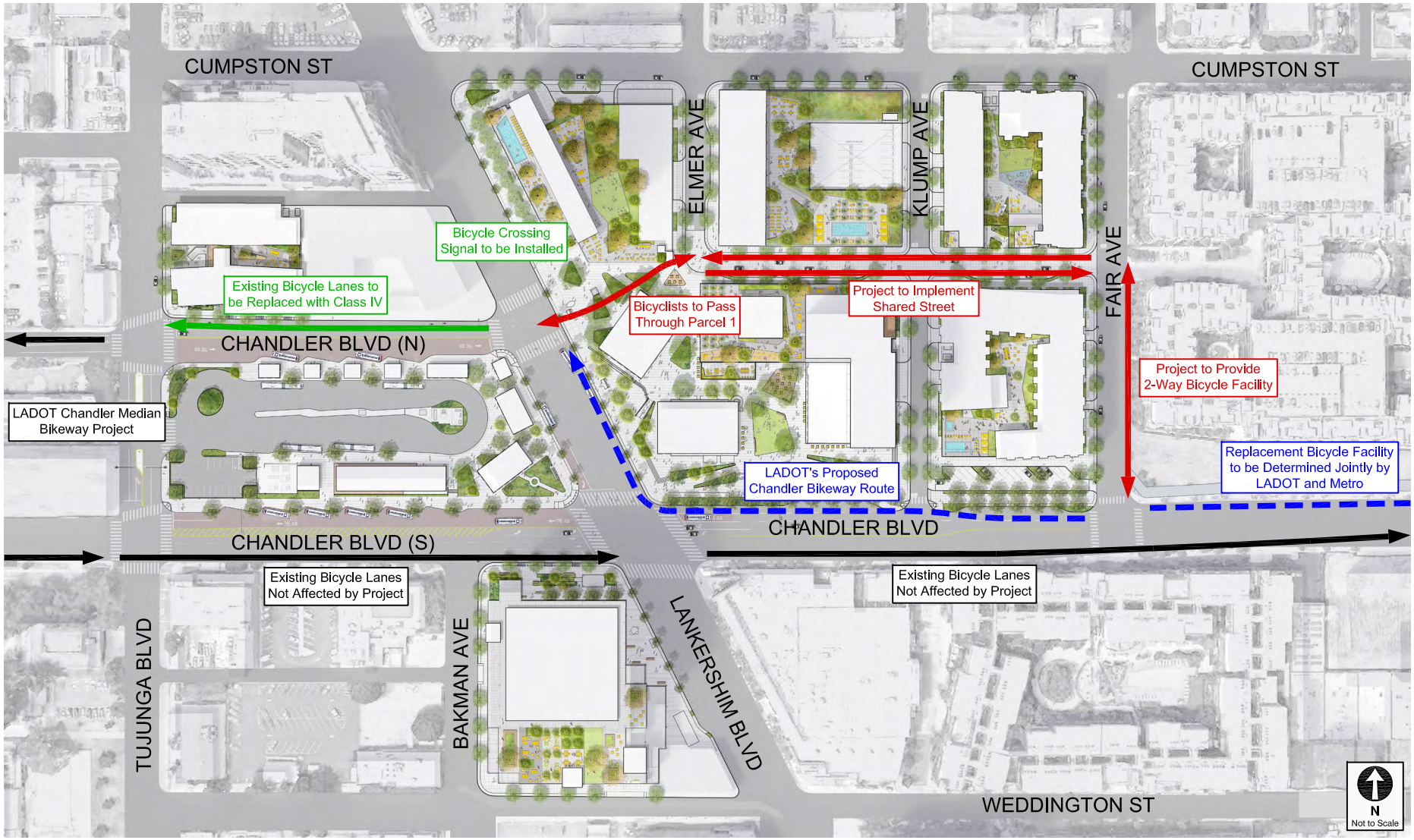
Source: RELM & HKS. March, 2021.

LEGEND

- Residential Lobby Access
- Office Lobby Access
- Bicycle Parking Access
- Metro Parking Access
- Subway Elevator/Escalator
- Secondary and/or Emergency Access
- Retail/Restaurant Access

PEDESTRIAN SITE ACCESS

FIGURE 5



LEGEND

- Project to Provide
- Project or LADOT to Provide
- Proposed by LADOT
- Existing Facility Not Affected by Project

PROPOSED BICYCLE FACILITIES

FIGURE 6

TABLE 1
PROJECT ASSESSOR PARCEL NUMBERS

Parcel 1 (Blocks 0 East, 1, 2, 3, 4, 5, and 6)				
Size:	10.7 acres			
Boundaries:	Cumpston Street, Fair Avenue, Chandler Boulevard, and Lankershim Boulevard			
APNs:	2350-012-920 [a]	2350-012-926	2350-012-932	2350-012-938
	2350-012-921	2350-012-927	2350-012-933	2350-013-906
	2350-012-922	2350-012-928	2350-012-934	2350-013-907
	2350-012-923	2350-012-929	2350-012-935	2350-013-908
	2350-012-924	2350-012-930	2350-012-936	2350-013-920 [a]
	2350-012-925	2350-012-931	2350-012-937	
Parcel 2 (Block 8)				
Size:	1.8 acres			
Boundaries:	Chandler Boulevard (South), Lankershim Boulevard, Weddington Street, and Bakman Avenue			
APNs:	2350-016-905	2350-016-906	2350-016-907	
Parcel 3 (Block 0 West)				
Size:	2.7 acres			
Boundaries:	Chandler Boulevard (North), Lankershim Boulevard, Chandler Boulevard (South), Tujunga Avenue			
APNs:	2350-012-920 [a]			
Parcel 4 (Block 7)				
Size:	0.7 acres			
Boundaries:	Alley to the north, private property to the east, Chandler Boulevard (North), and Tujunga Avenue			
APNs:	2350-012-920 [a]	2350-012-924	2350-012-928	2350-012-932
	2350-012-936	2350-013-907		
West Lot				
Size:	1.0 acres			
Boundaries:	Chandler Boulevard (North), Tujunga Avenue, Metro G (Orange) Line Busway, and private property to the west			
APNs:	2350-011-907			
East Lot				
Size:	1.8 acres			
Boundaries:	Private property to the north, Vineland Avenue, Chandler Boulevard, and Fair Avenue			
APNs:	2350-013-915	2350-013-916	2350-013-917	2350-013-918
	2350-013-920 [a]	2350-013-922		

Notes:
[a] Only a portion of this APN is located within the identified Parcel.

TABLE 2
PROJECT DEVELOPMENT SUMMARY

Description	Block 0 West	Block 0 East	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8 [a]	West Lot	East Lot	Total
Land Uses													
Affordable Housing *(units)*	-	-	-	-	160	-	-	-	151	-	-	-	**311**
Market-Rate Housing *Mid-Rise (units)*	-	-	-	-	-	194	-	-	-	-	-	-	**194**
Market-Rate Housing *High-Rise (units)*	-	-	313	309	-	-	400	-	-	-	-	-	**1,022**
Office [b, c] *(square feet)*	709	-	-	-	-	-	91,345	-	-	488,320	-	-	**580,374**
Retail [c] *(square feet)*	1,643	-	10,507	2,975	-	12,425	2,575	-	-	0	-	-	**30,125**
Restaurant [c] *(square feet)*	2,839	3,658	7,985	-	-	13,325	15,227	13,024	-	18,942	-	-	**75,000**
Parking													
Project Parking Spaces	2	-	532	389	90	323	798	-	5	1,174	-	-	**3,313**
Metro Parking Spaces	-	-	-	145	40	-	-	-	89	-	520	395	**1,189**
Project Bicycle Parking Spaces	-	-	264	172	78	152	260	-	110	122	-	-	**1,158**
Metro Bike Hub Spaces [d]	-	40	-	-	-	-	-	-	66	-	-	-	**106**

Notes:

[a] For future flexibility, 10,734 sf of retail space was analyzed as restaurant (a higher trip generator) in Blocks 4 and 8.

[b] Block 8 office space includes potential future conversion of 124 parking spaces into 87,300 sf of office space, in a hypothethical case in which office parking demand permanently dropped. This scenario would require subsequent City approval for a reduced parking supply.

[c] The Project may exchange up to 75,000 sf of retail and restaurant uses for 75,000 sf of office uses.

[d] Metro Bike Hubs provide secure bicycle parking for transit riders.

TABLE 3
MOBILITY PLAN 2035 STREET DESIGNATIONS

Street Designation	Right-of-Way Width	Roadway Width	Half-ROW	Half-Roadway	Sidewalk Width
Boulevard I	136	100	68	50	18
Boulevard II	110	80	55	40	15
Avenue I	100	70	50	35	15
Avenue II	86	56	43	28	15
Avenue III	72	46	36	23	13
Collector Street	66	40	33	20	13
Local Street	60	36	30	18	12

Notes:
All widths in feet.
Source: *Mobility Plan 2035: An Element of the General Plan* (Los Angeles Department of City Planning, September 2016).
Designated sidewalk width is the difference between the half-ROW width and the half-roadway width.

TABLE 4
ROADWAY DEDICATIONS, VACATIONS, AND WAIVERS

Location & Classification	Existing Half-ROW			Required Half-ROW			Proposed Project Action	Proposed Half-ROW with Project		
	Roadway	Sidewalk	Total	Roadway	Sidewalk	Total		Roadway	Sidewalk	Total
Lankershim Boulevard *(Boulevard II)*										
West side, adjacent to Block 0	40	10	50	40	15	55	Waiver Requested [a]	40	10	50
East side, adjacent to Parcel 1	40	10	50	40	15	55	Waiver Requested [a]	40	10	50
West side, adjacent to Block 8	40	10	50	40	15	55	Waiver Requested [a]	40	10	50
Chandler Boulevard *(Boulevard II)*										
North side, adjacent to Parcel 1	40	15	55	40	15	55	10-foot Dedication for inset curb [b]	40	15	55
Chandler Boulevard (North) *(Boulevard II)*										
South side, adjacent to Block 0	16 - 29 (var)	11 - 24 (var)	40	40	15	55	Waiver Requested [c]	30 - 38 (var)	2 - 10 (var)	40
North side, adjacent to Block 7	25	15	40	40	15	55	Waiver Requested [c] [d]	25	15	40
Chandler Boulevard (South) *(Boulevard II)*										
North side, adjacent to Block 0	35	10	45	40	15	55	Waiver Requested [d]	35	10	45
South side, adjacent to Block 8	35	10	45	40	15	55	10-foot Dedication Offered	40	15	55

Notes:
ROW = Right-of-way; roadway classifications from Mobility Plan 2035.
[a] Additional sidewalk width would be provided on the Project Site meeting or exceeding the Boulevard II standard.
[b] The dedication would be for a portion of the frontage to provide an inset curb for passenger pick-up / drop-off and on-street parking.
[c] The Project proposes to maintain the existing 80-foot total ROW, which would include sawtooth bus parking spaces partially within Metro property. Sidewalks would be minimum 15 feet wide, including additional width on Metro property.
[d] The Project proposes sets of sawtooth bus parking spaces on Chandler Boulevard (North and South) adjacent to Block 0. Additional sidewalk width would be provided on Metro property meeting the Boulevard II standard.

TABLE 4 (CONTINUED)
ROADWAY DEDICATIONS, VACATIONS, AND WAIVERS

Location & Classification	Existing Half-ROW			Required Half-ROW			Proposed Project Action	Proposed Half-ROW with Project		
	Roadway	Sidewalk	Total	Roadway	Sidewalk	Total		Roadway	Sidewalk	Total
Tujunga Avenue *(Avenue II)*										
East side, adjacent to Block 0	40	7	47	28	15	43	Waiver Requested [e]	40	7	47
East side, adjacent to Block 7	40	7	47	28	15	43	8-foot Dedication Offered [f]	40	15	55
Cumpston Street *(Collector Street)*										
South side, adjacent to Parcel 1	33	10	43	20	13	33	10-foot Vacation Requested	20	13	33
Weddington Avenue *(Local Street)*										
North side, adjacent to Block 8 (easterly) [g]	17	8	25	18	12	30	5-foot Dedication Offered	18	12	30
North side, adjacent to Block 8 (westerly) [h]	17	8	35 [i]	18	12	30	5-foot Vacation Requested	18	12	30
Bakman Avenue *(Local Street)*										
East side, adjacent to Block 8	26	14	40	18	12	30	10-foot Vacation Requested	18	12	30

Notes:

ROW = Right-of-way; roadway classifications from Mobility Plan 2035.

[e] The half-ROW exceeds the requirement, but the sidewalk within the public ROW is narrower than required. Additional sidewalk width would be provided on Metro property meeting the Avenue II standard.

[f] The half-ROW exceeds the requirement, but additional dedication is offered to increase the sidewalk width to the Avenue II standard.

[g] Only applies to the easterly portion of Block 8.

[h] Only applies to the westerly portion of Block 8.

[i] Ten feet of the ROW is located behind a fence.

Chapter 2
Project Context

This chapter presents a comprehensive summary of the area surrounding the Project Site in conformance with the requirements of the TAG. It describes key streets, transit routes, and freeway ramps within the Study Area.

EXISTING STREET SYSTEM

The existing street system in the Study Area includes Boulevards, Avenues, Collectors, and Local Streets that provide regional, sub-regional, and local access and circulation to and from the Project Site. The different types of street classifications are designated in Mobility Plan 2035 and are summarized in Table 3. Figure 7 shows the roadway designations of streets within the Study Area based on Mobility Plan 2035.

In addition to street designations, Mobility Plan 2035 establishes modal priorities on individual roads in an effort to enhance mobility for all user types. These priority mode designations are designed to guide infrastructure planning and land use planning in support of Mobility Plan 2035. These designations include the Transit Enhanced Network (TEN), the Neighborhood Enhanced Network (NEN), the Bicycle Enhanced Network (BEN) and Bicycle Lane Network (BLN) (together, the Bicycle Networks), the Vehicle Enhanced Network (VEN), and Pedestrian Enhanced District (PED). Streets on the TEN would receive features to enhance the experience of pedestrians and transit users, including streetscape improvements, transit shelters, or bus lanes. Streets on the NEN would be prioritized for slower-moving modes such as walking and bicycling while limiting vehicular traffic and travel speeds through traffic calming measures. Streets on the Bicycle Networks would provide bicycle paths and protected bicycle lanes to improve safety and comfort for bicyclists. Streets on the VEN are recognized as critical arterials needed for high-volume vehicular movement where consistent travel speeds and travel times are prioritized. PEDs are areas where improved pedestrian connections would have the greatest impact on safety, public health, access, and social or economic benefit.

The City also developed Vision Zero (*Vision Zero: Eliminating Traffic Deaths in Los Angeles by 2025*, August 2015), a traffic safety policy that promotes strategies to eliminate collisions that result in severe injury or death. In particular, it seeks to make streets safe for the most vulnerable roadway users (pedestrians and bicyclists). Using collision data, Vision Zero identified the High Injury Network (HIN), a network of streets where strategic investments will have the biggest impact in reducing death and severe injury. The HIN includes Lankershim Boulevard adjacent to the Project Site, as well as other streets in the Study Area as noted below.

Figure 8 identifies the modal priorities of streets within the Study Area based on Mobility Plan 2035 as well as streets designated as part of the HIN. The following is a brief description of the key streets serving the Project, including their classifications and any modal priorities under Mobility Plan 2035:

- Burbank Boulevard – Burbank Boulevard is a designated Boulevard II located 0.25 miles north of Chandler Boulevard (approximately 800 feet north of the northern edge of Parcel 1) and travels in the east-west direction. It provides two travel lanes east of Lankershim Boulevard and four travel lanes west of Lankershim Boulevard with a center left-turn lane throughout. Unmetered parking is generally available on both sides of the street within the Study Area. Inside lanes are generally 10 feet wide and the total paved width varies from 54 to 80 feet. There are bicycle lanes in each direction west of Elmer Avenue. Burbank Boulevard is part of the BEN, NEN, and the PED. Additionally, it is designated as part of the HIN throughout the Study Area.

- Cumpston Street – Cumpston Street is a Local Street west of Tujunga Avenue and a Collector east of Tujunga Avenue. The street travels in the east-west direction and is located along the north side of Parcel 1. It provides two travel lanes and, east of Lankershim Boulevard, a center left-turn lane. Unmetered parking is generally available on both sides of the street west of Lankershim Boulevard and east of Fair Avenue. Additional unmetered parking is available on the north side of the street between Klump Avenue and Fair Avenue. Metered parking is generally available on both sides of the street between Lankershim Avenue and Klump Avenue. Additional metered on-street parking is provided on the south side of the street between Klump Avenue and Fair Avenue. The total paved width is 54 feet adjacent to the Project Site. Cumpston Street is part of the NEN.

- Chandler Boulevard – Chandler Boulevard is a designated Boulevard II and travels in the east-west direction. West of Lankershim Boulevard, Chandler Boulevard is divided into north and south sections separated by the Metro G (Orange) Line busway and Block 0 West of the Project Site. The north section provides two westbound travel lanes, and the south section provides two eastbound travel lanes (and one westbound travel lane adjacent to Block 0). East of Lankershim Boulevard, Chandler Boulevard provides four travel lanes and a center left-turn lane along the south side of Parcel 1. Bicycle lanes are provided in both directions on Chandler Boulevard along the Project frontage, including westbound on the north section of Chandler Boulevard and eastbound on the south

section of Chandler Boulevard. On-street parking is generally available on both sides of the street within the Study Area, including metered parking east of Tujunga Avenue. Inside lanes are generally 10 feet wide and the total paved width varies from 38 feet west of Tujunga Avenue to 80 feet east of Lankershim Boulevard. Chandler Boulevard is part of the Bicycle Networks and the PED. The Project would modify Chandler Boulevard between Tujunga Avenue and Lankershim Boulevard to provide a westbound bus-only lane and bus parking on the south section and an eastbound bus-only lane and bus parking on the north section. There would be two eastbound general-purpose travel lanes on the south section and one westbound general-purpose travel lane on the north section.

- Weddington Street – Weddington Street is a Local Street and travels in the east-west direction. It is located adjacent to the southern border of Block 8 and provides one lane in each direction with no striping. Metered parking is available on both sides of the street within the Study Area. The total paved width of the street is generally 35 feet.

- Magnolia Boulevard – Magnolia Boulevard is a designated Avenue II and travels in the east-west direction. It is located 0.25 miles south of Chandler Boulevard (approximately 750 feet south of the southern edge of Block 8). It provides three to four travel lanes (west of Lankershim Boulevard it only provides one eastbound lane) and a center left-turn lane. Parking is generally available on both sides of the street within the Study Area, including metered parking between Lankershim Boulevard and Vineland Avenue. Inside lanes are typically 10 feet wide and the total paved width is generally 68 feet. Magnolia Boulevard is part of the PED. Additionally, it is designated as part of the HIN throughout the Study Area.

- Camarillo Street – Camarillo Street is a designated Avenue II and travels in the east-west direction. It is located approximately 0.60 miles south of the Project Site and provides two travel lanes with a center left-turn lane. Unmetered parking is generally available on both sides of the street within the Study Area. Inside lanes are generally 10 feet wide and the total paved width is generally 56 feet. Camarillo Street is part of the Bicycle Networks.

- Riverside Drive – Riverside Drive is a designated Avenue I and travels in the east-west direction. It is located approximately 1.10 miles south of the Project Site and provides four travel lanes with a center left-turn lane. Unmetered parking is generally available on both sides of the street within the Study Area. Inside lanes are generally 10 feet wide and the total paved width is 78 feet. Bicycle lanes are provided in both directions west of SR 170. Riverside Drive is part of the Bicycle Networks and the PED.

- Moorpark Street – Moorpark Street is a designated Avenue II and travels in the east-west direction. It is located approximately 1.30 miles south of the Project Site and provides two travel lanes with a center left-turn lane. Unmetered parking is generally available on both sides of the street within the Study Area. The total paved width is generally 56 feet.

- Colfax Avenue – Colfax Avenue is a designated Avenue II and travels in the north-south direction. It is located approximately 0.60 miles west of the Project Site and provides two travel lanes with a center left-turn lane. Unmetered parking is generally available on both sides of the street within the Study Area. The total paved width is generally 62 feet. Bicycle lanes are provided in both directions. Colfax Avenue is part of the Bicycle Networks and PED. It is identified as part of the HIN between Burbank Boulevard and Chandler Boulevard.

- Tujunga Avenue – Tujunga Avenue is a designated Avenue II and travels in the north-south direction. It is located adjacent to the western border of Block 0 West. North of Magnolia Boulevard, it provides two northbound travel lanes, one southbound travel lane, and a center left-turn lane. South of Magnolia Boulevard, it provides two travel lanes with a center left-turn lane. South of Riverside Drive / Camarillo Street, it provides one northbound travel lane, two southbound travel lanes, and a center left-turn lane. Unmetered parking is generally available on both sides of the street north of Chandler Boulevard and metered parking is generally available on both sides of the street south of Chandler Boulevard. The total paved width is generally 56 feet. Tujunga Avenue is part of the NEN and PED.

- Bakman Avenue – Bakman Avenue is a Local Street and travels in the north-south direction. It is located adjacent to the western border of Block 8 and provides one lane in each direction with a dashed yellow centerline. Metered parking is generally available on both sides of the street between Chandler Boulevard and Weddington Street and unmetered parking is available on both sides of the street south of Weddington Street. The total paved width is generally 50 feet. Bakman Avenue is part of the NEN.

- Lankershim Boulevard – Lankershim Boulevard is a designated Boulevard II and travels in the north-south direction. It passes through the middle of the Project Site and provides four lanes with a center left-turn lane. Metered parking is generally available on both sides of the street within the Study Area. Inside lanes are generally 10 feet wide and the total paved width is generally 72 feet. Lankershim Boulevard is part of the TEN, Bicycle Networks, and PED. Additionally, it is designated as part of the HIN north of Camarillo Street.

- Elmer Avenue – Elmer Avenue is a Local Street and travels in the north-south direction. It is located adjacent to the Project Site and provides one lane in each direction with no striping. Unmetered parking is generally available on the west side of the street within the Study Area. The total paved width is generally 30 feet. The Project would create a publicly accessible private extension of Elmer Avenue from Cumpston Street to a proposed publicly accessible private east-west street, District Way.

- Klump Avenue – Klump Avenue is a Collector and travels in the north-south direction. It originates immediately north of Cumpston Street adjacent to Parcel 1 and provides one lane in each direction with no striping. Unmetered parking is available on both sides of the street within the Study Area. The total paved width is generally 30 feet. The Project would create a publicly accessible private extension of Klump Avenue between Cumpston Street and Chandler Boulevard.

- Fair Avenue – Fair Avenue is a Local Street and travels in the north-south direction. It is located along the eastern border of Parcel 1 and provides two lanes with a center left-turn lane. Unmetered parking is generally available on the east side of the street. The total paved width is 44 feet. Fair Avenue is part of the NEN.

- Vineland Avenue – Vineland Avenue is a designated Boulevard II and travels in the north-south direction. It is located along the eastern border of the East Lot. North of Chandler Boulevard, it provides four lanes with a center left-turn median. South of Chandler Boulevard, it provides four lanes with a landscaped median. Unmetered parking is generally available on both sides of the street within the Study Area. Inside lanes are

generally 10 feet wide and the total paved width is generally 80 feet. Vineland Avenue is part of the Bicycle Networks, NEN, and PED. Additionally, it is identified as part of the HIN north of Camarillo Street.

PEDESTRIAN, BICYCLE, AND TRANSIT FACILITIES

As required in the TAG, a comprehensive inventory was conducted of destinations and facilities serving pedestrians, bicyclists, and transit riders within 0.25 miles of the Project Site. Figure 9 identifies commercial and institutional destinations to which pedestrians may be drawn. Figure 10 inventories pedestrian, bicycle, and transit infrastructure. Table 5 summarizes the width, amenities, and condition of all sidewalks within 0.25 miles of the Project Site. As shown, most of the sidewalks in the vicinity of the Project Site do not currently meet Mobility Plan 2035 standard widths. There are also many locations where sidewalks are missing or uneven, especially on local residential streets.

There are existing bicycle lanes on Burbank Boulevard, Vineland Avenue, and Chandler Boulevard, including Chandler Boulevard (North), Chandler Boulevard (South), and Chandler Boulevard east of Lankershim Boulevard. East of Fair Avenue, there is a Class IV bicycle path passing through the southern edge of the East Lot and continuing east past Vineland Avenue as the Chandler Bikeway to Burbank.

Table 6 summarizes the bus stops within 0.25 miles of the Project Site, including the routes they serve and whether they provide benches or shelters. As shown, there are bus benches at nearly all of the stops on Lankershim Boulevard or on east/west routes that stop at Lankershim Boulevard. There are no bus benches on most of the stops on Vineland Avenue or on east/west routes that stop at Vineland Avenue. There are bus shelters at about half of the bus stops in the inventory area. Of the 13 bus stops adjacent to the Project Site, eight have benches and four have shelters.

Additionally, Figure 9 indicates locations of various commercial and institutional establishments within 0.25 miles of the Project Site, as required by the TAG. North of the Project Site, Burbank Boulevard and Lankershim Boulevard are commercial corridors with various businesses including fast-food restaurants, a car dealership, auto repair and body shops, a hotel, a nightclub, and several small storefronts. East of the Project Site, Vineland Avenue is a commercial / industrial

corridor with small storefronts, industrial warehouses, and a high school. South of the Project Site, Chandler Boulevard and Lankershim Boulevard are commercial corridors with various businesses including fast-food and sit-down restaurants, a post office, a gym, a hospital, and a school. Magnolia Boulevard is a commercial corridor with various businesses including fast-food and sit-down restaurants, theaters, a gym, a park, a bus terminal, a church, and some small storefronts. West of the Project Site, Tujunga Avenue is a mostly residential corridor, but provides pedestrian access to some small storefronts, a school, a library, a church, a park, and a recreation center. On all sides, the Project is surrounded by numerous residential uses, from single-family homes to large multi-family apartments, residents of which may visit the retail and restaurant destinations within the Project Site.

PUBLIC TRANSIT SERVICE

The Study Area is served by bus lines operated by Metro, LADOT Commuter Express, Burbank Bus, and Santa Clarita Transit. Figure 11 illustrates the existing transit service in the Study Area.

In addition to the bus lines that provide service within the Project vicinity, Metro Rail operates the Metro B (Red) Line subway in the Study Area. The Metro B (Red) Line runs between North Hollywood and downtown Los Angeles where it connects with the Metro A (Blue) Line, Metro D (Purple) Line, Metro E (Expo) Line, and Metro L (Gold) Line.

Table 7 summarizes the transit lines providing service within the Study Area, including the type of service (peak vs. off-peak, express vs local), frequency of service, service area, and hours of operation. The average frequency of transit service during the peak hour was derived from the number of peak period stops made nearest the Project Site.

REGIONAL TRANSPORTATION

Several freeways provide regional transportation to and from the Study Area. SR 170 runs in the northwest-southeast direction and is located 0.40 miles west of the Project Site. SR 170 provides four travel lanes in each direction along with various auxiliary lanes. Access to and from SR 170

is available via interchanges at Burbank Boulevard, Magnolia Boulevard, and Riverside Drive/Tujunga Boulevard.

US 101 generally runs in the east-west direction west of SR 170 and in the northwest-southeast direction south of SR 170 and SR 134. It is located one mile south of the Project Site. US 101 provides five travel lanes in each direction along with various auxiliary lanes. Access to and from US 101 is available via interchanges at Tujunga Avenue, Riverside Drive, Vineland Avenue, and Lankershim Boulevard.

SR 134 runs in the east-west direction and is located approximately 1.00 miles south of the Project Site. SR 134 provides four travel lanes in each direction along with various auxiliary lanes. Access to and from SR 134 is available via interchanges at Vineland Avenue, Lankershim Boulevard, and Cahuenga Boulevard.

FUTURE CUMULATIVE CONDITIONS

Under the Project's proposed phasing and buildout, Project construction could be completed as late as Year 2037. At that time, the Study Area would be affected by other development projects and transportation infrastructure improvements completed in the interim.

Related Projects

The Project is only one of a number of development projects that are proposed, approved, or under construction within the Study Area. A list of other Related Projects was prepared based on information provided by LADOT and LADCP, verified during the development of this transportation assessment, and includes any project within 0.25 miles of any intersection included in the operational analysis in Chapter 9.[12] The Related Projects are detailed in Table 8, along with their vehicular trip generation estimates, and shown on a map in Figure 12. Where trip generation estimates were not provided by LADOT or found in studies prepared for those projects, the

[12] As detailed in Chapter 9, this report includes detailed analysis of 39 intersections around the Project Site, including as far north as Burbank Boulevard, as far east as Lankershim Boulevard at Moorpark Street, as far south as Moorpark Street, and as far west as SR 170 at Burbank Boulevard.

estimates were prepared using rates from *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers [ITE], 2017) (Trip Generation Manual) as noted in Table 8.

Future Infrastructure Improvements

The transportation network within the Study Area could also be affected by the following regional improvement plans, local specific plans, and programmed improvements.

North Hollywood Station Transit Neighborhood Plan. The North Hollywood Station Transit Neighborhood Plan (TNP) is one of five transit neighborhood plans in preparation by LADCP along the Metro G (Orange) Line busway. The plan aims to "encourage transit ridership, promote job creation, preserve or enhance current industrial uses, improve the urban built environment, and focus new growth and housing in proximity to transit and along key corridors." The Orange Line TNP would achieve this focus by encouraging further development of homes, offices, and retail around the North Hollywood Station. A preliminary draft TNP is anticipated to be released to the public in 2020 and is anticipated to be adopted in Year 2021. The TNP would not propose any modifications to the existing street network and therefore was not accounted for in this study.

Metro G (Orange) Line Improvements Project. The Metro G (Orange) Line Improvements Project would upgrade the existing Metro G (Orange) Line to provide faster travel speeds and improved reliability through grade-separated crossings and gates at grade-level crossings. Within the Study Area, this project may install gates and concrete median islands across Tujunga Avenue where the busway crosses. The gates could allow buses to receive signal preemption and would improve safety for all road users. If the gates and median islands are installed, in consideration of the limited distance on Tujunga Avenue between Chandler Boulevard (North) and Chandler Boulevard (South), left turns would be eliminated from Tujunga Avenue to Chandler Boulevard (North). The elimination of left turns represents a worst-case condition and was, therefore, conservatively assumed in this study. The project is anticipated to be complete and in operation by Year 2024. The Project may install these features on Metro's behalf during Project construction.

Metro North Hollywood to Pasadena Bus Rapid Transit (BRT). The Metro North Hollywood to Pasadena BRT project is a transit corridor development project that would connect North

Hollywood, Burbank, Glendale, Eagle Rock, and Pasadena via dedicated bus rapid transit lanes. This transit improvement would improve access to both local and regional destinations by providing connections to major job centers and connections to the Metro B (Red) Line, Metro G (Orange) Line, and Metro L Line (Gold) light rail. The Consolidated Transit Center would be the western terminus of the Metro North Hollywood to Pasadena BRT. While the route and alignment of the BRT project have not been finalized, it may travel on dedicated bus lanes on Chandler Boulevard adjacent to Parcel 1. The project is anticipated to be complete and in operation by Year 2024.

Metro North San Fernando Valley BRT. The Metro North San Fernando Valley BRT project is a transit corridor development that would connect North Hollywood, Sun Valley, Panorama City, Northridge, and Chatsworth via dedicated bus rapid transit lanes. This transit improvement would improve access to both local and regional destination by providing connections to major job centers and connections to the Metro B (Red) Line, Metro G (Orange) Line, and a potential future light rail project on Van Nuys Boulevard. The buses would stop at the Consolidated Transit Center. While the route and alignment of the Metro North San Fernando BRT have not yet been finalized, it may travel in a dedicated busway on Lankershim Boulevard north of Chandler Boulevard. The Metro North San Fernando Valley BRT project is anticipated to be complete and in operation by Year 2025.

Metro NextGen Bus Plan. The Metro NextGen Bus Plan seeks to reimagine the Metro bus system to better meet the needs of current and future riders. It proposes a new bus network that is more convenient and, thus, more attractive to riders. In addition to reconsidering routes and frequency, it identifies smart street improvements such as signal synchronization, transit priority, stop realignments, and dedicated bus lanes. Based on the draft plan released in January 2020, the Metro bus lines within the Study Area (as listed in Table 7) would be improved with simpler routes and higher frequency.

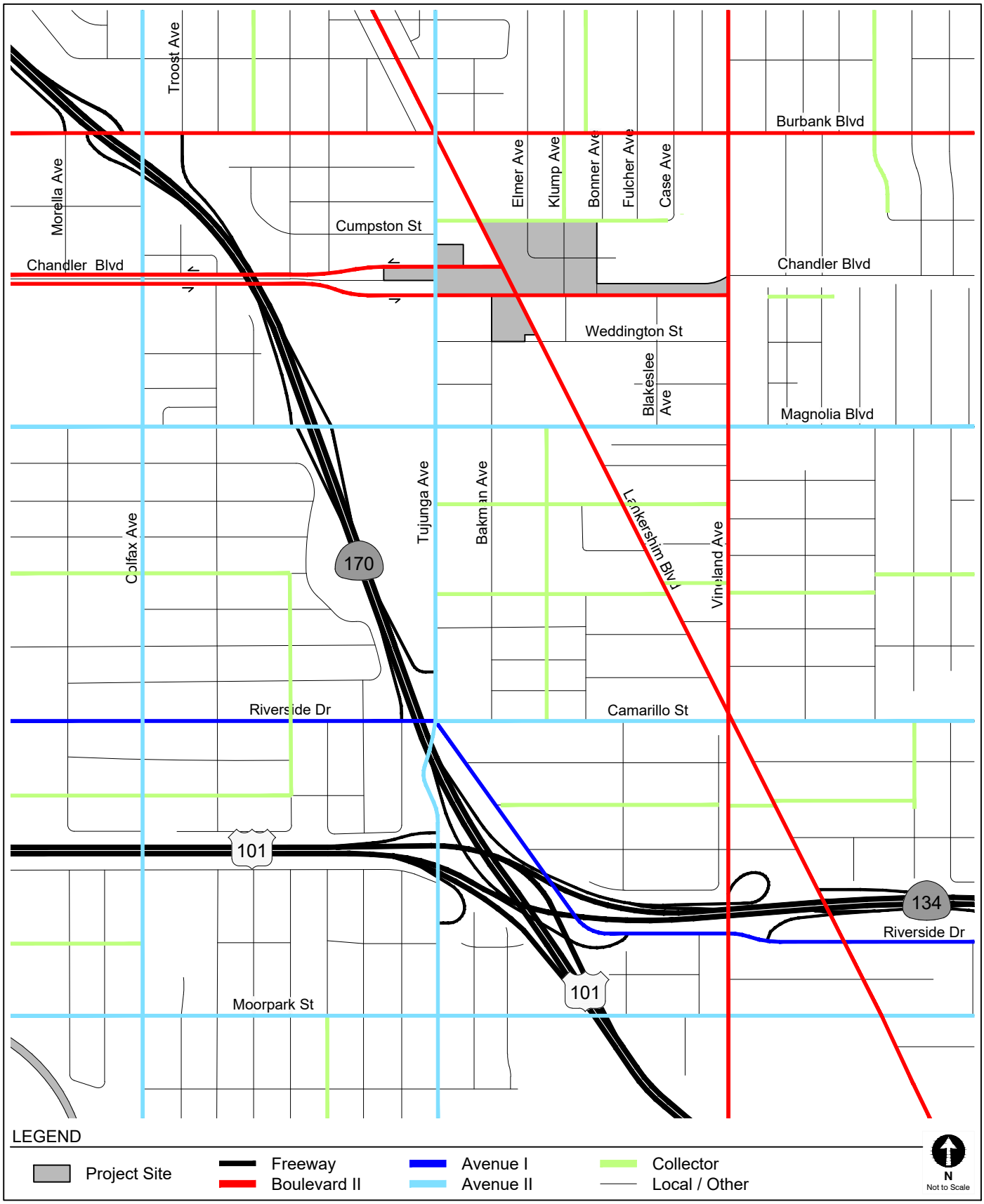
City Bicycle Plan. *2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element* (LADCP, adopted March 1, 2011) (2010 Bicycle Plan) identifies the City's vision for a more integrated bicycle network throughout the City, including within the Study Area. It proposes bicycle lanes on Lankershim Boulevard, Chandler Boulevard, Camarillo Street, Riverside Drive, Vineland Avenue, and Colfax Avenue. It proposes bicycle routes on Tujunga Avenue, Burbank Boulevard, and Camarillo Street. It proposes "bicycle friendly streets" (which would include traffic

calming enhancements and other bicycle-friendly features) on various neighborhood streets in the Study Area, including Fair Avenue, Tujunga Avenue, Colfax Avenue, Cumpston Street, Otsego Street, and Bakman Avenue.

Prior to the 2010 Bicycle Plan approval, bicycle lanes had already been constructed on Chandler Boulevard, Colfax Avenue, and a portion of Vineland Avenue. These have not changed since implementation of the 2010 Bicycle Plan. Since the 2010 Bicycle Plan was approved, bicycle lanes have been installed on Riverside Drive and Vineland Avenue, bicycle routes have been installed on Burbank Boulevard, and continental crosswalks have been installed on Bakman Avenue at Weddington Street and McCormick Street. No further improvements have been made since implementation of the Plan. Lankershim Boulevard, Camarillo Street, Riverside Drive, Tujunga Avenue, Fair Avenue, Cumpston Street, and Otsego Street have not been upgraded to include the improvements identified in the 2010 Bicycle Plan.

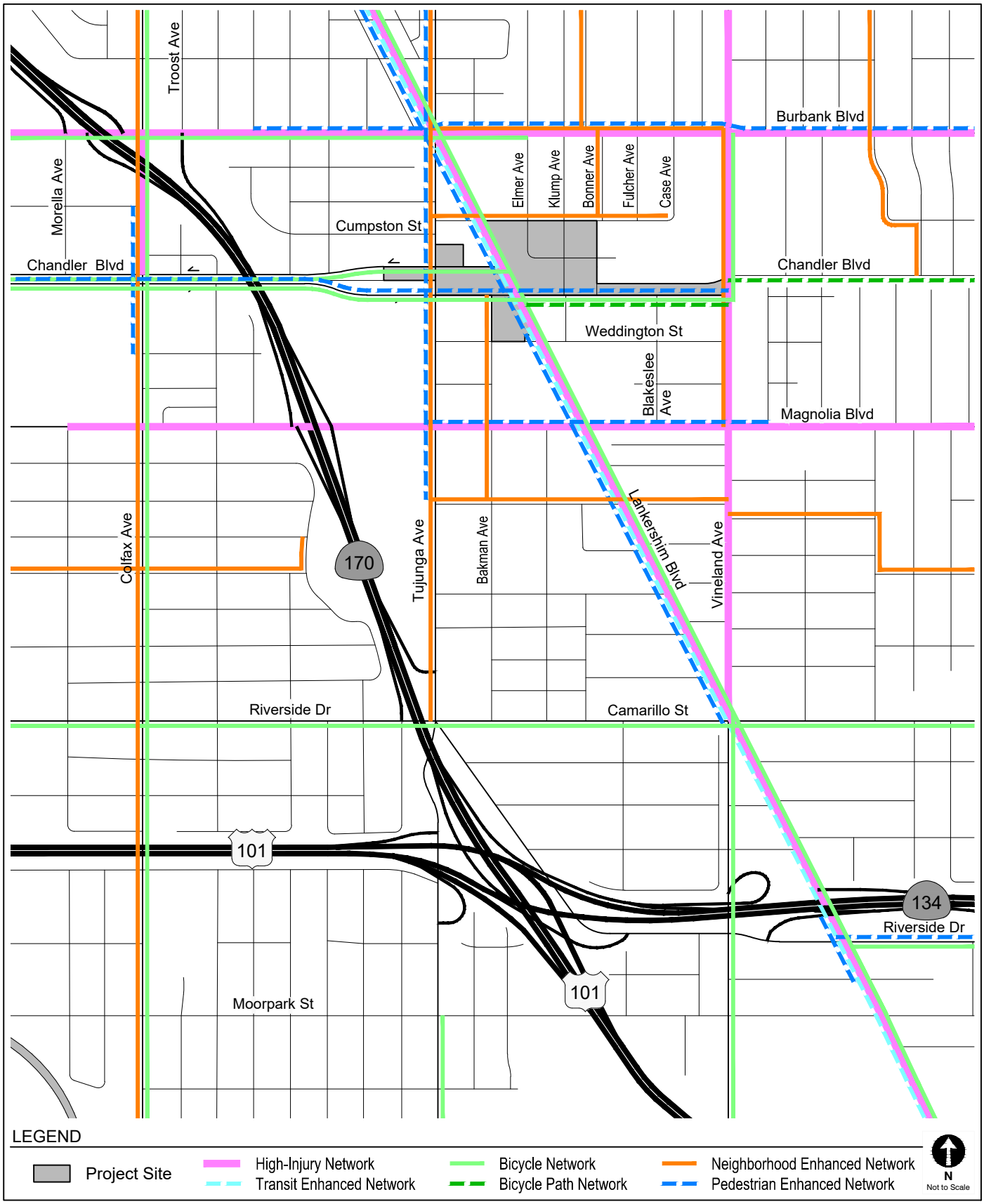
Chandler Bikeway Project. The Chandler Bikeway Project is a City project to complete the off-street Chandler Bikeway that extends from Burbank to Chatsworth. The Chandler Bikeway Project would close a gap between Vineland Avenue and Leghorn Avenue (approximately 2.60 miles in length), identified as including the Metro North Hollywood station frontage. The Project includes infrastructure to connect the Chandler Bikeway through Parcel 1 on District Way. The City may additionally install a Class IV bicycle lane on Chandler Boulevard and Lankershim Boulevard adjacent to Parcel 1, as shown in Figure 6. Metro, LADOT, and the Project Applicant will continue to coordinate bicycle infrastructure and improvements within and adjacent to the Project Site.

Vision Zero / Vision Zero Corridor Plans. The primary goal of Vision Zero is to eliminate traffic deaths in the City of Los Angeles by 2025. Currently within the Study Area, the City has listed Lankershim Boulevard as a priority corridor on a list of active Vision Zero projects. The City has already implemented many continental crosswalks between Chandler Boulevard and Victory Boulevard and installed a protected left-turn signal on the northbound left-turn movement at Lankershim Boulevard & Chandler Boulevard (North) as part of this program. It has yet to install signal upgrades at the intersection of Lankershim Boulevard & Burbank Boulevard. No other Vision Zero improvements are currently proposed within the Study Area, other than Project features that would improve pedestrian and bicycle safety, such as the proposed crosswalk and bicycle crossing of Lankershim Boulevard at Chandler Boulevard (North).



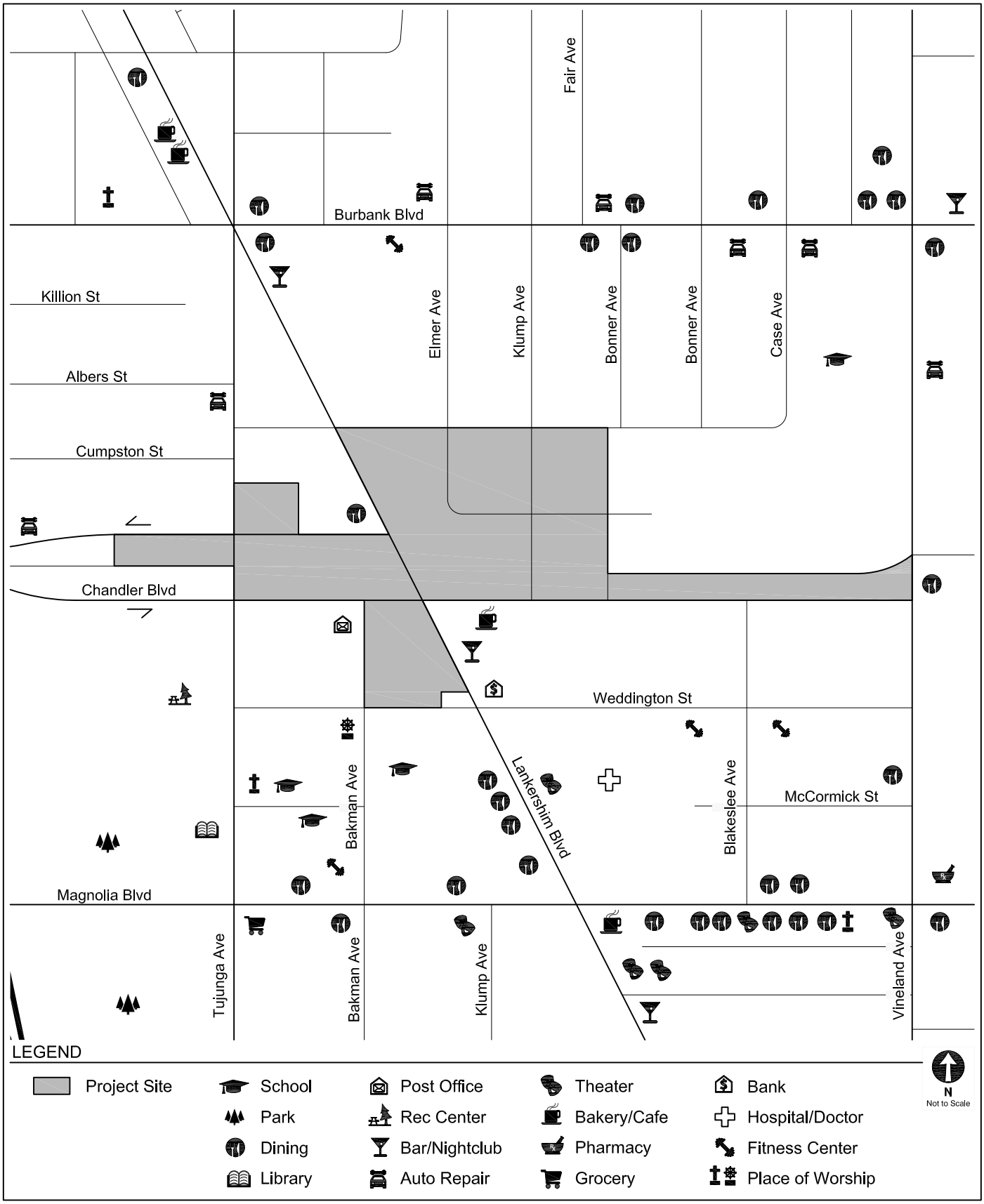
ROADWAY DESIGNATIONS WITHIN STUDY AREA

FIGURE 7



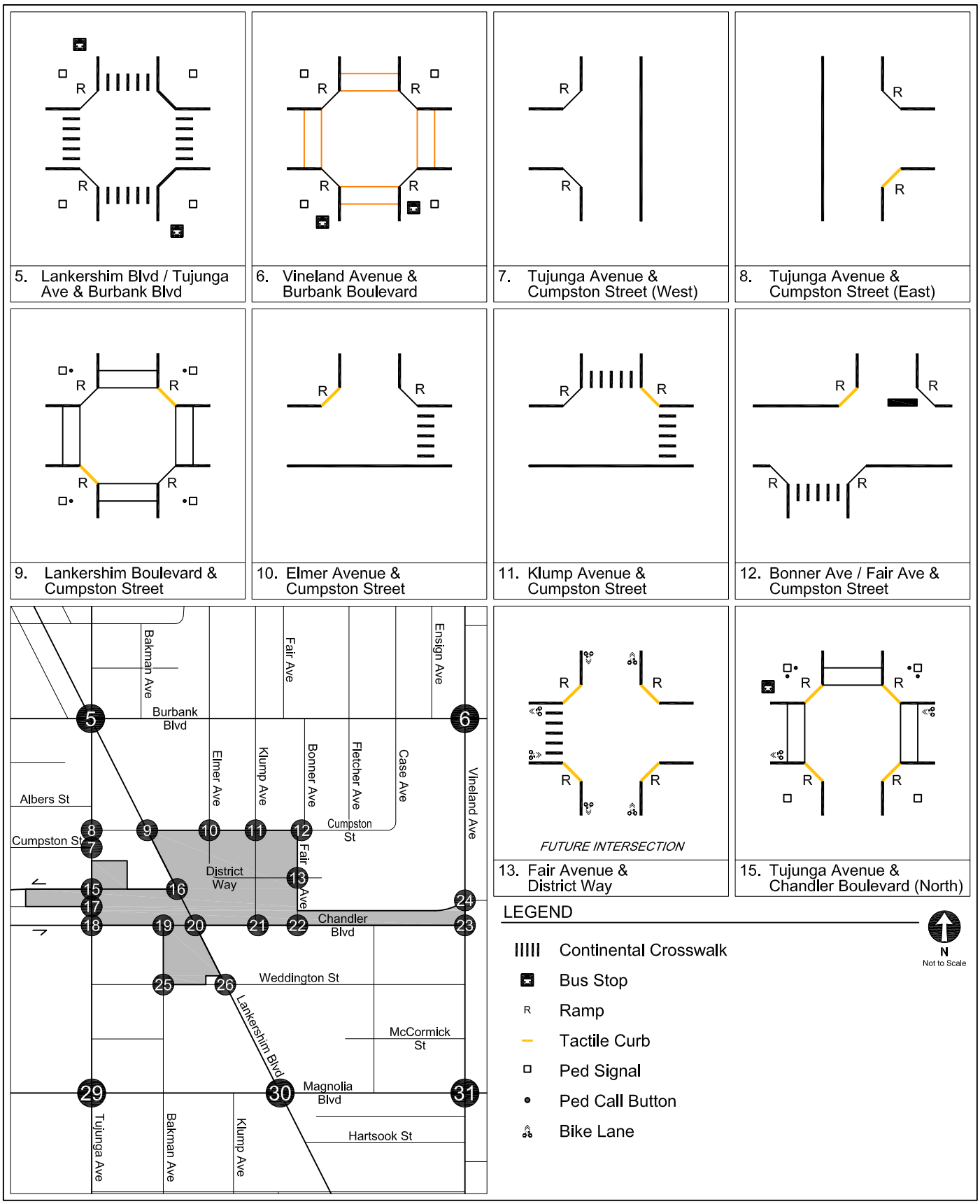
ROADWAY MODAL PRIORITIES AND HIGH INJURY NETWORK

FIGURE 8



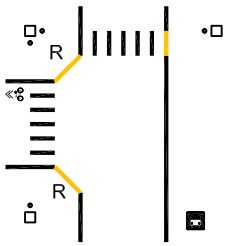
PEDESTRIAN DESTINATIONS WITHIN STUDY AREA

FIGURE 9

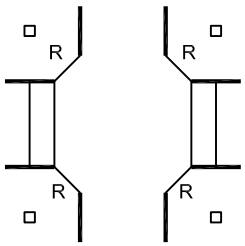


PEDESTRIAN, BICYCLE, AND TRANSIT INFRASTRUCTURE WITHIN STUDY AREA

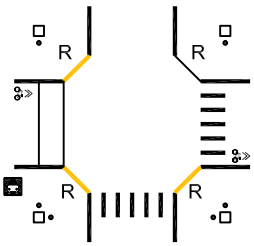
FIGURE 10



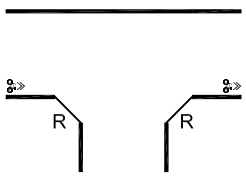
16. Lankershim Boulevard & Chandler Boulevard (North)



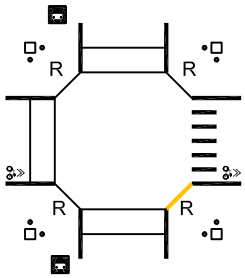
17. Tujunga Avenue & Orange Line Busway



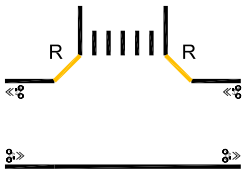
18. Tujunga Avenue & Chandler Boulevard (South)



19. Bakman Avenue & Chandler Boulevard (South)

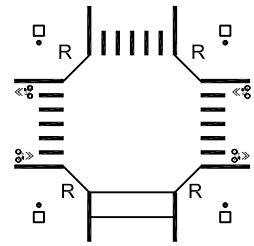


20. Lankershim Boulevard & Chandler Boulevard (South)

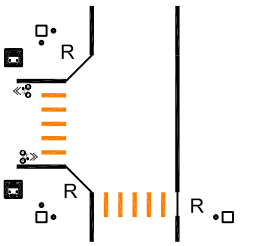


FUTURE INTERSECTION

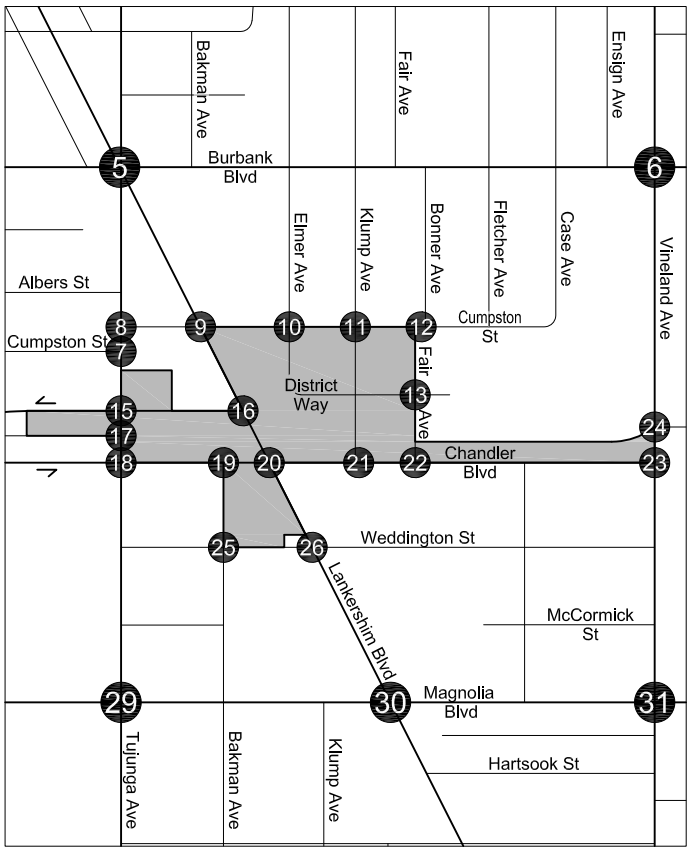
21. Klump Avenue & Chandler Boulevard

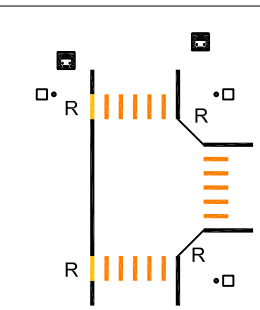


22. Fair Avenue & Chandler Boulevard

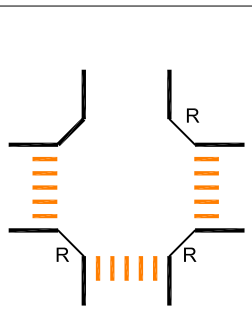


23. Vineland Avenue & Chandler Boulevard (West)





24. Vineland Avenue & Chandler Boulevard (East)



25. Bakman Avenue & Weddington Street

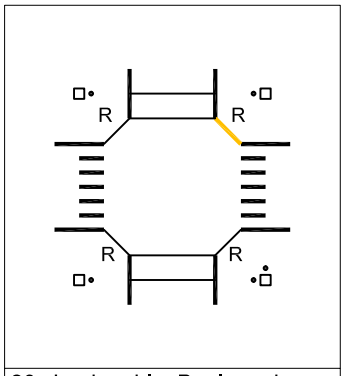
LEGEND

- Continental Crosswalk
- Continental Crosswalk near School
- Bus Stop
- R Ramp
- Tactile Curb
- Ped Signal
- Ped Call Button
- Bike Lane

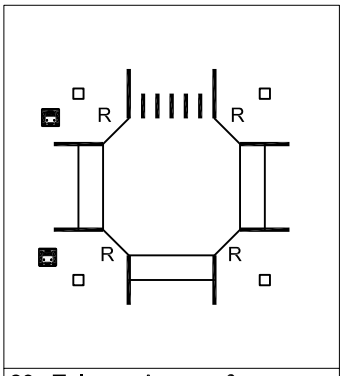
N
Not to Scale

PEDESTRIAN, BICYCLE, AND TRANSIT INFRASTRUCTURE WITHIN STUDY AREA

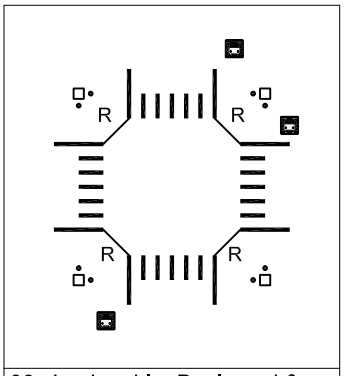
FIGURE 10 (CONT.)



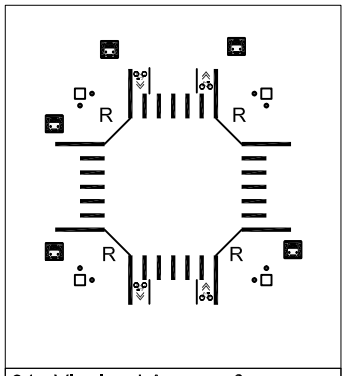
26. Lankershim Boulevard Weddington Street



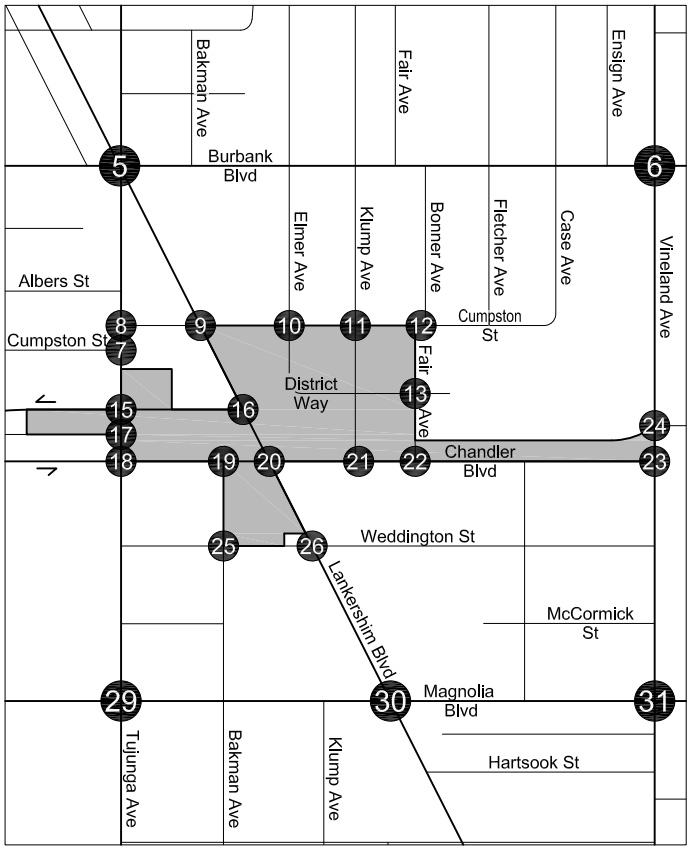
29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard



31. Vineland Avenue & Magnolia Boulevard



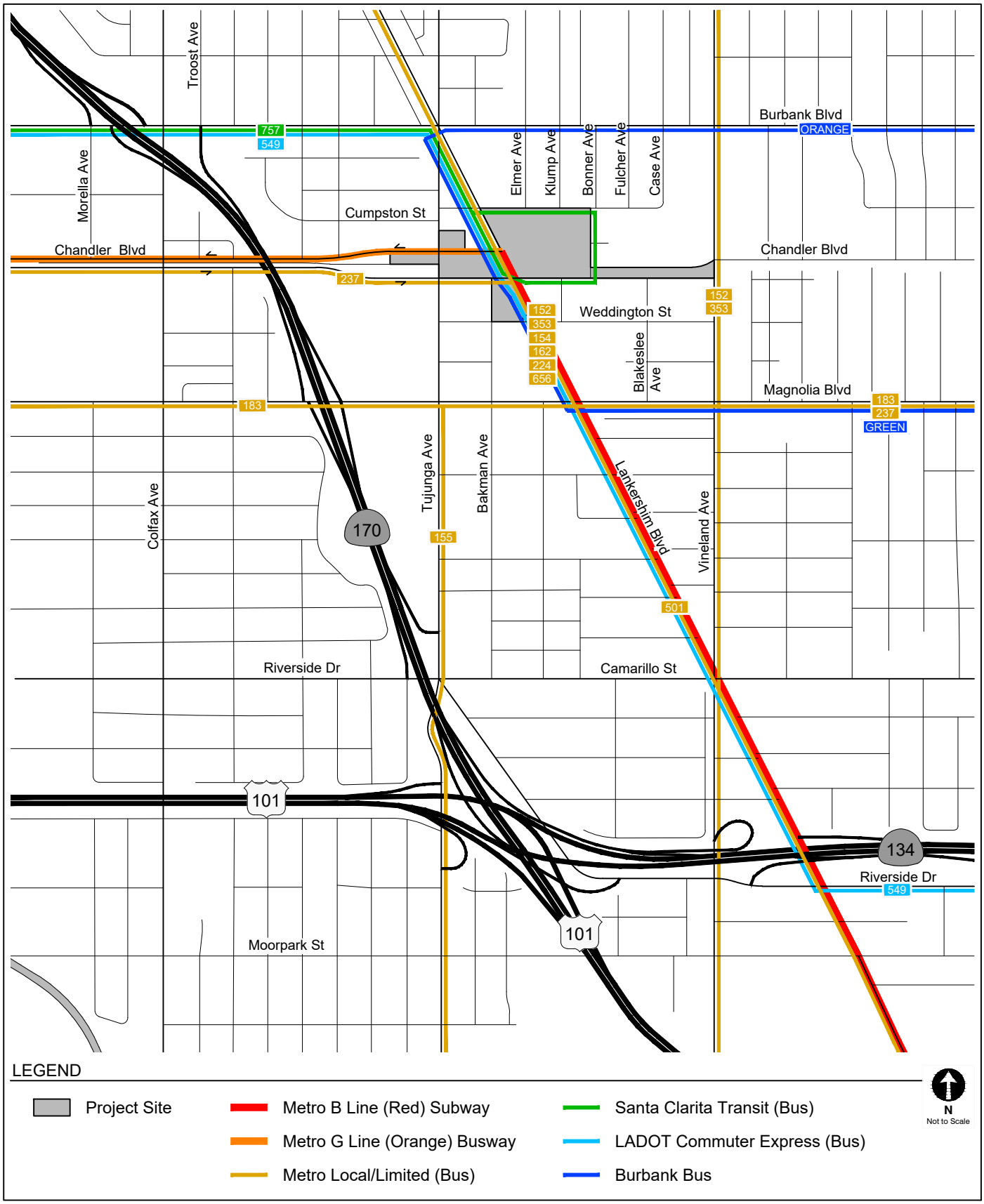
LEGEND

- Continental Crosswalk
- Bus Stop
- R Ramp
- Tactile Curb
- Ped Signal
- Ped Call Button
- Bike Lane

N
Not to Scale

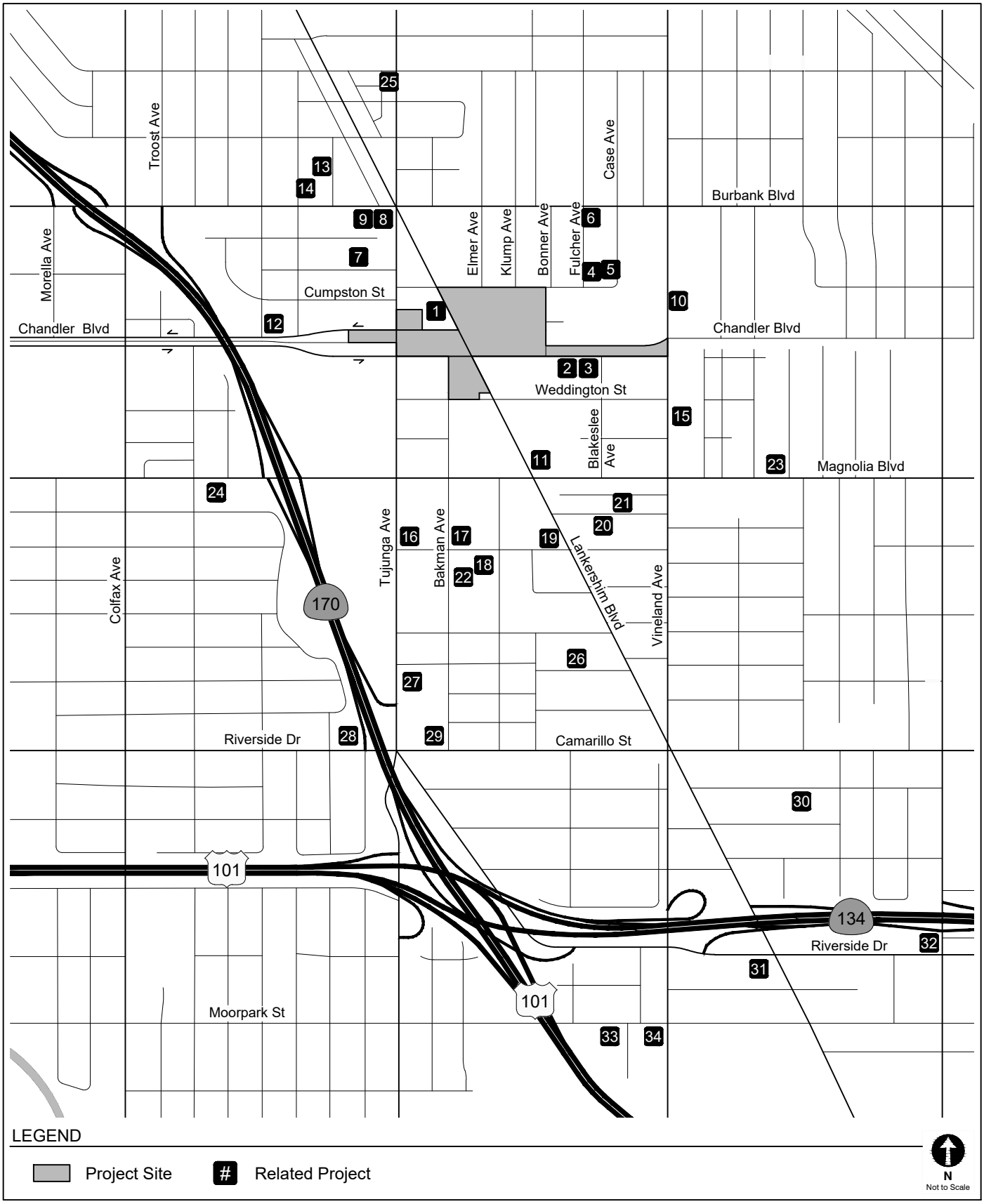
PEDESTRIAN, BICYCLE, AND TRANSIT INFRASTRUCTURE WITHIN STUDY AREA

FIGURE 10 (CONT.)



EXISTING TRANSIT SERVICE WITHIN STUDY AREA

FIGURE 11



LOCATIONS OF RELATED PROJECTS

FIGURE 12

TABLE 5
EXISTING SIDEWALK SEGMENT CONDITIONS

Sidewalk Segment	Side of Street	Designated Sidewalk Width	Sidewalk Width	Street Trees Present	Trash Bins Present	Sidewalk Deficiencies
Burbank Boulevard	N	15 ft	7 - 10 ft	No	No	[a]
West of Tujunga Ave	S	15 ft	10 ft	No	No	[a]
Burbank Boulevard	N	15 ft	8 - 10 ft	No	No	[a]
From Tujunga Ave to Elmer Ave	S	15 ft	8 - 12 ft	No	No	[a]
Burbank Boulevard	N	15 ft	5 - 12 ft	No	No	[a, b]
From Elmer Ave to Klump Ave	S	15 ft	5 - 8 ft	No	No	[a]
Burbank Boulevard	N	15 ft	15 ft	No	No	[b]
From Klump Ave to Bonner Ave	S	15 ft	8 ft	No	No	[a, c]
Burbank Boulevard	N	15 ft	5 - 12 ft	No	No	[a]
From Bonner Ave to Fulcher Ave	S	15 ft	5 - 12 ft	No	No	[a]
Burbank Boulevard	N	15 ft	10 - 15 ft	No	No	[a, c]
From Fulcher Ave to Case Ave	S	15 ft	5 - 12 ft	No	No	[a]
Burbank Boulevard	N	15 ft	6 - 25 ft	Yes	Yes	[a, b, c]
From Case Ave to Vineland Ave	S	15 ft	8 - 14 ft	No	No	[a]
Killion Street	N	12 ft	5 ft	Yes	No	[a, c]
West of Camellia Ave	S	12 ft	5 ft	Yes	No	[a, c]
Killion Street	N	12 ft	5 ft	Limited	No	[a, c]
East of Camellia Ave	S	12 ft	5 ft	Limited	No	[a]
Albers Street	N	12 ft	5 ft	Yes	No	[a, b, c]
West of Camellia Ave	S	12 ft	5 ft	Yes	No	[a, b, c]
Albers Street	N	12 ft	5 ft	No	No	[a, b, c]
East of Camellia Ave	S	12 ft	5 ft	No	No	[a, b]

Notes:

[a] Sidewalk does not meet general plan width designation.

[b] Missing curb cut(s) or sidewalks.

[c] Sidewalk or curb cut uprooted by tree / cracked / uneven.

[d] Sidewalk is located adjacent to the Project Site.

TABLE 5 (CONTINUED)
EXISTING SIDEWALK SEGMENT CONDITIONS

Sidewalk Segment	Side of Street	Designated Sidewalk Width	Sidewalk Width	Street Trees Present	Trash Bins Present	Sidewalk Deficiencies
Cumpston Street	N	12 ft	5 ft	Yes	No	[a, b, c]
West of Camellia Ave	S	12 ft	5 ft	Yes	No	[a, b]
Cumpston Street	N	13 ft	5 - 12 ft	Limited	No	[a]
From Camellia Ave to Tujunga Ave	S	13 ft	5 - 12 ft	Limited	No	[a]
Cumpston Street	N	13 ft	5 - 14 ft	Limited	No	[a, c]
From Tujunga Ave to Lankershim Blvd	S	13 ft	18 ft	Limited	Yes	
Cumpston Street [d]	N	13 ft	5 - 14 ft	No	Yes	[a]
From Lankershim Blvd to Bonner Ave	S	13 ft	16 ft	No	Yes	
Cumpston Street	N	13 ft	5 - 14 ft	Limited	No	[a, c]
From Bonner Ave to Case Ave	S	13 ft	5 - 14 ft	Yes	No	[a]
Chandler Boulevard (North)	N	15 ft	12 ft	No	No	[a, c]
West of Beck Ave	S	n/a	n/a	n/a	n/a	
Chandler Boulevard (North)	N	15 ft	5 ft	No	No	[a]
From Beck Ave to Camellia Ave	S	n/a	n/a	n/a	n/a	
Chandler Boulevard (North) [d]	N	15 ft	3 - 12 ft	No	No	[a, b]
From Camellia Ave to Tujunga Ave	S	15 ft	3 ft	Limited	No	[a, c]
Chandler Boulevard (North) [d]	N	15 ft	20 ft	No	No	[b, c]
From Tujunga Blvd to Lankershim Blvd	S	15 ft	9 ft	Yes	No	[a]
Chandler Boulevard (South)	N	n/a	n/a	n/a	n/a	
From Beck Ave to Camellia Ave	S	15 ft	12 ft	No	No	[a, c]
Chandler Boulevard (South)	N	n/a	n/a	n/a	n/a	
From Camellia Ave to Tujunga Ave	S	15 ft	12 ft	No	No	[a]

Notes:

[a] Sidewalk does not meet general plan width designation.

[b] Missing curb cut(s) or sidewalks.

[c] Sidewalk or curb cut uprooted by tree / cracked / uneven.

[d] Sidewalk is located adjacent to the Project Site.

TABLE 5 (CONTINUED)
EXISTING SIDEWALK SEGMENT CONDITIONS

Sidewalk Segment	Side of Street	Designated Sidewalk Width	Sidewalk Width	Street Trees Present	Trash Bins Present	Sidewalk Deficiencies
Chandler Boulevard (South) [d]	N	15 ft	4 - 9 ft	Limited	No	[a, c]
From Tujunga Blvd to Lankershim Blvd	S	15 ft	5 ft	Yes	No	[a]
Chandler Boulevard [d]	N	15 ft	11 ft	Yes	Yes	[a]
From Lankershim Blvd to Vineland Ave	S	15 ft	10 ft	Yes	Yes	[a]
Chandler Boulevard	N	12 ft	3 - 10 ft	Yes	Yes	[a, b, c]
East of Vineland Ave	S	12 ft	4	Yes	Yes	[a]
Weddington Street	N	12 ft	14 ft	Limited	No	[b, c]
From Tujunga Ave to Bakman Ave	S	12 ft	14 ft	Limited	Yes	
Weddington Street [d]	N	12 ft	8 ft	No	Yes	[a]
From Bakman Ave to Lankershim Blvd	S	12 ft	8 ft	No	No	[a]
Weddington Street	N	12 ft	4 - 8 ft	Yes	Yes	[a]
From Lankershim Blvd to Blakeslee Ave	S	12 ft	4 - 8 ft	Yes	No	[a, b, c]
Weddington Street	N	12 ft	4 - 8 ft	No	No	[a, b, c]
From Blakeslee Ave to Vineland Ave	S	12 ft	4 - 8 ft	No	No	[a, b]
McCormick Street	N	12 ft	5 - 15 ft	Limited	No	[a]
From Tujunga Ave to Bakman Ave	S	12 ft	5 - 15 ft	Limited	No	[a]
McCormick Street	N	12 ft	5 - 12 ft	Yes	Yes	[a]
From Blakeslee Ave to Vineland Ave	S	12 ft	7 - 10 ft	Yes	No	[a, c]
Magnolia Boulevard	N	15 ft	8 ft	Yes	No	[a]
West of Tujunga Ave	S	15 ft	8 ft	Yes	Yes	[a]
Magnolia Boulevard	N	15 ft	10 ft	Limited	Yes	[a]
From Tujunga Ave to Bakman Ave	S	15 ft	6 - 10 ft	No	Yes	[a]

Notes:

[a] Sidewalk does not meet general plan width designation.

[b] Missing curb cut(s) or sidewalks.

[c] Sidewalk or curb cut uprooted by tree / cracked / uneven.

[d] Sidewalk is located adjacent to the Project Site.

TABLE 5 (CONTINUED)
EXISTING SIDEWALK SEGMENT CONDITIONS

Sidewalk Segment	Side of Street	Designated Sidewalk Width	Sidewalk Width	Street Trees Present	Trash Bins Present	Sidewalk Deficiencies
Magnolia Boulevard	N	15 ft	6 - 9 ft	Limited	No	[a]
From Bakman Ave to Lankershim Blvd	S	15 ft	6 - 13 ft	Limited	No	[a]
Magnolia Boulevard	N	15 ft	10 ft	Yes	Yes	[a]
From Lankershim Blvd to Blakeslee Ave	S	15 ft	13 ft	Yes	No	[a]
Magnolia Boulevard	N	15 ft	10 ft	Yes	Yes	[a]
From Blakeslee Ave to Vineland Ave	S	15 ft	10 ft	Yes	Yes	[a]
Camellia Avenue	E	12 ft	5 - 10 ft	Yes	No	[a]
From Burbank Blvd to Killion St	W	12 ft	5 - 10 ft	Yes	No	[a]
Camellia Avenue	E	12 ft	5 ft	Limited	No	[a, c]
From Killion St to Albers St	W	12 ft	5 ft	Limited	No	[a, c]
Camellia Avenue	E	12 ft	6 ft	No	No	[a, c]
From Albers St to Cumpston St	W	12 ft	5 - 10 ft	No	No	[a]
Camellia Avenue	E	12 ft	5 - 10 ft	Limited	No	[a]
From Cumpston St to Chandler Blvd	W	12 ft	5 - 10 ft	No	No	[a, c]
Tujunga Avenue	E	15 ft	5 ft	No	Yes	[a]
From Burbank Blvd to Cumpston St	W	15 ft	7 ft	No	Yes	[a, b]
Tujunga Avenue [d]	E	15 ft	4 - 15 ft	No	No	[a, c]
From Cumpston St to Chandler Blvd (N)	W	15 ft	12 ft	No	No	[a]
Tujunga Avenue [d]	E	15 ft	15 ft	No	No	
From Chandler Blvd (N) to Chandler Blvd (S)	W	15 ft	10 ft	No	No	[a]
Tujunga Avenue	E	15 ft	7 ft	No	No	[a]
From Chandler Blvd (S) to Magnolia Blvd	W	15 ft	5 ft	No	No	[a]

Notes:

[a] Sidewalk does not meet general plan width designation.

[b] Missing curb cut(s) or sidewalks.

[c] Sidewalk or curb cut uprooted by tree / cracked / uneven.

[d] Sidewalk is located adjacent to the Project Site.

TABLE 5 (CONTINUED)
EXISTING SIDEWALK SEGMENT CONDITIONS

Sidewalk Segment	Side of Street	Designated Sidewalk Width	Sidewalk Width	Street Trees Present	Trash Bins Present	Sidewalk Deficiencies
Bakman Avenue [d]	E	12 ft	4 - 13 ft	Limited	Yes	[a]
From Chandler Blvd (S) to Magnolia Blvd	W	12 ft	6 - 13 ft	Yes	Yes	[a, c]
Lankershim Boulevard	E	15 ft	8 - 10 ft	Yes	Yes	[a, c]
From Burbank Blvd to Cumpston St	W	15 ft	10 ft	Yes	No	[a]
Lankershim Boulevard [d]	E	15 ft	15 ft	Yes	Yes	
From Cumpston St to Chandler Blvd (S)	W	15 ft	15 ft	Limited	Yes	
Lankershim Boulevard [d]	E	15 ft	12 ft	Yes	Yes	[a]
From Chandler Blvd (S) to Weddington St	W	15 ft	12 ft	Yes	Yes	[a]
Lankershim Boulevard	E	15 ft	12 ft	Yes	Yes	[a]
From Weddington St to Magnolia Blvd	W	15 ft	12 ft	Yes	Yes	[a]
Elmer Avenue	E	12 ft	7 ft	No	No	[a, b, c]
From Burbank Blvd to Cumpston St	W	12 ft	7 ft	No	No	[a, b, c]
Klump Avenue	E	13 ft	5 ft	No	No	[a]
From Burbank Blvd to Cumpston St	W	13 ft	5 - 10 ft	No	No	[a]
Bonner Avenue	E	12 ft	6 - 10 ft	No	No	[a]
From Burbank Blvd to Cumpston St	W	12 ft	6 ft	No	No	[a]
Fair Avenue [d]	E	12 ft	10 ft	Limited	No	[a]
From Cumpston St to Chandler Blvd	W	12 ft	10 ft	Limited	No	[a]
Fulcher Avenue	E	12 ft	4 - 8 ft	Limited	No	[a]
From Burbank Blvd to Cumpston St	W	12 ft	4 - 7 ft	Limited	No	[a]
Blakeslee Avenue	E	12 ft	6 ft	No	No	[a]
From Chandler Blvd to Weddington St	W	12 ft	6 ft	No	No	[a]

Notes:

[a] Sidewalk does not meet general plan width designation.

[b] Missing curb cut(s) or sidewalks.

[c] Sidewalk or curb cut uprooted by tree / cracked / uneven.

[d] Sidewalk is located adjacent to the Project Site.

TABLE 5 (CONTINUED)
EXISTING SIDEWALK SEGMENT CONDITIONS

Sidewalk Segment	Side of Street	Designated Sidewalk Width	Sidewalk Width	Street Trees Present	Trash Bins Present	Sidewalk Deficiencies
Blakeslee Avenue	E	12 ft	10 ft	No	No	[a, b]
From Weddington St to McCormick St	W	12 ft	10 ft	No	No	[a, b]
Blakeslee Avenue	E	12 ft	10 ft	Yes	No	[a]
From McCormick St to Magnolia Blvd	W	12 ft	10 ft	Yes	No	[a]
Case Avenue	E	12 ft	10 ft	Yes	No	[a]
From Burbank Blvd to Cumpston St	W	12 ft	5 ft	No	No	[a]
Vineland Avenue	E	15 ft	8 ft	Limited	Yes	[a]
From Burbank Blvd to Chandler Blvd	W	15 ft	12 - 20 ft	Limited	Yes	[a]
Vineland Avenue	E	15 ft	8 ft	No	Yes	[a]
From Chandler Blvd to Magnolia Blvd	W	15 ft	8 ft	No	Yes	[a]

Notes:
[a] Sidewalk does not meet general plan width designation.
[b] Missing curb cut(s) or sidewalks.
[c] Sidewalk or curb cut uprooted by tree / cracked / uneven.
[d] Sidewalk is located adjacent to the Project Site.

TABLE 6
LOCATIONS OF BUS STOPS IN PROJECT VICINITY

Stop Location	Direction	Route(s)	Bench Available	Shelter Available
North Hollywood Metro Station [a, b]	n/a	Metro 152, 154, 162, 183, 224, 353, and 501 Burbank Bus Green and Orange	Yes	Yes
North Hollywood G Line Station [a]	n/a	Metro G (Orange) Line	Yes	Yes
Lankershim Blvd / Burbank Blvd	N	Metro 154, 162, 224, 656	Yes	No
Lankershim Blvd / Burbank Blvd	S	Metro 154, 162, 224, 656	Yes	Yes
Vineland Ave / Burbank Blvd	N	Metro 152	Yes	No
Vineland Ave / Burbank Blvd	S	Metro 152	Yes	Yes
Chandler Blvd / Tujunga Ave [a, c]	W	Metro 237	No	No
Chandler Blvd / Tujunga Ave [a]	E	Metro 237	No	No
Lankershim Blvd / Chandler Blvd (N) [a]	N	LADOT 549	Yes	Yes
Lankershim Blvd / Chandler Blvd (N) [a]	S	LADOT 549	Yes	No
Lankershim Blvd / Chandler Blvd [a]	N	Metro 154, 162, 224, 353, 656	Yes	Yes
Lankershim Blvd / Chandler Blvd [a]	S	Metro 224, 656	Yes	No
Lankershim Blvd / Chandler Blvd [a]	S	Metro 152, 183, 237	Yes	No
Vineland Ave / Chandler Blvd [a]	N	Metro 152	Yes	No
Vineland Ave / Chandler Blvd [a]	S	Metro 152	No	No
Chandler Blvd / Vineland Ave [a]	W	Metro 183	No	No
Chandler Blvd / Vineland Ave [a]	E	Metro 183	No	No
Magnolia Ave / Tujunga Ave	W	Metro 183	Yes	Yes
Magnolia Ave / Tujunga Ave	E	Metro 183	Yes	Yes
Lankershim Blvd / Magnolia Ave	N	Metro 183, 224, 501, 656	Yes	Yes
Lankershim Blvd / Magnolia Ave	S	Metro 224, 501, 656	Yes	Yes
Magnolia Ave / Lankershim Blvd	W	Metro 152, 237	Yes	Yes
Magnolia Ave / Lankershim Blvd	W	Metro 183	Yes	Yes
Magnolia Ave / Lankershim Blvd	E	Metro 152, 237	Yes	Yes
Vineland Ave / Magnolia Ave	N	Metro 152, 183	Yes	No
Vineland Ave / Magnolia Ave [d]	S	Metro 152	Yes	Yes
Magnolia Ave / Vineland Ave [d]	W	Metro 237	No	No
Magnolia Ave / Vineland Ave [d]	E	Metro 237	No	No
Magnolia Ave / Vineland Ave [d]	E	Metro 183	No	Yes

Notes:
[a] Bus Stop located adjacent to Project Site
[b] Station will be relocated with construction of the Project.
[c] Lacks sidewalk west of the stop.
[d] Lacks sidewalk south of the stop.

TABLE 7
EXISTING TRANSIT SERVICE WITHIN STUDY AREA

Provider, Route, and Service Area		Service Type	Hours of Operation	Average Headway (minutes) [a]			
				Morning Peak Hour		Afternoon Peak Hour	
Metro Bus Service				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
152/353	West Hills - Sun Valley - North Hollywood	Local	5:00 AM - 12:00 AM	20	17	14	27
154	Tarzana - North Hollywood - Burbank	Local	5:30 AM - 12:00 AM	60	60	60	60
155	Sherman Oaks - Studio City - Burbank	Local	5:00 AM - 8:30 PM	48	40	40	40
162	West Hills - Van Nuys - North Hollywood	Local	5:00 AM - 12:00 AM	20	20	20	22
183	Sherman Oaks - North Hollywood - Burbank - Glendale	Local	5:30 AM - 12:00 AM	48	48	48	48
224	Sylmar - North Hollywood - Studio City	Local	4:30 AM - 1:00 AM	14	11	13	24
237/656	Hollywood - North Hollywood - Van Nuys - Mission Hills	Local	5:00 AM - 12:00 AM	48	48	48	60
501	North Hollywood - Burbank - Glendale - Pasadena	Express	5:00 AM - 10:00 PM	15	14	13	14
Santa Clarita Transit				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
757	Santa Clarita - North Hollywood	Commuter	5:00 AM - 11:00 PM	34	34	34	34
LADOT Commuter Express Bus Service				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
549	Encino - North Hollywood - Pasadena	Commuter	6:00 AM - 7:30 PM	48	48	48	48
Burbank Bus				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
Green	North Hollywood - Media District	Local	6:00 AM - 7:00 PM	14	14	13	13
Orange	North Hollywood - Hollywood-Burbank Airport	Local	5:30 AM - 10:30 PM	16	17	15	15
Metro Rapid Bus / Rail Service				**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
Metro B (Red) Line Subway - North Hollywood to Union Station		Rail	4:30 AM - 1:00 AM	10	10	10	10
Metro G (Orange) Line Busway - North Hollywood to Chatsworth		Guideway	24 Hours	5	5	5	5

Notes:
Metro: Los Angeles County Metropolitan Transportation Authority
LADOT: Los Angeles Department of Transportation
[a] Headway information based on operating and ridership data from Metro for April 2019.

TABLE 8
RELATED PROJECTS

No.	Project Name and Address	Description	Trip Generation Estimates						
			Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
				In	Out	Total	In	Out	Total
1.	NoHo Lankershim Station 5401 Lankershim Boulevard	127 apartment units, 14,500 sf retail and 1,918 sf office	882	11	34	45	35	28	63
2.	New NoHo Artwalk Project 11126 Chandler Boulevard	73 apartment units and 2,900 sf retail	903	(27)	67	40	61	2	63
3.	The Weddington 11120 Chandler Boulevard	324 apartment units	2,082	38	119	157	114	61	175
4. [a]	Apartments 5508 Fulcher Avenue	46 apartment units	250	4	13	17	12	8	20
5. [a]	Apartments 5513 Case Avenue	90 apartment units	490	8	24	32	24	16	40
6. [a]	Apartments 11112 Burbank Boulevard	12 apartment units	65	1	3	4	3	2	5
7.	Apartments 11433 Albers Street	59 apartment units	392	24	6	30	24	13	37
8. [a]	Mixed-Use 5553 N Tujunga Avenue	30 apartment units with office and retail	409	6	13	19	20	16	36
9. [a]	Apartments 11410 W Burbank Boulevard	84 apartment units	615	9	30	39	30	17	47
10. [a]	Mixed-Use 5444 N Vineland Avenue	96,444 sf self-storage space, 10,000 sf office	161	16	6	22	10	18	28
11. [a]	Fitness Studio 5200 N Lankershim Boulevard	2,690 sf health/fitness club	93	2	2	4	5	4	9
12.	Condominiums 11525 Chandler Boulevard	60 condominium units	349	4	22	26	21	10	31

Notes:
Related project information provided by LADOT and collected from the Department of City Planning website (http://planning.lacity.org). Trip generation data provided by LADOT except where noted.
[a] Trip generation estimates based on rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, 2017).

TABLE 8 (CONTINUED)
RELATED PROJECTS

No.	Project Name and Address	Description	Trip Generation Estimates						
			Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
				In	Out	Total	In	Out	Total
13. [c]	Apartments 5633 Farmdale Avenue	26 apartment units	141	2	7	9	7	4	11
14.	Camellia Court Apartments 5610 Camellia Avenue	62 apartment units	396	7	25	32	24	13	37
15. [a]	Self Storage 5260 N Vineland Avenue	81,300 sf self-storage space	123	5	3	8	7	7	14
16. [a]	Apartments 5147 Bakman Avenue	33 apartment units	180	3	9	12	9	6	15
17. [a]	Apartments 5110 N Bakman Avenue	51 apartment units	373	5	18	23	18	11	29
18. [a]	Apartments 11246 W Otsego Street	70 apartment units	512	7	25	32	25	14	39
19.	NoHo Millennium 5107 Lankershim Boulevard	297 apartment units, 23,733 sf market and 1,267 sf office	1,606	9	100	109	122	51	173
20.	Apartments 11106 Hartsook Street	61 apartment units	361	5	22	27	22	12	34
21. [a]	Apartments 11029-11035 Hartsook Street	53 apartment units	223	4	11	15	11	7	18
22. [a]	Apartments 5050 N Bakman Avenue	40 apartment units	249	4	12	16	12	7	19
23.	Mixed Use 10821 Magnolia Boulevard	40 apartment units and 4,075 sf retail	527	4	16	36	16	20	36
24.	School 11600 Magnolia Boulevard	78 additional students	164	38	23	61	17	25	42

Notes:
Related project information provided by LADOT and collected from the Department of City Planning website (http://planning.lacity.org). Trip generation data provided by LADOT except where noted.
[a] Trip generation estimates based on rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, 2017).

TABLE 8 (CONTINUED)
RELATED PROJECTS

No.	Project Name and Address	Description	Trip Generation Estimates						
			Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
				In	Out	Total	In	Out	Total
25. [a]	Apartments 5755 N Tujunga Avenue	33 apartment units	242	3	12	15	11	7	18
26. [a]	Apartments 11155 W Huston Street	24 apartment units	161	2	8	10	8	4	12
27.	Wesley School 4832 Tujunga Avenue	91 additional students	244	45	37	82	13	15	28
28.	Apartments 11443 Riverside Drive	29 apartment units	171	3	10	13	10	6	16
29. [a]	Mixed Use 11311 Camarillo Street	60 apartment units and 3,000 sf retail	439	8	17	25	21	16	37
30. [a]	Apartments 10804 W Blix Street	21 apartment units	139	2	7	9	7	4	11
31.	Mixed Use 10850 Riverside Drive	179 apartment units and 5,684 sf retail	1,246	10	73	83	75	38	113
32.	Cohen Apartments 10601 Riverside Drive	82 apartment units and 13,327 sf retail	1,083	17	39	56	47	36	83
33.	Apartments 11036 Moorpark Street	96 apartment units	506	7	32	39	31	16	47
34.	Gas Station 4377 Vineland Avenue	Expansion of existing facilities	645	21	22	43	20	21	41

Notes:
Related project information provided by LADOT and collected from the Department of City Planning website (http://planning.lacity.org). Trip generation data provided by LADOT except where noted.
[a] Trip generation estimates based on rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, 2017).

Chapter 3
Transportation Assessment Screening

As summarized in Chapter 1, the TAG provides a set of screening criteria for each of the CEQA and non-CEQA analyses that may be required in a transportation assessment. This chapter presents the screening criteria and applies them to the Project.

PROJECT TRIP GENERATION

Some of the screening criteria include a minimum daily Project trip generation threshold. The TAG specifies that this estimate should be prepared using the latest version of the City's VMT Calculator tool[13] or the most recent version of ITE's Trip Generation Manual. The VMT Calculator uses ITE trip generation rates as a basis for trip generation estimates but also accounts for a variety of sociodemographic, land use, and built environment factors estimated for each Census tract within the City, as well as the interaction of land uses within a mixed-use development.

The VMT Calculator estimates that the Project would generate 14,823 daily trips upon completion of Full Buildout, prior to accounting for any mitigation measures the Project proposes to incorporate. The VMT Calculator is described in more detail in Chapter 5, and the detailed reports from the VMT Calculator are provided in Appendix A.

SCREENING FOR CEQA ANALYSES

Table 9 summarizes the Project screening application for the four CEQA analyses identified in the TAG and an additional analysis, the Freeway Safety Analysis, separately required based on *LADOT Transportation Assessments – Interim Guidance for Freeway Safety Analysis* (LADOT, May 1, 2020) and *Interim Land Development and Intergovernmental Review (LDIGR) Safety*

[13] Version 1.3, released July 2020.

Review Practitioners Guidance (California Department of Transportation [Caltrans], July 2020). As shown in Table 9, the Project meets the screening criteria for the following four CEQA analysis types:

- Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies
- Threshold T-2.1: Causing Substantial Vehicle Miles Traveled
- Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use
- Freeway Safety Analysis

A fifth type, Threshold T-2.2: Substantially Inducing Additional Automobile Travel, is intended primarily for transportation infrastructure projects that increase vehicular capacity on highways. While the Project does modify lanes on Chandler Boulevard (north and south of the Consolidated Transit Center), additions of short sections of transit lanes are specifically exempted from the screening criteria for Threshold T-2.2. Therefore, Threshold T-2.2 does not apply to the Project.

The detailed analysis for each of the four required CEQA analyses identified above are provided in Chapters 4 through 7, respectively.

SCREENING FOR NON-CEQA ANALYSES

Table 10 summarizes the Project screening application for the four non-CEQA analyses identified in the TAG. As shown in Table 10, the Project meets the screening criteria for each of the four non-CEQA analysis types:

- Pedestrian, Bicycle, and Transit Access Assessment
- Project Access, Safety, and Circulation Evaluation
- Project Construction
- Residential Street Cut-Through Analysis

The detailed analyses are provided in Chapters 8 through 11, respectively.

TABLE 9
TRANSPORTATION ASSESSMENT SCREENING - CEQA ANALYSES

Screening Criteria	Met by Project
Conflicting with Plans, Programs, Ordinances, or Policies (Threshold T-1)	
The Project would require a discretionary action that requies the decision-maker to find that the decision substantially conforms to the purpose, intent, and provisions of the General Plan.	Yes
The Project is known to directly conflict with a transportation plan, policy, or program adopted to support multi-modal transportation options or public safety.	No
The Project is required to or proposing to make any voluntary modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)	Yes
Analysis Required (Any Criteria Met)	**Yes**
Causing Substantial Vehicle Miles Traveled (Threshold T-2.1)	
The Project would generate a net increase of 250 or more daily vehicle trips.	Yes
The Project would generate a net increase in daily VMT.	Yes
Analysis Required (All Criteria Met)	**Yes**
Substantially Inducing Additional Automobile Travel (Threshold T-2.2)	
The Project would include the addition of through traffic lanes on existing or new highways, excepting short sections of managed lanes, transit lanes, or auxiliary lanes that are designed as safety improvements rather than to add vehicular capacity.	No
Analysis Required	**No**
Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use (Threshold T-3)	
The Project proposes new driveways or access points from the public right-of-way.	Yes
The Project would modify the public right-of-way (i.e., street dedications, curb reconfiguration, etc.), whether voluntary or mandatory.	Yes
Analysis Required (Any Criteria Met)	**Yes**
Freeway Safety Analysis [a]	
The Project would generate a net increase of 25 or more peak hour trips on a freeway off-ramp.	Yes
Analysis Required	**Yes**

Notes:

All screening criteria from the TAG Section 2, CEQA Analysis of Transportation Impacts, except as noted in [a].

[a] Screening criteria based on *LADOT Transportation Assessments - Interim Guidance for Freeway Safety Analysis* (LADOT, May 1, 2020).

TABLE 10
TRANSPORTATION ASSESSMENT SCREENING - NON-CEQA ANALYSES

Screening Criteria	Met by Project
Pedestrian, Bicycle, and Transit Access Assessment	
The Project involves a discretionary action that would be under review by the Los Angeles Department of City Planning.	Yes
The Project would construct at least 50 dwelling units, 50 hotel rooms, or 50,000 square feet of non-residential space.	Yes
The Project would generate a net increase of 1,000 or more daily vehicle trips, the Project Site has 250 feet or more of frontage along a street classified as Collector, Avenue, or Boulevard in Mobility Plan 2035, or the Project's building frontage would encompass an entire block along a street classified as Avenue or Boulevard in Mobility Plan 2035.	Yes
Pedestrian, Bicycle, and Transit Access Assessment Required (All Criteria Met)	**Yes**
Project Access, Safety, and Circulation Evaluation	
The Project would generate a net increase of 250 or more daily vehicle trips.	Yes
The Project involves a discretionary action that would be under review by the Los Angeles Department of City Planning.	Yes
Project Access, Safety, and Circulation Evaluation Required (All Criteria Met)	**Yes**
Project Construction	
The Project requires construction activities to take place within the public right-of-way of a street classified as Avenue or Boulevard in Mobility Plan 2035 and would necessitate the temporary closure of a lane, alley, or street for more than one day.	Yes
The Project requires construction activities to take place within the public right-of-way of a street classified as a Collector or Local Street in Mobility Plan 2035 and would necessitate the temporary closure of a lane, alley, or street for more than seven days.	Yes
Project construction would result in the loss of regular vehicle, bicycle, or pedestrian access for more than one day.	Yes

Notes:
All screening criteria from the TAG Section 3, Non-CEQA Transportation Analysis.

TABLE 10 (CONTINUED)
TRANSPORTATION ASSESSMENT SCREENING - NON-CEQA ANALYSES

Screening Criteria	Met by Project
Project construction would result in the loss of regular Americans with Disabilities Act pedestrian access to transit facilities during operating hours.	No
Project construction would result in the temporary loss for more than one day of an existing bus stop or rerouting of a bus that serves the Project Site.	Yes
Project construction would result in the temporary removal and/or loss of on-street metered parking for more than 30 days.	No
The Project involves a discretionary action to construct new buildings or additions of more than 1,000 square feet requiring access for hauling construction materials and equipment from streets less than 24 feet wide in a hillside area.	No
Project Construction Assessment Required (Any Criteria Met)	**Yes**
Residential Street Cut-Through Analysis	
The Project would generate a net increase of 250 or more daily vehicle trips.	Yes
The Project involves a discretionary action that would be under review by the Los Angeles Department of City Planning.	Yes
The Project is located along a currently congested street classified as Avenue or Boulevard in Mobility Plan 2035 and adds trips that may cause traffic diversion onto parallel local streets.	Yes
The Project is projected to add a substantial amount of automobile traffic to congested streets classified as Boulevard, Avenues, or Collectors in Mobility Plan 2035 which would cause a shift to alternative routes.	Yes
Nearby local residential streets provide a viable alternative route compared to the congested corridor(s).	Yes
Residential Street Cut-Through Analysis Required (All Criteria Met)	**Yes**

Notes:
All screening criteria from the TAG Section 3, Non-CEQA Transportation Analysis.

Chapter 4

CEQA Threshold T-1: Consistency with Policy Analysis

This chapter presents a review of the Project's consistency with plans and policies guiding development and transportation networks in Los Angeles.

SIGNIFICANCE CRITERIA

The Consistency with Policy Analysis applies Threshold T-1 from the TAG to the Project. Threshold T-1 states that a project would result in a significant impact if it would "conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities." (TAG Section 2.1.3).

A project would be determined not to conflict with a particular program, plan, policy, or ordinance if it is generally in conformance and does not obstruct its implementation of that policy. At the same time, the TAG provides that a project would not be shown to result in an impact merely based on whether a project would not implement a particular program, plan, policy, or ordinance. If a conflict is identified, mitigation measures would focus on improving access, comfort, and safety for all road users, especially pedestrians, bicyclists, and transit riders.

Cumulative Impact Analysis

In addition to potential Project-specific impacts, the TAG requires that the Project be reviewed in combination with other development projects within one-quarter mile of intersections analyzed in Chapter 9 (i.e., the Related Projects shown in Figure 12 and Table 8) to determine if there may be a cumulatively significant impact resulting from inconsistency with a particular program, plan, policy, or ordinance. The majority of the 34 Related Projects are fully or primarily residential, along with two school expansions, two self-storage facilities, a fitness studio, and a gas station expansion.

PLANS, PROGRAMS, ORDINANCES, AND POLICIES

Table 2.1-1 of the TAG identifies a series of City adopted programs, plans, ordinances, and policies that establish the transportation planning regulatory framework for development in the City. Attachment D of the TAG also provides a series of questions to help guide the review of the documents in Table 2.1-1. Those questions and their responses are provided in Appendix B.

Each of the documents listed in TAG Table 2.1-1 was reviewed for applicability to the Project, and the relevant transportation-related policies are described below, along with the Project's conformance. In addition to the documents listed in the TAG, the Project's consistency with LAMC Section 12.21.A.4 (off-street parking requirements) was also reviewed at the request of LADOT.

Mobility Plan 2035

Mobility Plan 2035 combines "complete street" principles with the following five goals that define the City's mobility priorities:

1. Safety First
2. World Class Infrastructure
3. Access for All Angelenos
4. Collaboration, Communication, and Informed Choices
5. Clean Environments and Healthy Communities

It further enumerates a variety of policies and programs in support of those goals. The policies and programs that are applicable to the Project are provided in Table B-1 in Appendix B, along with a detailed discussion of the Project's consistency with each. In summary, the Project is conceived as a pedestrian- and transit-oriented development that emphasizes accessibility by all travel modes. It is organized around a network of small blocks connecting publicly accessible open spaces with activated ground-floor street frontages to create a high-quality pedestrian experience. It would provide new or maintained (i.e., restriped) pedestrian crosswalks at a variety

of locations as described in Chapter 1, and all sidewalks would meet or exceed Mobility Plan 2035 standard widths[14].

In addition to constructing the Consolidated Transit Center, the Project would support multi-modal options through the provision of secure parking for at least 100 bicycles at one or more Metro Bike Hubs as well as designated locations for Metro's Bikeshare short-term rental program or similar first mile / last mile transportation options. It would also provide convenient and secure long-term and short-term parking for bicycles at each Block. The Project would include a new two-way bicycle route through the Project Site as shown in Figure 6 and proposes to provide dedicated curb-side passenger loading areas on District Way, Chandler Boulevard, and Lankershim Boulevard.

The Project's mix of high-density residential uses, office space, and commercial uses located adjacent to one of the largest public transit hubs in the San Fernando Valley would encourage ridesharing and the use of alternative mobility modes. Additionally, the Project's TDM program will further reduce trips and VMT. The Project is estimated to generate lower VMT per capita for residents and employees than the average for the South Valley Area Planning Commission (APC) area, as detailed in Chapter 5 of this report. The Project has a direct connection to Union Station, the largest transit hub in Southern California, via the Metro B (Red) Line. The Project would provide sufficient off-street parking to accommodate the Project's parking demand as well as providing additional parking for Metro users.

Additionally, LAMC Section 12.37 states that a project must dedicate and improve adjacent streets to half-ROW standards consistent with street designations identified in Mobility Plan 2035 and shown in Table 3 or request a waiver of dedication. As discussed in Chapter 1 and summarized in Table 4, the Project would dedicate and improve various streets and sidewalks, request to vacate ROW in some instances where the existing ROW exceeds standards, and request waivers of dedication for certain frontages, which would be accomplished through the District NoHo Specific Plan and the Project's Vesting Tentative Tract Map. The Project proposes to dedicate and improve the following streets to meet their standard ROW or sidewalk width:

[14] In some locations, portions of the sidewalk would be provided on the Project Site, as summarized in Table 4.

- 10 feet on the north side of Chandler Boulevard adjacent to Parcel 1 for a loading area
- 10 feet on the south side of Chandler Boulevard (South) adjacent to Block 8
- 8 feet on the east side of Tujunga Avenue adjacent to Block 7 to provide a 15-foot sidewalk
- 5 feet on the north side of Weddington Avenue adjacent to the easterly portion of Block 8

The Project requests a vacation of the following ROW to reduce streets to their standard ROW:

- 10 feet on the south side of Cumpston Avenue adjacent to Parcel 1
- 5 feet on the north side of Weddington Avenue adjacent to the westerly portion of Block 8
- 10 feet on the east side of Bakman Avenue adjacent to Block 8

Finally, the Project requests a waiver of dedication requirements on the following streets:

- Chandler Boulevard (North): Chandler Boulevard (North) is a designated Boulevard II, but with the Project would have a modified use with a set of sawtooth bus parking spaces on the south curb, an eastbound bus-only lane, a single mixed-flow westbound travel lane, and a westbound bicycle lane. The Project proposes that the existing 80-foot total ROW be maintained (compared with the Boulevard II standard of 110 feet), which would include minimum 15-foot wide sidewalks on both sides of the street (consistent with Boulevard II standards) and approximately 50 feet for the aforementioned uses of the roadway (30 feet less than Boulevard II standards). Thus, a waiver is requested for both the south side of the street adjacent to Block 0 West and the north side of the street adjacent to Block 7.

- Lankershim Boulevard: Boulevard II standards require a sidewalk width of 15 feet, where the existing public ROW on Lankershim Boulevard adjacent to the Project Site (including Block 0 West and Block 8 on the west side of Lankershim Boulevard and all of Parcel 1 on the east side) only provides 10 feet for sidewalks. The property along the Project frontage contains existing Metro equipment in the ground and, therefore, cannot be dedicated to the City. However, the Project Site would provide additional sidewalk width on Project property that would at all locations meet or exceed 15 feet in total width, thereby meeting or exceeding Boulevard II standards.

- Chandler Boulevard (South): Chandler Boulevard (South) is a designated Boulevard II, but with the Project, the north curb would provide a set of sawtooth bus parking spaces

on Block 0 West. The Project proposes that the existing 45-foot half-ROW be maintained on the north side of the street (compared with the Boulevard II standard of 55 feet). There would be a sidewalk on Metro property exceeding the 15 feet required for Boulevard II standards.

- Tujunga Avenue: The east half of Tujunga Avenue adjacent to Block 0 West requires a half-roadway width of 28 feet and a sidewalk width of 15 feet (43 feet total half-ROW). The current half-ROW is 47 feet, including a 40-foot roadway and seven-foot sidewalk; therefore, it exceeds the total half-ROW requirement but does not provide a 15-foot sidewalk. However, the Consolidated Transit Center would provide additional sidewalk width on Metro property, in total meeting or exceeding the 15 feet required for Arterial II standards.

Each of the locations where waivers of dedications are requested remains consistent with the intent of the Mobility Plan 2035 street designations, and in all cases the Project would maintain publicly accessible sidewalks that meet or exceed the street designation standard. It should be noted that no dedications would be required or provided along the frontage of the East Lot or West Lot. These lots would be separately developed by Metro, which is not required to provide dedications in connection with its self-permitting authority.

As detailed in Table B-1 in Appendix B and summarized above, the Project is consistent with all applicable policies of Mobility Plan 2035. The Project does not interfere with other policies identified in Mobility Plan 2035. Therefore, the Project is consistent with Mobility Plan 2035.

Implementation of the Project, together with the Related Projects, would not create inconsistencies with Mobility Plan 2035. The Related Projects primarily propose high-density residential uses in an area with good transit connectivity, reducing dependence on automobiles and encouraging more active travel modes. Therefore, the Project, together with the Related Projects, would not result in cumulative impacts with respect to consistency with applicable policies identified in Mobility Plan 2035.

Plan for a Healthy LA

Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan (LADCP, March 2015) (Plan for a Healthy Los Angeles) introduces guidelines for the City to follow to enhance the City's position as a regional leader in health and equity, encourage healthy design and equitable access, and increase awareness of equity and environmental issues.

A detailed analysis of the Project's consistency with the policies in the Plan for a Healthy Los Angeles is provided in Table B-2 in Appendix B. In summary, the Project would promote healthy living as a pedestrian- and transit-oriented mixed-use development where active travel modes are encouraged. It is organized around a network of small blocks connecting publicly accessible open spaces with activated ground-floor street frontages to create a high-quality pedestrian experience. It proposes to provide dedicated curb-side passenger loading areas within and adjacent to the Project Site. The Project would support multi-mobility options through the provision of secure parking for at least 100 bicycles at one or more Metro Bike Hubs as well as designated locations for Metro's Bikeshare short-term rental program or similar first mile / last mile transportation options. It would provide new or maintained (i.e., restriped) pedestrian crosswalks at a variety of locations as described in Chapter 1. It would modify westbound bicycle infrastructure on Chandler Boulevard, including the development of a new two-way bicycle route through the Project Site as shown in Figure 6.

The Project would also provide up to 311 affordable housing units and would provide employment and entrepreneurial opportunities through the office, retail, and restaurant space at the Project Site. The commercial uses would serve Project residents and employees, transit riders, and the surrounding community, and would be easily accessed by pedestrians and bicyclists. Finally, the Project is estimated to generate lower VMT per capita for residents and employees than the average for the South Valley APC area, as detailed in Chapter 5 of this transportation assessment. Further, it would implement TDM measures, also described in Chapter 5, to further reduce VMT per capita. VMT directly contributes to GHG emissions, so a reduced VMT per capita also reduces GHG per capita.

The above discussion highlights characteristics that specifically support policies in the Plan for a Healthy Los Angeles, as detailed in Table B-2 in Appendix B. The Project prioritizes safety and access for all individuals utilizing the Project Site and does not hinder other goals and policies

identified in the Plan for a Healthy Los Angeles. Therefore, the Project is consistent with and would not obstruct the implementation of the policies recommended by the Plan for a Healthy Los Angeles.

Implementation of the Project, together with the Related Projects, would not create inconsistencies with Plan for a Healthy Los Angeles. Similar to the Project, the Related Projects primarily propose high-density housing (including some affordable housing) in an area with good transit connectivity, thereby reducing dependence on automobiles, encouraging more active travel modes, and reducing GHG emissions. Therefore, the Project, together with the Related Projects, would not result in cumulative impacts with respect to consistency with applicable policies identified in Plan for a Healthy Los Angeles.

Specific Plans

The Project is not located within an area currently governed by a Specific Plan. However, the Applicant seeks the establishment of the District NoHo Specific Plan through the Project entitlement process.

LAMC Section 12.21.A.16 (Bicycle Parking)

LAMC Section 12.21.A.16 details the bicycle parking requirements for new developments. As further described in Appendix C, the Project's bicycle parking requirement is 1,158 spaces. The Project would provide up to 1,158 bicycle parking spaces for residential, retail, and office users (including 969 long-term and 189 short-term spaces). The Project would meet the LAMC requirements for on-site bicycle parking supply, notwithstanding the fact that the Project would be subject to (and meet) the requirements of the District NoHo Specific Plan, which may set a different requirement (higher or lower) than the LAMC requirement. Additionally, beyond the LAMC requirements, the Project would also provide secure bicycle parking for at least 100 transit riders at one or more Metro Bike Hubs as well as designated locations for Metro's Bikeshare rental program or similar first mile / last mile transportation options.

Similar to the Project, each of the Related Projects would be individually responsible for providing on-site bicycle parking based on LAMC requirements. Therefore, the Project, together with the Related Projects, would not result in cumulative impacts with respect to consistency with LAMC Section 12.21.A.16.

LAMC Section 12.26J (TDM Ordinance)

LAMC Section 12.26J, the TDM Ordinance (Ordinance No. 168,700, effective March 31, 1993) establishes TDM requirements for non-residential projects. Key requirements of the TDM Ordinance include providing carpool / vanpool loading areas, walkways between buildings and public sidewalks, and improving adjacent bus stops to the satisfaction of local transit agencies. The Project proposes to implement a comprehensive TDM program consistent with the purpose and intent of the TDM Ordinance and consisting of the following basic elements:

- Reduced parking supply
- TDM promotions and marketing
- Pedestrian network improvements
- Traffic calming improvements
- Implement on-street bicycle facilities
- Bicycle parking per LAMC

The TDM program is discussed in more detail in Chapter 5 of this transportation assessment. Additionally, the Project includes extensive pedestrian connectivity and support for public transit through the development of the Consolidated Transit Center. Parcel 1 proposes to provide several on-street loading areas, and Block 8 (which is an office building) would provide space for carpool and vanpool parking and loading within the parking structure under the office. The Project would, thus, not conflict with the current TDM ordinance.

It should be noted that a draft of the City's updated TDM ordinance was released in June 2021. It requires more comprehensive TDM programs and applies to a broader range of development projects. The TDM measures to be incorporated into the Project's TDM program meet the requirements of the draft updated TDM ordinance, as currently drafted. Additionally, the Project would incorporate TDM monitoring and reporting in compliance with the updated TDM Ordinance.

Similar to the Project, each of the Related Projects would be individually responsible for implementing any required measures under the TDM Ordinance. Therefore, the Project, together with the Related Projects, would not result in cumulative impacts with respect to consistency with the TDM Ordinance.

Vision Zero Action Plan / Vision Zero Corridor Plans

The primary goal of Vision Zero is to eliminate traffic deaths in the City by Year 2025. Vision Zero identified Lankershim Boulevard as part of its HIN, a network of streets where strategic investments will have the biggest impact in reducing death and severe injury. Annually developed Action Plans emphasize creating safe streets for all users, developing a culture of safety, adopting policy measures to promote safety, and use data to inform the most effective solutions. The information from this review comes from *Vision Zero Los Angeles: 2018 Action Plan + Progress Report* (City of Los Angeles, 2018) (2018 Action Plan) and LADOT's list of active Vision Zero projects maintained at www.ladotlivablestreets.org.

Based on the 2018 Action Plan, Lankershim Boulevard between Chandler Boulevard and Victory Boulevard (approximately 1.40 miles to the north) is designated as one of 40 Priority Corridors for Vision Zero improvements. As part of the Phase 1 improvements for that corridor, LADOT already installed 16 continental crosswalks[15]. Phase 2 will include signal upgrades at the intersection of Lankershim Boulevard & Burbank Boulevard. The Project would not interfere with the implementation of any other improvements in the future.

Four of the Related Projects (aside from the Project itself) are located on Lankershim Boulevard (including Related Project #8, which has an address on Tujunga Avenue but is located where Tujunga Avenue, Lankershim Boulevard, and Burbank Boulevard intersect). The Related Projects would not interfere with implementation of any proposed or potential future Vision Zero improvements and, therefore, the Project, together with the Related Projects, would not result in cumulative impacts with respect to consistency with Vision Zero.

[15] Continental crosswalks are a type of high-visibility crosswalk characterized by a "ladder" striping pattern.

Streetscape Plans

There are no streetscape plans near the Project Site and, therefore, streetscape plans do not apply to the Project. However, the Project proposes the development of a streetscape plan for the public ROW fronting the Project Site, which is intended to promote a balanced approach to all modes of transportation and provide safe and adequate space for sidewalks, bicycle paths, transit, parking, vehicular traffic, street trees, landscaping, lighting, and street furnishings.

Citywide Design Guidelines

Citywide Design Guidelines (LADCP Urban Design Studio, October 2019) (Design Guidelines) identify urban design principles to guide architects and developers in designing high-quality projects that meet the City's functional, aesthetic, and policy objectives and help foster a sense of community. The Design Guidelines are organized around three design approaches: pedestrian-first design, 360-degree design, and climate-adapted design.

The policies that are applicable to this transportation assessment are those under pedestrian-first design, and the Project's consistency with those policies are discussed in detail in Table B-3 in Appendix B. In summary, the Project specifically prioritizes and enhances the pedestrian experience through its design. It would provide a network of sidewalks with a minimum width of 12 feet[16], organized around a system of small blocks connecting publicly accessible open space. The sidewalks would be lined with trees and pedestrian lighting. Lankershim Boulevard and District Way would be entirely free from parking garage and service access, allowing uninterrupted pedestrian and bicycle circulation, and the only access point on Chandler Boulevard would be to the East Lot[17]. The Project is consistent with all applicable policies of the Design Guidelines.

Similar to the Project, the Related Projects are also consistent with the Design Guidelines by providing additional high-density housing (including some affordable housing) in an area with good transit connectivity, thereby reducing dependence on automobiles and encouraging

[16] In some locations, portions of the sidewalk would be provided on the Project Site, as summarized in Table 4.

[17] The existing access to the East Lot is also located on Chandler Boulevard.

pedestrian travel modes and the increased social interaction that provides. Most of the Related Projects that are located on arterial streets (including Lankershim Boulevard, Burbank Boulevard, Chandler Boulevard, and Magnolia Boulevard) would provide street-level retail or restaurant space in support of an active, walkable neighborhood environment. Therefore, the Project, together with the Related Projects, would not result in cumulative impacts with respect to consistency with the Design Guidelines.

SUMMARY

The Project is consistent with each of the City documents listed in Table 2.1-1 of the TAG. Therefore, the Project would not result in a significant impact under Threshold T-1 and no mitigation measures are required.

Similarly, the Project, together with the Related Projects, is consistent with the documents and no significant cumulative impact would occur under Threshold T-1.

Chapter 5

CEQA Transportation Threshold T-2.1: VMT Analysis

This chapter presents an analysis of potential VMT impacts for the Project under Threshold T-2.1 based on the TAG.

VMT GUIDELINES

The VMT guidelines are intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. This encourages development that shortens the distance between housing, jobs, and services, increases the availability of affordable housing options proximal to public transit, offers attractive non-vehicular transportation options, provides strong transportation demand management programs, and promotes walking and bicycling trips.

VMT Impact Thresholds

The TAG identifies significance thresholds to apply to development projects when evaluating potential VMT impacts. Consistent with State CEQA guidance, the TAG in Threshold T-2.1 states that a residential project would result in a significant VMT impact if it would generate household VMT per capita more than 15% below the existing average household VMT per capita for the APC area in which the project is located. Similarly, an office project would result in a significant VMT impact if it would generate work VMT per employee more than 15% below the existing average work VMT per employee for the APC area in which it is located. A regional-serving retail project, which the Project is not, would result in a significant VMT impact if it would result in a net increase in total daily VMT.

Residents contribute to household VMT while employees (including office, retail, and restaurant employees) contribute to work VMT. The TAG identifies a daily household VMT per capita impact

criteria of 9.4 and a daily work VMT per employee impact criteria of 11.6 for the South Valley APC, in which the Project is located. Therefore, should the Project's average household VMT per capita be equal to or lower than 9.4 and average work VMT per employee be equal to or lower than 11.6, the Project's overall VMT impact would be less than significant.

It is important to note that these thresholds – and the VMT analysis to which the thresholds apply – are based on specific types of one-way trips, including:

- Home-Based Work Production: trips to a workplace destination originating from a residential use at the Project Site
- Home-Based Other Production: trips to a non-workplace destination (e.g., retail, restaurant, etc.) originating from a residential use at the Project Site
- Home-Based Work Attraction: trips to a workplace destination at the Project Site originating from a residential use.

The location and characteristics of residences and workplaces are often the main drivers of VMT, as detailed in Appendix 1 of *Technical Advisory on Evaluating Transportation Impacts in CEQA* (California Governor's Office of Planning and Research, December 2018). Therefore, as detailed in *City of Los Angeles VMT Calculator Documentation* (LADOT and LADCP, May 2020) (VMT Calculator Documentation), the City's household VMT per capita threshold applies to Home-Based Work Production and Home-Based Other Production trips and the work VMT per employee threshold applies to Home-Based Work Attraction trips.

Other types of trips generated by the Project, including Non-Home-Based Other Production (trips to a non-residential destination originating from a non-residential use at the Project Site), Home-Based Other Attraction (trips to a non-workplace destination at the Project Site originating from a residential use), and Non-Home-Based Other Attraction (trips to a non-residential destination at the Project Site originating from a non-residential use), are not factored into the VMT per capita and VMT per employee thresholds as those trips are typically localized and are assumed to have a negligible effect on the VMT impact assessment. However, those trips are factored into the calculation of total Project trip generation and VMT for LADOT screening purposes when determining whether Threshold T-2.1 is applicable to a given project, as was done here (see above).

In addition to VMT analysis of the Project as a whole, the TAG requires that the various Project land uses be assessed for potential VMT impacts individually, accounting for reduction in trip-making inherent to a mixed-use project.

VMT ANALYSIS METHODOLOGY

LADOT prepared a tool (VMT Calculator) designed to estimate project-specific daily household VMT per capita and daily work VMT per employee for developments within City limits. The VMT Calculator (Version 1.3, released July 2020) accounts for a variety of sociodemographic, land use, and built environment factors estimated for each census tract within the City as well as the interaction of land uses within a mixed-use development. Some of the key factors built into the VMT Calculator include travel behavior zones, mixed-use development methodology, population and employment assumptions, and TDM measures.

Travel Behavior Zones (TBZs)

The City developed TBZs as part of a framework for determining the magnitude of VMT and vehicle trip reductions that could be achieved through TDM strategies. As detailed in the VMT Calculator Documentation, TBZs were designated in each Census tract throughout the City considering population density, land use density, intersection density, and proximity to transit. 8They are categorized as follows:

- Suburban (Zone 1): very low-density primarily centered around single-family homes and minimally connected street network
- Suburban Center (Zone 2): low-density developments with a mix of residential and commercial uses with larger blocks and lower intersection density
- Compact Infill (Zone 3): higher density neighborhoods that include multi-story buildings and well-connected streets
- Urban (Zone 4): high-density neighborhoods characterized by multi-story buildings with a dense road network

The VMT Calculator determines a project's TBZ based on the latitude and longitude of a project address. The Project is located in a Compact Infill TBZ.

Mixed-Use Development Methodology

As detailed in the VMT Calculator Documentation, the VMT Calculator accounts for the interaction of land uses within a mixed-use development and considers the following sociodemographic, land use, and built environment factors for a project area:

- The project location's jobs/housing balance, which factors into how many trips are local or internal to a mixed-use project
- Land use density where the project is located, which factors into the likelihood of short trips as well as walking and bicycling
- Transportation network density, which affects the circuity of travel (whether driving, walking, or bicycling) and, therefore, affects both trip length and the likelihood of choosing non-automobile modes of travel
- Proximity to transit, which affects the likelihood that residents or employees will travel via transit rather than automobile
- Proximity to retail and other destinations, affecting the likelihood that residents or employees will take short trips or non-automobile modes for routine commercial activities
- Vehicle ownership rates, with higher levels of vehicle ownership leading to a higher rate of automobile trips
- Household size, which affects both the number of trips made by a given residential unit (increasing or decreasing overall VMT) but also affects the number of people when calculating the daily VMT per capita

Trip Lengths

The VMT Calculator estimates trip lengths to and from a project site based on information from the City's Travel Demand Forecasting Model (City Model). The City Model divides the City into traffic analysis zones (TAZs) to which specific land use and trip-making characteristics can be assigned. The model considers the TAZ where a project is located to determine the trip length and trip type, both of which factor into the calculation of a project's VMT.

Population and Employment Assumptions

The VMT Calculator contains population assumptions based on Census data and employment assumptions derived from multiple data sources, including *2012 Developer Fee Justification Study* (Los Angeles Unified School District, 2012), *Trip Generation Manual, 9th Edition* (ITE, 2012), the San Diego Association of Governments Activity-Based Model, the United States Department of Energy, and other modeling resources. A summary of population and employment assumptions for various land uses is provided in Table 1 of the VMT Calculator Documentation.

TDM Measures

The VMT Calculator measures the reduction in VMT resulting from a project's incorporation of TDM strategies as project design features or mitigation measures. The following seven categories of TDM strategies are included in the VMT Calculator:

1. Parking
2. Transit
3. Education and Encouragement
4. Commute Trip Reductions
5. Shared Mobility
6. Bicycle Infrastructure
7. Neighborhood Enhancement

TDM strategies within each of these categories have been empirically demonstrated to reduce trip-making or mode choice in such a way as to reduce VMT, as documented in *Quantifying Greenhouse Gas Mitigation Measures* (California Air Pollution Control Officers Association, August 2010).

Retail and Restaurant Uses

The TAG identifies a special VMT analysis methodology for regional-serving retail projects, which it defines on page 2-10 as "retail projects that exceed 50,000 square feet in floor area." For such

a project, VMT analysis should be conducted either qualitatively based on a market study demonstrating that the project area is underserved by existing retail options and, thus, the project would reduce VMT by attracting residents and businesses to a closer regional option or quantitively using the City's travel demand forecasting model to compare regional VMT per capita with and without the project in place.

According to the TAG, regional-serving retail can lengthen trips and increase VMT because it is likely to shift business away from local-serving retail options. Conversely, local-serving retail (which includes restaurant space) tends to shorten trips and reduce VMT because it attracts trips from nearby residences and businesses that would otherwise travel further to find suitable options.

The Project includes approximately 105,125 sf of retail and restaurant, which exceeds the 50,000 sf threshold identified in the TAG between local-serving and regional-serving retail. Notwithstanding, the Project does not fit the TAG's definition of a regional-serving retail project, and, therefore, need not conduct additional VMT analysis of retail and restaurant uses beyond what is provided by the VMT Calculator. As discussed below, the Project is not a retail project, is not regional-serving, and would serve the local community.

Not a Retail Project. The TAG's definition of a regional-serving retail project explicitly includes the term "retail project." The Project is a mixed-use development that is primarily made up of residential and office uses. The retail and restaurant uses comprise approximately 4.80%[18] of the total Project floor area and are clearly ancillary to the primary Project uses. The retail and restaurant space is intended to serve Project residents and employees, transit riders, and the surrounding local community.

Further, as described in Chapter 1, the Project includes a potential land use exchange of up to 75,000 sf of retail and restaurant uses for up to 75,000 sf of office space should future market conditions warrant. In this scenario, the amount of retail and restaurant space could be reduced to 30,125 sf, which is less than the 50,000 sf threshold and, at only 1.40% of the total Project floor area, further illustrates that the retail and restaurant space is ancillary to the primary Project uses.

[18] The retail and restaurant space comprises 105,125 sf of the total 2,209,027 gross sf of the Project.

Not Regional-Serving. While the Project does include more than 50,000 sf of retail, that space is split over seven Blocks[19], most with their own individual parking structures (or not providing public parking at all), separated by streets. The most amount of retail space on any single block would be 30,826 sf on Block 5/6[20], well under the 50,000 sf threshold. The characteristic of regional-serving retail that causes it to draw customers from a broad area is that it concentrates a variety of retail options in one contiguous center such that visitors can park once and conveniently visit many stores. The Project does not fit this description because, from a shopper's perspective, the various buildings of the Project are separate and not part of a contiguous center. Additionally, the majority of the space is expected to be filled by restaurants or other food service establishments. Patrons would typically only visit a single food service establishment on a given trip and, therefore, a concentration of food options is less of a regional draw than a concentration of shopping options.

The most common patrons of these uses would be people already at the Project Site and people who live close by. People already at the Project Site (i.e., residents, office employees, and transit riders) are within easy walking distance of all retail and restaurant uses throughout the Project Site and would generate no vehicle trips while patronizing those uses. People who live close to the Project Site would be the most familiar with the various retail and dining options available and likely drive past the Project Site frequently. Therefore, nearby residents can readily stop on their way to or from their homes without making a separate trip to travel to the Project Site.

Additional Considerations. Notwithstanding that the Project does not fit the definition of a regional-serving retail project, a review was conducted of other retail options in the area to determine whether the Project is likely to substantially alter retail trip-making patterns within the Study Area. The Study Area does not have any regional-serving retail centers. The nearest regional-serving retail center is the NOHO West retail and entertainment development, which opened in 2020, located on Oxnard Street at SR 170 (approximately 1.20 miles northwest of the Project Site). In general, retail uses within the Study Area are ground-level commercial uses fronting public (or publicly accessible) roads.

[19] Blocks 3 and 7 do not propose to include any retail or restaurant space.

[20] Block 6 shares access and parking with Block 5, so for the purposes of this statement they were together considered a single block.

Lankershim Boulevard is lined with low-density commercial uses throughout the Study Area. Magnolia Boulevard east of Tujunga Avenue and Burbank Boulevard east of Beck Avenue are also generally lined with commercial uses, though interspersed with multi-family residential uses that do not have ground-floor retail. Chandler Boulevard east of Tujunga Avenue has some retail uses. Much of the retail in the vicinity is partially industrial, such as various rental yards and industrial supply yards on the east side of Vineland Avenue north of Chandler Boulevard.

The Study Area has experienced a substantial increase in residential population density over the past decade. Low-rise apartment buildings and vacant lots have been replaced with mid-rise apartment buildings in the neighborhoods immediately adjacent to the Project Site to the north, south, and west, without a corresponding investment in retail and restaurant development to support the community. Additionally, as shown in Table 8, the Related Projects include proposed development of over 2,100 additional residential units within the Study Area but only approximately 70,000 sf of commercial space, further exacerbating this disparity. As a result, residents often travel longer distances to access variety in retail and restaurant options, resulting in greater VMT than local options such as those provided by the Project would generate. Therefore, the Project's retail and restaurant space would help to meet the current needs of the community as well as serving the additional demand generated by the Related Projects and the other uses proposed as part of the Project itself.

Based on these factors, the Project's retail space is local-serving and would ultimately result in a net reduction of regional VMT compared to conditions without the Project. Accordingly, the quantitative analysis provided by the VMT Calculator, which accounts for the retail and restaurant square footage in part by assuming an increase of internal trips between different Project land uses, is sufficient to assess VMT for the entire Project.

PROJECT VMT ANALYSIS

The VMT Calculator was used to evaluate Project VMT and compare it to the VMT impact criteria. The VMT Calculator was set up with the Project's mix of land uses (including affordable housing

as a separate category from standard multi-family apartment units) and their respective sizes as the primary input. Project VMT was analyzed both for Phase 1[21] and Full Buildout of the Project.

Additionally, as required by the TAG for mixed-use developments, analysis was conducted of the Project's residential and office land uses individually using the VMT Calculator. In order to assess the VMT per capita associated with individual land uses while still accounting for the reduction in trips associated with interactions between the Project's mix of land uses, the VMT Calculator was run with the full mix of Project land uses, with and without each individual land use in succession. In this manner, the specific VMT and population effects of each individual land use could be measured within the context of a mixed-use project. Separately, because the VMT Calculator is not designed to analyze net change in VMT resulting from retail and restaurant uses, the retail and restaurant land uses were reviewed qualitatively for potential VMT impacts according to the criteria for a regional-serving retail project[22].

Project TDM Measures

Additionally, the analysis included the Project's proposed TDM measures. The Project's design incorporates vehicular and bicycle parking features that encourage the use of alternative transportation modes and, thus, reduce VMT through reducing vehicle trips. It also proposes to promote the TDM measures to Project Site residents and employees as part of regular operations. The Project would not result in significant VMT impacts whether or not any TDM measures were incorporated (as detailed below), and each of the Project's proposed TDM measures are either intrinsically part of the Project design (such as the amount of Project parking provided), required by City ordinance (such as the provision of bicycle parking), or voluntary measures that would be part of Project operation:

- Reduced Parking Supply: The Project would provide a total of 3,313 parking spaces for Project uses along with up to 1,189 parking spaces for Metro users at Full Buildout. The basic parking requirements set forth by the LAMC would require a total of 4,291 parking

[21] For the purposes of the analyses in this report, Phase 1 includes construction of Block 0 West (Consolidated Transit Center), Blocks 5, 6, 7, and 8, and the West Lot and East Lot.

[22] As previously discussed, the Project is not a regional-serving retail project; however, the significance criteria for a regional-serving retail project (i.e., a significant impact would occur if the retail and restaurant space would result in a net increase in total daily VMT) is the most closely applicable criteria for individually assessing potential VMT impacts of the retail and restaurant land uses alone.

spaces at Full Buildout (not including spaces for Metro users) as shown in Appendix C. Under Phase 1, the Project would provide a total of 1,979 spaces for Project uses compared with a LAMC requirement of 2,458 spaces. Since the Project would be entitled through a Specific Plan, it would be permitted to provide less parking than otherwise would be required under the LAMC. This reduced parking supply is supportable by virtue of the Project being located at and including Metro's North Hollywood Station at the terminus of the Metro B (Red) Line subway and Metro G (Orange) Line busway. In addition, the Project is eligible to provide fewer spaces for commercial uses as a result of being located within a State Enterprise Zone. A reduced parking supply makes parking less available and more expensive and, therefore, encourages the use of non-automobile modes to and from the Project Site and reduces VMT.

- Promotions and Marketing: A key component of a successful TDM program is to make Project residents and employees aware of the various programs offered. To this end, a transportation management coordinator (TMC) would be designated to reach out to Project residents and companies leasing Project office space to promote the benefits of TDM. The TMC will provide information on public transit and any available incentives, the benefits of flexible work schedules and telecommuting programs, pedestrian and bicycle amenities provided at the Project Site, and parking incentives.

- Pedestrian Network Improvements: The Project specifically prioritizes the pedestrian experience. It creates a network of sidewalks with a minimum width of 12 feet around the various Blocks along with various publicly accessible open spaces throughout the Project Site. It also provides activated ground-floor street frontages, street trees, pedestrian-scaled streetlights, and understory plantings to create a consistent, high-quality pedestrian experience. The enhanced pedestrian connectivity would encourage pedestrian trips to and from the Project Site as well as improving accessibility to the transit options at the Project Site and, therefore, reduces automobile trips and reduces VMT.

- Traffic Calming Improvements: The Project would enhance crossings of Lankershim Boulevard with refreshed and/or new continental crosswalks at both intersections with Chandler Boulevard (North and South) and would install a new continental crosswalk across Tujunga Avenue at Chandler Boulevard (North) and across District Way at Fair Avenue. These improvements would help to slow vehicular traffic and improve safety and connectivity for pedestrians.

- Implement On-street Bicycle Facilities: As shown in Figure 6, the Project will implement the shared street on District Way and the connection through Parcel 1 to Lankershim Boulevard. The Project will install the bicycle crossing signal across Lankershim Boulevard at Chandler Boulevard (North), and the Class IV bicycle lanes separated from vehicular traffic by bollards on Fair Avenue between District Way and Chandler Boulevard and on Chandler Boulevard (North) between Lankershim Boulevard and Tujunga Avenue. It would allow for installation of Class IV bicycle lanes westbound on Chandler Boulevard and northbound on Lankershim Boulevard to Chandler Boulevard (North).

- Bicycle Parking per LAMC: The Project would provide up to 1,158 bicycle parking spaces for Project uses in compliance with the requirements of the LAMC shown in Appendix C. Additionally, beyond the LAMC requirements, the Project would provide at least 100 secure bicycle parking spaces for transit riders at one or more Metro Bike Hubs and short-term bicycle rentals through Metro's Bikeshare program or similar first mile / last mile

transportation options. The Project-serving bicycle facilities give residents and employees the option to use bicycles as part of their mode choice and, therefore, encourage the use of non-automobile modes to and from the Project Site and reduce VMT. The Metro Bike Hub spaces and Metro Bikeshare program or similar first mile / last mile transportation options provide additional options for nearby residents and employees traveling to and from the Consolidated Transit Center.

Full Project VMT

The VMT analysis results from the VMT Calculator are shown in Table 11 for both Phase 1 and Full Buildout of the Project, before and after implementation of the Project's proposed TDM measures. The detailed output from the VMT Calculator is provided in Appendix A.

Phase 1, without TDM Measures. As shown in Table 11, Phase 1 is estimated to generate 79,534 total daily VMT without incorporation of TDM measures. It would produce 6,669 home-based production VMT (used to calculate household VMT per capita) and 26,498 home-based work attraction VMT (used to calculate work VMT per employee). Based on the estimate of 1,375 residents, Phase 1 would generate average household VMT per capita of 4.8, which is less than the South Valley APC impact threshold of 9.4 and, therefore, would not result in a significant VMT impact. Based on the estimate of 2,545 employees, Phase 1 would generate average work VMT per employee of 10.4, which is less than the South Valley APC impact threshold of 11.6 and, therefore, would also not result in a significant VMT impact.

Full Buildout, without TDM Measures. As shown in Table 11, Full Buildout of the Project is estimated to generate 123,802 total daily VMT without incorporation of TDM measures. It would produce 19,785 home-based production VMT and 27,938 home-based work attraction VMT. Based on the estimate of 3,717 residents, Full Buildout would generate average household VMT per capita of 5.3, which is less than the South Valley APC impact threshold of 9.4 and, therefore, would not result in a significant VMT impact. Based on the estimate of 2,682 employees, Full Buildout would generate average work VMT per employee of 10.4, which is less than the South Valley APC impact threshold of 11.6 and, therefore, would also not result in a significant VMT impact.

Phase 1, with TDM Measures. With the TDM measures in place, as shown in Table 11, Phase 1 is estimated to generate 67,913 total daily VMT (a reduction of 11,621 daily VMT compared to Phase 1 without TDM measures). It would produce 5,695 home-based production VMT and 22,626 home-based work attraction VMT. Based on the estimate of 1,375 residents and 2,545 employees, Phase 1 would generate average household VMT per capita of 4.1 and average work VMT per employee of 8.9. Therefore, with the TDM measures, the VMT impact of Phase 1 would be reduced even lower than the less-than-significant levels prior to incorporation of TDM.

Full Buildout, with TDM Measures. With the TDM measures in place, as shown in Table 11, Full Buildout of the Project is estimated to generate 103,775 total daily VMT (a reduction of 20,027 daily VMT compared to Full Buildout without TDM measures). It would produce 16,584 home-based production VMT and 23,419 home-based work attraction VMT. Based on the estimate of 3,717 residents and 2,682 employees, Full Buildout would generate average household VMT per capita of 4.5 and average work VMT per employee of 8.7. Therefore, with the TDM measures, the VMT impact of the Project at Full Buildout would be reduced even lower than the less-than-significant levels prior to incorporation of TDM.

Individual Land Use VMT

As previously described, the Project land uses were also analyzed to determine if they could individually (though accounting for internal trips within the Project's mix of land uses) result in a significant VMT impact. The residential uses (including, separately, affordable housing units and market-rate housing units) and office uses were analyzed quantitatively using the VMT Calculator for Phase 1 and Full Buildout of the Project. The retail and restaurant uses together were analyzed qualitatively because the VMT Calculator is not designed to analyze net change in VMT resulting from retail and restaurant uses.

To assess the VMT per capita associated specifically with, for example, the affordable housing units in the context of the larger mixed-use Project (i.e., accounting for trip reductions between uses within the Project Site), the VMT Calculator was run with and without the affordable housing while keeping the other land uses steady. In this manner, the two components of the VMT per

capita calculation[23] could be identified as the difference between the VMT Calculator output with and without the affordable housing.

Phase 1 Residential and Office Uses. Table 12 summarizes the results of the individual land use VMT analysis for affordable housing, market-rate housing, and office uses under Phase 1. Each use was analyzed in the manner described above without accounting for any TDM measures to show that, even without the VMT-reducing effects of the Project's TDM measures, none of the uses would result in significant VMT impacts. As shown in Table 12, each of the Phase 1 land uses would generate lower VMT per resident or VMT per employee than the South Valley APC impact thresholds of 9.4 and 11.6, respectively. Therefore, like Phase 1 with all land uses, it would not result in a significant VMT impact. The TDM measures would further reduce the VMT per capita of each land use.

Table 13 summarizes the results of the individual land use VMT analysis for affordable housing, market-rate housing, and office uses upon Full Buildout of the Project. Each use was analyzed in the manner described above without accounting for any TDM measures to show that, even without the VMT-reducing effects of the Project's TDM measures, none of the uses would result in significant VMT impacts. As shown in Table 13, each of the Project land uses would generate lower VMT per resident or VMT per employee than the South Valley APC impact thresholds of 9.4 and 11.6, respectively. Therefore, like the Project with all land uses, it would not result in a significant VMT impact. The TDM measures would further reduce the VMT per capita of each land use.

Retail and Restaurant Uses. Notwithstanding that the Project does not fit the TAG's definition of a regional-serving retail project, a qualitative analysis was conducted to determine whether the Project's retail and restaurant uses would result in a net reduction in total VMT, consistent with the regional-serving retail project significance criteria in the TAG.

As previously described, there are no regional-serving retail centers within the Study Area. Rather, there are linear commercial corridors, including Lankershim Boulevard and portions of Magnolia Boulevard and Burbank Boulevard, that provide unconcentrated commercial uses similar to those proposed by the Project. Importantly, while the Study Area has experienced a

[23] i.e., the daily VMT as the numerator and the number of residents as the denominator.

substantial increase in the number of residential units over the past decade, there has not been a corresponding increase in the amount of retail and restaurant development to support those residents. Further, the Related Projects include development of over 2,100 additional residential units within the Study Area, also without a commensurate increase in commercial space. The Project would provide a substantial increase in the amount and variety of available goods, services, and dining options, and as a result would help to keep residents local, thus reducing VMT. Additional patronage by Project residents, employees, and transit riders at the Project Site would not generate any VMT, and the Project's inclusion of retail and restaurant space would specifically reduce VMT associated with the Project's office and residential uses.

As such, the Project's retail and restaurant uses would contribute to a reduction of net VMT and would not result in a significant impact.

Land Use Exchange

The Project would similarly not result in a significant VMT impact when considering the alternative land use program in which up to 75,000 sf of retail and restaurant space is exchanged for 75,000 sf of office space. As shown in Table 14, the Project with the land use exchange is estimated to generate 98,100 total daily VMT without incorporation of TDM measures, which is less than the Project without the land use exchange. The Project would generate average household VMT per capita of 5.3, which is equivalent to the household VMT per capita associated with Full Buildout shown in Table 11 and would not result in a significant VMT impact. The Project would generate average work VMT per employee of 9.9, which is less than the work VMT per employee associated with Full Buildout shown in Table 11 and would also not result in a significant VMT impact. After incorporation of the TDM measures, the Project considering the land use exchange would continue to generate less overall VMT and equal or lesser VMT per capita than the Project without the land use exchange.

CUMULATIVE VMT ANALYSIS

A development project would have a cumulative VMT impact if it were deemed inconsistent with *Connect SoCal - 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy*

(Southern California Association of Governments, September 2020) (RTP/SCS), the regional plan to reach state air quality and GHG reduction targets. However, based on the TAG, a project that does not result in a significant VMT impact using the City's methodology described above would be in alignment with the RTP/SCS and, therefore, would also have no cumulative VMT impact.

Additionally, as described in detail above, the Project's retail and restaurant are local-serving, and would not result in a net increase in VMT. The Project's retail and restaurant space are spread over seven blocks with individual parking areas, separated by streets. It does not concentrate retail and restaurant uses into a contiguous center and lacks both the concentration of uses and amount of leasable space to draw significant numbers of patrons from beyond a local area. When considered with the Related Projects, most of which propose additional residential development near to the Project Site, the Project would help to provide local retail and dining options to the many new residents (and office employees, primarily from the Project itself) in the Study Area.

Therefore, the Project would have no cumulatively significant VMT impact.

TABLE 11
PROJECT VMT ANALYSIS

Description	Phase 1		Full Buildout	
Land Use Inputs				
Affordable Housing	151 units		311 units	
Market-Rate Housing	400 units		1,216 units	
Office	580,374 sf		580,374 sf	
Retail	4,218 sf		30,125 sf	
Restaurant	53,690 sf		75,000 sf	
VMT Analysis [a]				
Resident Population	1,375		3,717	
Employee Population	2,545		2,682	
Project Area Planning Commission	South Valley		South Valley	
Project Travel Behavior Zone	Compact Infill (Zone 3)		Compact Infill (Zone 3)	
	Before TDM	After TDM	Before TDM	After TDM
Total Daily VMT [b]	79,534	67,913	123,802	103,775
Home-Based Production VMT [c]	6,669	5,695	19,785	16,584
Home-Based Work Attraction VMT [c]	26,498	22,626	27,938	23,419
Household VMT per Resident	4.8	4.1	5.3	4.5
Impact Threshold	9.4	9.4	9.4	9.4
Significant Impact	NO	NO	NO	NO
Work VMT per Employee	10.4	8.9	10.4	8.7
Impact Threshold	11.6	11.6	11.6	11.6
Significant Impact	NO	NO	NO	NO

Notes:
Phase 1 consists of development of Blocks 0, 5, 6, 7, and 8.
[a] Project Analysis is from VMT Calculator version 1.3 output reports.
[b] See VMT Calculator Report 1.
[c] See VMT Calculator Report 4.

TABLE 12
VMT ANALYSIS FOR INDIVIDUAL PROJECT LAND USES
PHASE 1

Description	Phase 1 Complete [a]	Affordable Housing		Market-Rate Housing		Office	
		Without Affordable Housing [b]	Affordable Housing Only [c]	Without Market-Rate Housing [b]	Market-Rate Housing Only [c]	Without Office [b]	Office Only [c]
Resident Population	1,375	901	474	474	901	1,375	0
Employee Population	2,545	2,545	0	2,545	0	223	2,322
Total Daily VMT [d]	79,534	75,714	3,820	67,587	11,947	43,693	35,841
Home-Based Production VMT [e]	6,669	4,725	1,944	1,190	5,479	7,453	-784
Home-Based Work Attraction VMT [e]	26,498	26,596	-98	26,511	-13	2,769	23,729
Household VMT per Resident [f]	4.8		4.1		6.1		
Impact Threshold	9.4		9.4		9.4		n/a
Significant Impact	NO		NO		NO		
Work VMT per Employee [g]	10.4						10.2
Impact Threshold	11.6		n/a		n/a		11.6
Significant Impact	NO						NO

Notes:

Phase 1 consists of development of Blocks 0, 5, 6, 7, and 8.

[a] See Table 11.

[b] VMT Calculator results when run with all Phase 1 land uses except the indicated use.

[c] The difference between the complete Phase 1 results and the results excluding the indicated land use, which represents the incremental effect on population and VMT of the indicated land use when accounting for trips between Project land uses.

[d] See VMT Calculator Report 1.

[e] See VMT Calculator Report 4.

[f] Household VMT per Capita = Home-Based Production VMT / Resident Population.

[g] Work VMT per Employee = Home-Based Work Attraction VMT / Employee Population.

TABLE 13
VMT ANALYSIS FOR INDIVIDUAL PROJECT LAND USES
FULL BUILDOUT

Description	Full Buildout Complete [a]	Affordable Housing		Market-Rate Housing		Office	
		Without Affordable Housing [b]	Affordable Housing Only [c]	Without Market-Rate Housing [b]	Market-Rate Housing Only [c]	Without Office [b]	Office Only [c]
Resident Population	3,717	2,740	977	977	2,740	3,717	0
Employee Population	2,682	2,682	0	2,682	0	360	2,322
Total Daily VMT [d]	123,802	115,871	7,931	88,443	35,359	88,699	35,103
Home-Based Production VMT [e]	19,785	15,874	3,911	3,164	16,621	20,774	-989
Home-Based Work Attraction VMT [e]	27,938	28,084	-146	28,243	-305	4,233	23,705
Household VMT per Resident [f]	5.3		4.0		6.1		
Impact Threshold	9.4		9.4		9.4		n/a
Significant Impact	NO		NO		NO		
Work VMT per Employee [g]	10.4						10.2
Impact Threshold	11.6		n/a		n/a		11.6
Significant Impact	NO						NO

Notes:

[a] See Table 11.

[b] VMT Calculator results when run with all Project land uses except the indicated use.

[c] The difference between the complete Project results and the results excluding the indicated land use, which represents the incremental effect on population and VMT of the indicated land use when accounting for trips between Project land uses.

[d] See VMT Calculator Report 1.

[e] See VMT Calculator Report 4.

[f] Household VMT per Capita = Home-Based Production VMT / Resident Population.

[g] Work VMT per Employee = Home-Based Work Attraction VMT / Employee Population.

TABLE 14
PROJECT VMT ANALYSIS WITH LAND USE EXCHANGE

Description	Full Buildout with Land Use Exchange	
Land Use Inputs		
Affordable Housing	311 units	
Market-Rate Housing	1,216 units	
Office	655,374 sf	
Retail	0 sf	
Restaurant	30,125 sf	
VMT Analysis [a]		
Resident Population	3,717	
Employee Population	2,742	
Project Area Planning Commission	South Valley	
Project Travel Behavior Zone	Compact Infill (Zone 3)	
	Before TDM	After TDM
Total Daily VMT [b]	98,100	82,232
Home-Based Production VMT [c]	19,864	16,651
Home-Based Work Attraction VMT [c]	27,096	22,713
Household VMT per Resident	5.3	4.5
Impact Threshold	9.4	9.4
Significant Impact	NO	NO
Work VMT per Employee	9.9	8.3
Impact Threshold	11.6	11.6
Significant Impact	NO	NO

Notes:

[a] Project Analysis is from VMT Calculator version 1.3 output reports.

[b] See VMT Calculator Report 1.

[c] See VMT Calculator Report 4.

Chapter 6

CEQA Transportation Threshold T-3: Geometric Design And Land Use Hazards Analysis

This chapter presents an analysis of potential safety, operational, or capacity impacts that could be caused by the design or location of Project access points.

SIGNIFICANCE CRITERIA

The Geometric Design and Land Use Hazards Analysis measures the Project against Threshold T-3 as described in TAG Section 2.4:

Threshold T-3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

It seeks to identify potential safety conflicts between vehicles, pedestrians, and bicycles, as well as operational delays or capacity reductions resulting from the design or placement of Project access points.

Threshold T-3 requires that the determination of significance should be based on commonly-accepted traffic engineering design standards (such as those identified in Section 321 of LADOT's *Manual of Policies and Procedures* (December 2008, Updated 2020) (MPP), regarding driveway design) while considering the amount of pedestrian and bicycle activity crossing vehicular access points, sight distance and physical conditions like curves or grade changes, and the project's proximity to streets identified in the HIN or the Safe Routes to School (SRTS) program. Significance may be determined qualitatively or quantitatively as best suits the circumstances of the project.

If a significant impact is identified, mitigation measures may include installation of new traffic control devices, redesign or relocation of access points, turn restrictions, pavement markings, or vehicular demand management.

DRIVEWAY DESIGN GUIDELINES

MPP Section 321 provides design guidelines regarding driveway placement, width, and type. The general recommendations that would apply to the Project's access points are:

- The driveway location should be planned to minimize conflicts between the parking facility and users of the adjacent street, including pedestrians, bicyclists, and drivers.
- Driveways should be located on streets with the least traffic volume when feasible, and not along arterial streets.
- All commercial loading facilities should be located on local streets when feasible.
- The number of driveways should be minimized.
- Driveways should be spaced at least 50 feet apart when feasible.
- Driveway design should address all issues that could affect safety of driveway operation, including pedestrian traffic, sight distance, lane widths and turn radii, traffic volumes and speeds on the street, and driveway traffic volume.
- Residential driveways serving more than 25 parking spaces and all commercial driveways should be 28 feet wide for two-way traffic and 16 feet wide for one-way traffic. Driveways to accommodate commercial vehicles or multiple lanes may be wider as determined by LADOT based on a turning radius analysis or operational analysis, and driveways may be narrower if site conditions require it.
- All vehicle maneuvering (such as commercial vehicles turning around) should occur on private property or an alley.

Each vehicular access point was designed to comply with these guidelines to the extent feasible. Deviations from these guidelines are discussed below, along with any mitigating considerations. The final design of the access points would be reviewed by the City Department of Building and Safety, Bureau of Engineering, and LADOT during site plan review to ensure and safe pedestrian and vehicular design.

PROJECT HAZARDS ANALYSIS

As shown in Figure 4, the Project Site would provide vehicular access to the individual Blocks. In many cases, separate access would be provided for Metro rider parking, retail users, and/or commercial loading. A complete summary of all Project vehicular access points is provided in Table 15.

Consistency with Driveway Design Guidelines

Driveway Placement. Project access is concentrated on non-arterial streets, consistent with the MPP, and all commercial loading facilities are located on local or private streets. All vehicular access to Parcel 1 is provided on Cumpston Street (a Collector Street), Fair Avenue (a Local Street), or Elmer Avenue and Klump Avenue (publicly accessible private streets constructed by the Project). Additionally, access to Klump Avenue is provided from Chandler Boulevard (a Boulevard II), though this access point would be designed as a standard intersection rather than a driveway. Vehicular access to Block 7 would be via the alley on the north side of the building. Vehicular access to Block 8 would be via Weddington Avenue (inbound) and Bakman Avenue. (outbound).

Vehicular access points were only located on arterial streets when there was no feasible alternative. Block 0 West, the Consolidated Transit Center, is surrounded by arterial streets. It would continue to provide access for the Metro G (Orange) Line busway and Metro maintenance vehicles from Tujunga Avenue. The West Lot also only has frontage on arterial streets and would provide two access points on Chandler Boulevard (North). The East Lot's only non-arterial frontage is a short stretch on Fair Avenue. It would provide a full-access driveway on Chandler Boulevard and an exit-only driveway to Fair Avenue, a Local Street.

Driveway Spacing. Under MPP Section 321, driveways should be spaced at least 50 feet apart when feasible. The Project's driveways generally are spaced at least 50 feet apart, except for in certain cases where this is infeasible. Blocks 3 and 4 each provide two driveways on Klump Avenue that are separated by approximately 40 feet. The northern driveway of each Block leads directly to a ramp to subterranean parking for residents and the southern driveway leads to a limited number of at-grade parking spaces. On Block 3, the southern driveway serves 40 spaces

for Metro riders. On Block 4, the southern driveway serves 16 spaces for retail customers, along with providing a secondary access to a ramp to above-grade residential parking. In each case, the driveways serve a small enough number of parking spaces that the frequency with which vehicles will be exiting both driveways at the same time would be low. Moreover, traffic speeds and volumes on Klump Avenue would be low for three reasons: it would be a private neighborhood street with a posted speed limit of 25 miles per hour (mph); it would be less than 30 feet wide (compared to a public Local Street with a standard width of 36 feet) and, therefore, drivers may drive even more slowly out of caution; and the blocks are too short (between 240 feet and 320 feet between stop signs) to allow higher speeds. Therefore, the reduced driveway spacing would not result in a hazard.

Under MPP Section 321, residential driveways serving more than 25 parking spaces and all commercial driveways should be 30 feet wide for two-way traffic and 16 feet wide for one-way traffic. Driveways to accommodate commercial vehicles or multiple lanes may be wider as determined by LADOT, based on a turning radius analysis or operational analysis, and driveways may be narrower if site conditions require it. Blocks 1, 5/6, and 8 each have commercial loading access located immediately adjacent to a general vehicular driveway. This results in approximately 60-foot curb cuts on Elmer Avenue (to Block 1), Klump Avenue (to Block 5/6), and Weddington Street (to Block 8). The locations of these commercial loading access points were identified as the only feasible way to meet the design goals of the Project, including the minimization of vehicular access points that would otherwise reduce available ground-floor parking supply, divide ground-floor commercial frontage into multiple smaller blocks, or otherwise conflict with sound pedestrian-first design. Each pair of driveways would have a physical barrier (in the form of concrete column supports between two and five feet wide) between them. Though these curb cuts are wider than the standards in the MPP, the commercial loading driveways would be used infrequently, generally outside of peak hours, and generally by large vehicles (i.e., highly visible and audible) with professional drivers. Therefore, the loading access sides of these curb cuts would function similarly to standard sidewalk and, therefore, the wide curb cuts would not result in a hazard.

Driveway Design. Generally, the driveways would be at or below the maximum width designated in the MPP. The following driveways would include minor exceptions that would not result in unusual safety hazards:

- Certain locations noted above (at Blocks 1, 5/6, and 8) would have commercial loading driveways adjacent to general vehicular driveways and, thus, have wider curb cuts (over 50 feet total each) divided in the middle by physical barriers. The commercial loading driveways would be infrequently used by professional drivers trained to use extreme caution when entering and exiting loading areas (using vehicles equipped with back-up alerts).

- On Cumpston Street, the one-way entry and exit driveways to the passenger loading and parking area for Block 1 residents would be 16 feet and 20 feet wide, respectively, compared with a 16-foot standard in the MPP. The wider exit driveway would be to ensure that any vehicle that enters the passenger loading and parking area can safely maneuver back to Cumpston Street.

- The one-way entry and exit driveways to Block 8 on Weddington Street and Bakman Avenue, respectively, would be 24 feet wide as each would provide two lanes (the exit driveway would provide one lane for left-turns and one lane for right-turns). Because these one-way driveways would not serve opposing traffic, in which the turning radius of an inbound vehicle may conflict with a vehicle waiting to depart, the typical width of 28 feet is unnecessary for safe access.

- The driveway to Block 0 West on Tujunga Avenue, which is for Metro use only, would be 50 feet wide to accommodate the wide turning radiuses of transit buses. Buses are driven by trained professionals who are especially observant of pedestrian traffic. Additionally, the driveway may be controlled when a bus passes through by gate arms installed during Project construction as part of the Metro G (Orange) Line Improvements Project.

Additionally, some of the driveways may be narrower than the MPP recommends for two-way traffic, though the precise widths of the curb cuts have not yet been determined. In general, narrowed driveways provide greater comfort for pedestrians and bicyclists on the sidewalk and, therefore, these conditions would also not result in an unusual safety hazard.

Driveway Obstacles. No unusual obstacles are presented in the design of the driveways that would be considered hazardous to motorized vehicles, non-motorized vehicles, or pedestrians. All roads are straight and flat and driveways meet the roadways at right angles. In some cases, the driveways are lined with solid walls stretching to the sidewalk, impeding direct visibility to the sidewalk. However, at these locations, passive safety systems such as convex mirrors would be installed to improve visibility for both drivers and pedestrians.

Upon further refinement of plans during the building permit application process, the driveways would be designed according to building code and other LADOT standards. They would be reviewed by the City Department of Building and Safety, Bureau of Engineering and, where

appropriate, LADOT during site plan review to ensure code compliance and safe pedestrian and vehicular design.

Project Site Pedestrian Access

The Project's design also minimizes potential hazards to pedestrians by concentrating access for those users away from the vehicular access points.

Pedestrian Access. The Project would provide dedicated pedestrian access (Figure 5) separate from vehicular access points (Figure 4) at all Blocks. While vehicular access for Parcel 1 was concentrated on Klump Avenue (along with limited access on Cumpston Street, Elmer Avenue, and Fair Avenue), pedestrian access is concentrated on District Way, a primary pedestrian promenade through the Project Site.

Pedestrian Traffic. The Project would generate a substantial number of pedestrian trips into and out of the various Blocks. Figure 13 shows the estimated number of pedestrian trips generated at each Block based on a combination of the vehicular trip generation estimates described in Chapter 8 and a study of existing transit boardings and transfers at the Project Site. The details of how the pedestrian trip generation estimates were derived is provided in Appendix D.

Pedestrian Paths of Travel. Pedestrian paths of travel would be routed away from vehicle traffic to the extent possible. Figure 13 also shows the anticipated pedestrian travel routes for Project traffic within and in the immediate vicinity of the Project Site. Most pedestrian trips would either be internal trips within the Project Site or trips between Project uses and the Consolidated Transit Center. As shown in Figure 13, the vast majority of pedestrians traveling to, from, or within the Project Site are not expected to walk across Project vehicular access points. Instead, pedestrian trips are concentrated on District Way, Chandler Boulevard (especially between the East Lot and West Lot, the Consolidated Transit Center, and the Metro B [Red] Line subway portals), and on Lankershim Boulevard. Many pedestrians would cross Lankershim Boulevard, though pedestrians would have the option to cross under Lankershim Boulevard due to the reconfiguration of the Metro B (Red) Line fare gates to allow free undercrossing between Block 0 West (the Consolidated Transit Center) and Block 0 East (within Parcel 1).

As Figure 13 shows, the only access point with substantial levels of pedestrian cross traffic would be the Metro G (Orange) Line busway entry/exit on Tujunga Avenue. However, this driveway is signalized, and pedestrians would only cross on a walk signal as at a standard intersection crosswalk. Therefore, this would not result in a hazardous conflict.

Project Pedestrian Amenities. In addition to reconfiguring the Metro B (Red) Line fare gates, the Project also proposes to install new continental crosswalks across Lankershim Boulevard at the south side of Chandler Boulevard (North), across Tujunga Avenue at the south side of Chandler Boulevard (North) and the north side of Chandler Boulevard (South), and across District Way at the west side of Fair Avenue. The Project would also repaint one or more existing crosswalks that could be affected by Project construction at each of the following locations:

- Tujunga Avenue & Chandler Boulevard (North)
- Tujunga Avenue & Chandler Boulevard (South)
- Lankershim Boulevard & Chandler Boulevard (North)
- Lankershim Boulevard & Chandler Boulevard (South)
- Across the Block 0 West access point on Tujunga Avenue

These amenities would also serve to reduce hazardous conflicts between vehicles and pedestrians.

Project Site Bicycle Access

The Project's design also minimizes potential hazards to bicyclists by providing facilities for bicyclists that avoid arterial streets (i.e., District Way through the Project Site), installing a Class IV bicycle lane on Fair Avenue and Chandler Boulevard (North) and a bicycle crossing signal on Lankershim Boulevard at Chandler Boulevard (North), and allowing for installation of protected bicycle lanes westbound on Chandler Boulevard and northbound on Lankershim Boulevard to Chandler Boulevard (North). The existing eastbound bicycle facility on Chandler Boulevard (South) between Tujunga Avenue and Vineland Avenue would not be affected by the Project.

Additionally, at nearly every Block as shown in Figure 5, the Project would provide long-term and short-term bicycle parking directly accessible to the sidewalk rather than through the vehicular

parking lots or structures. The only exceptions based on the current Project Site plan would be Block 4, where a portion of the bicycle parking would be provided within the at-grade parking level accessed through one of the vehicular driveways, and Block 8, where the bicycle parking room would be accessible both through the building lobby and through the vehicular driveways.

Vision Zero

Lankershim Boulevard and Vineland Avenue, both of which run adjacent to portions of the Project Site, are part of the Vision Zero HIN, where injuries resulting from collisions between vehicles and pedestrians, bicyclists, or other vehicles are most common. As discussed in Chapter 4, Lankershim Boulevard is also designated as a Priority Corridor for Vision Zero improvements. Phase 1 of the Lankershim Boulevard Priority Corridor project was previously completed, and Phase 2 improvements are not adjacent to the Project Site. The Project would provide minimum 15-foot sidewalks on each side of Lankershim Boulevard adjacent to Project Site frontage, consistent with Mobility Plan standards[24], helping to improve safety for the most vulnerable roadway users.

Safe Routes to School

Lankershim Elementary School is located on Bakman Avenue south of Weddington Street (south of Block 8). Its SRTS map is shown in Figure 14 and includes all crosswalks in the Study Area as well as crossing guards during start and end times at the Project-adjacent intersections of Lankershim Boulevard & Chandler Boulevard (North) and Bakman Avenue & Weddington Street. The Project would not directly affect access to Lankershim Elementary School but would add vehicular traffic to the Study Area and to specific Project access points, some of which are along routes students may walk to and from the school. It is important to note that at Block 8, nearest to Lankershim Elementary School, there are currently two driveways on Bakman Avenue and one on Weddington Street. With the Project, there would be one outbound-only driveway on Bakman Avenue and one wide curb-cut serving commercial loading purposes alongside inbound-only traffic to the parking structure on Weddington Street. The driveways would be designed in

[24] In some locations, portions of the sidewalk would be provided on the Project Site, as summarized in Table 4.

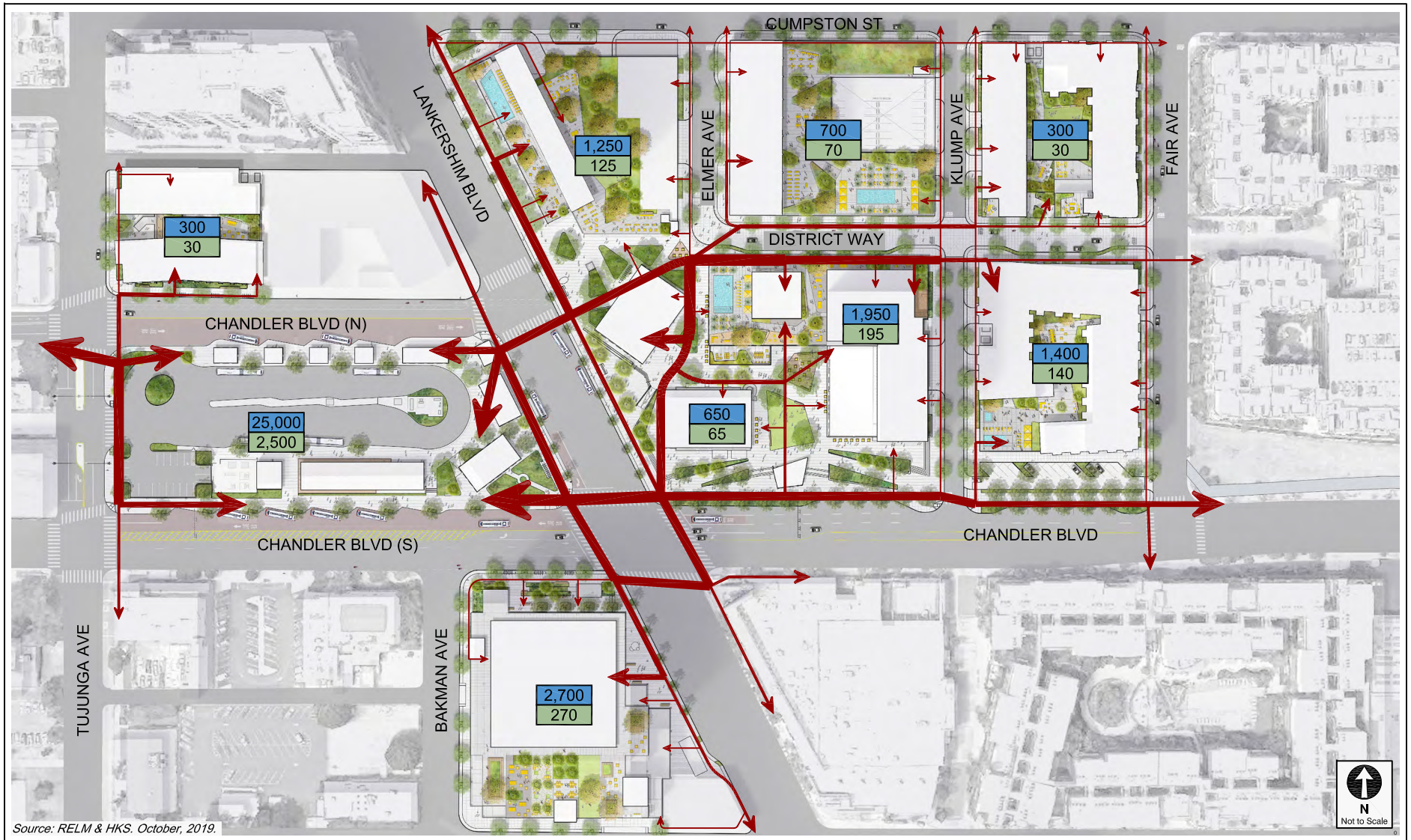
accordance with the MPP and the sidewalks adjacent to Project Site frontage would meet or exceed Mobility Plan 2035 standard widths. Therefore, the Project would not result in a significant safety hazard to students.

Project Hazards Analysis Summary

Based on the Project site plan review and design assumptions, the Project does not present any geometric design hazards related to traffic movement, mobility, or pedestrian accessibility, and no significant impact would occur with respect to Threshold T-3. Therefore, no mitigation measures would be required.

CUMULATIVE ANALYSIS

According to the TAG, a project could contribute to a significant cumulative impact with respect to Threshold T-3 if the project, in combination with related projects with access points proposed along the same block(s), would result in significant impacts. However, as shown in Figure 12, there are no related projects on the same blocks as any Project access point. Further, as the Project would not result in a significant impact with respect to Threshold T-3, neither would it contribute to a cumulatively significant impact.



Source: RELM & HKS. October, 2019.

LEGEND

X,XXX — Estimated Daily Pedestrian Trips
X,XXX — Estimated Peak Hour Pedestrian Trips

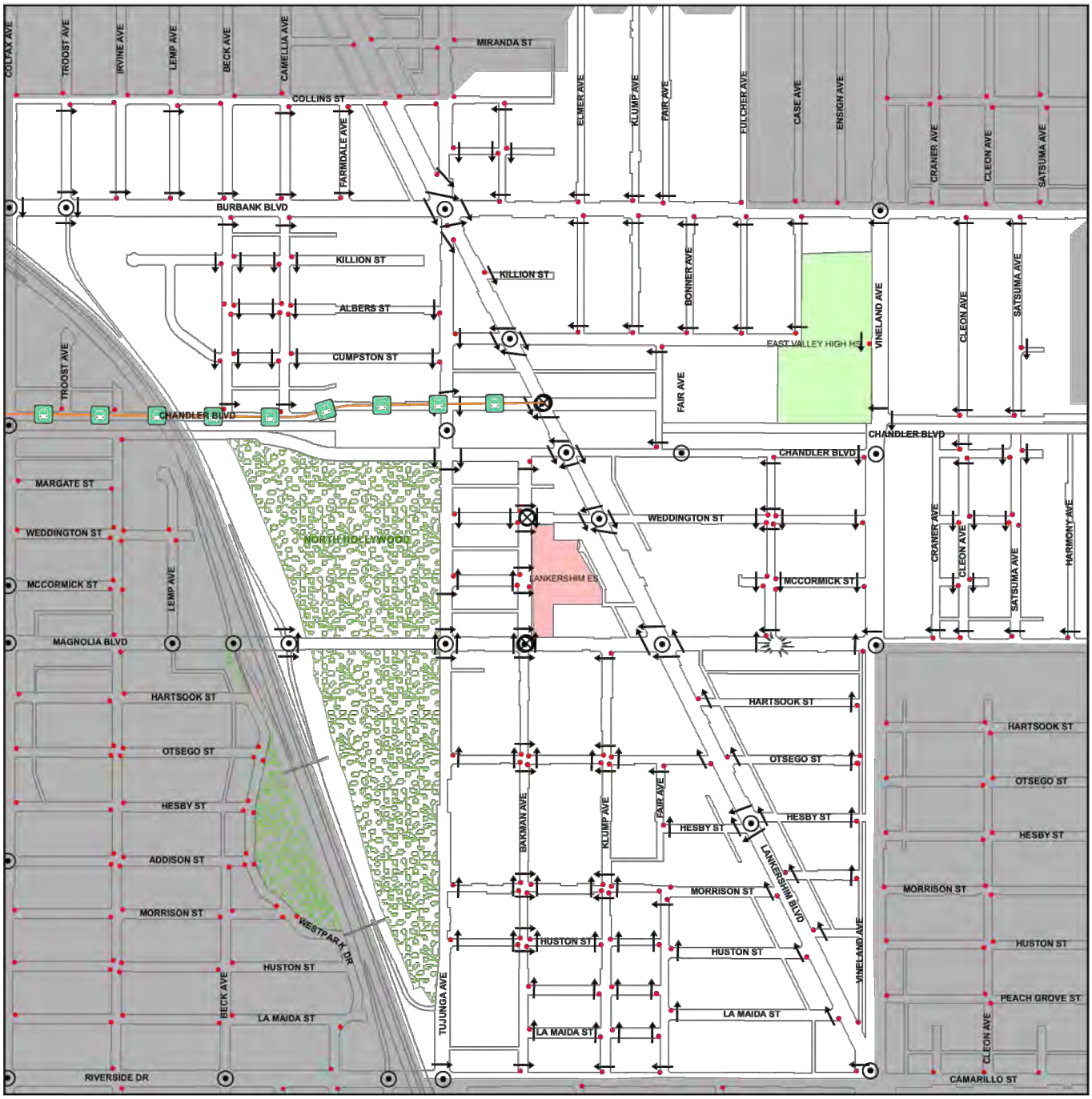
PEDESTRIAN PATHS OF TRAVEL

Minimal Pedestrian Activity (~10 trips/hr)

Maximum Pedestrian Activity (up to 800 trips/hr)

ESTIMATED PROJECT-RELATED PEDESTRIAN ACTIVITY

FIGURE 13



Legend

- Recommended Crossing
- Stop Sign
- Traffic Signal
- Crossing Guard
- Flashing Warning Light
- Stairs or Walkway
- Pedestrian Bridge
- Pedestrian Tunnel
- Parks

N W E S

0 300 600
Feet

Source: LADOT. September, 2016.

Parents:

This map shows the recommended crossings to be used from each block in your school attendance area. Following the arrows, select the best route from your home to the school and mark it with a colored pencil or crayon. This is the route your child should take. Instruct your child to use this route and to cross streets only at locations shown. You and your child should become familiar with the route by walking it together. Obey marked crosswalks, stop signs, traffic signals and other traffic controls. Crossing points have been located at these controls wherever possible, even though a longer walk may be necessary. Instruct your child to always look both ways before crossing the street. If no sidewalk exists, your child should walk facing traffic.

Estimados Padres:

Este mapa muestra los cruzados recomendados para los peatones de cada cuadra en la area de su escuela. Siguiendo las flechas en el mapa, selecione la ruta mas segura de su casa a la Escuela y marquelo con un lapis o tiza de color. Esta es la ruta que su hijo (a) debe de usar. Digale a su hijo (a) que use esta ruta y que cruce las calles solamente en los lugares indicados. Usted y su hijo (a) deberian de familiarizarce con esta ruta. Obedezcan los rotulos de peatones, de altos, semaforos y todos los señales de trafico. Puntos para cruzar estan localizados en areas controladas, aunque sea necesario de alargar el tiempo para cruzar. Instruye a su hijo (a) que siempre se fije de los dos lados antes de cruzar la calle. El estudiante debe de siempre caminar en la direccion opuesta del trafico si no existe una banqueta.

SAFE ROUTES TO SCHOOL MAP FOR LANKERSHIM ELEMENTARY SCHOOL

FIGURE 14

TABLE 15
PROJECT VEHICULAR ACCESS SUMMARY

Block	Street	Purpose	Direction	Approx. Width [a]	Parking
0	Tujunga Avenue	Metro G (Orange) Line Busway Route Terminus	Two-way	50 ft	n/a
1	Cumpston Street	Resident Drop-off and Parking	Inbound / Outbound [b]	16 ft / 20 ft	below-grade
	Elmer Avenue	Retail Parking	Two-way	28 ft [c]	above-grade
	Elmer Avenue	Commercial Loading	Back in / head out	28 ft [c]	at-grade
2	Klump Avenue	Resident Parking and Commercial Loading	Two-way	28 ft	at-grade and below-grade
	Klump Avenue	Metro Parking	Two-way	28 ft	above-grade
3	Klump Avenue	Resident Parking	Two-way	20 ft	below-grade
	Klump Avenue	Metro Parking	Two-way	20 ft	at-grade
4	Klump Avenue	Resident Parking	Two-way	20 ft	below-grade
	Klump Avenue	Retail Parking	Two-way	20 ft	at-grade
	Fair Avenue	Resident Parking	Two-way	20 ft	at-grade and above-grade
	Fair Avenue	Commercial Loading	Back in / head out	15 ft	at-grade
	Fair Avenue	Retail Outdoor Parking	Inbound Only	16 ft	at-grade
	Klump Avenue	Retail Outdoor Parking	Outbound Only, Right-Turn Only	16 ft	at-grade
5/6	Klump Avenue	Resident, Office, and Retail Parking	Two-way	28 ft [c]	below-grade
	Klump Avenue	Commercial Loading	Back in / head out	25 ft [c]	at-grade
7	Alley	Metro Parking	Two-way	24 ft	at-grade and below-grade
8	Bakman Avenue	Office and Retail Parking	Outbound Only	24 ft	at-grade, below-grade, and above-grade
	Weddington Street	Office and Retail Parking	Inbound Only	24 ft [c]	at-grade, below-grade, and above-grade
	Weddington Street	Commercial Loading	Back in / head out	27 ft [c]	at-grade
West Lot [d]	Chandler Boulevard (North)	Metro Parking	Two-way	28 ft	at-grade and above-grade
East Lot	Chandler Boulevard	Metro Parking	Two-way	24 ft	at-grade and above-grade
	Fair Avenue	Metro Parking	Outbound Only, Right-Turn Only	16 ft	at-grade and above-grade

Notes:

[a] Driveway widths are based on the apron width, consistent with the widths recommended in MPP 321.

[b] The inbound and outbound lanes are approximately 60 feet apart.

[c] Parking driveway and commercial loading driveway are located adjacent to each other.

[d] There are two similar driveways on Chandler Boulevard (North) serving the West Lot.

Chapter 7

CEQA Freeway Safety Analysis

In May 2020, LADOT issued *Interim Guidance for Freeway Safety Analysis* (City Freeway Guidance) identifying City requirements for a CEQA safety analysis of Caltrans facilities as part of a transportation assessment. Additionally, Caltrans released *Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance* (Caltrans Safety Guidance). The analysis below considers both sets of guidelines.

CITY ANALYSIS METHODOLOGY

The City Freeway Guidance relates to the identification of potential safety impacts at freeway off-ramps as a result of increased traffic from development projects. It provides a methodology and significance criteria for assessing whether additional vehicle queueing at off-ramps could result in a safety impact due to speed differentials between the mainline freeway lanes and the queued vehicles at the off-ramp.

Based on the City Freeway Guidance, a transportation assessment for a development project must include analysis of any freeway off-ramp where the project adds 25 or more peak hour trips. The project would result in a significant impact at such a ramp if each of the following three criteria were met:

1. Under a scenario analyzing future conditions upon project buildout, with project traffic included, the off-ramp queue would extend to the mainline freeway lanes[25] based on the 95th percentile queue length using Synchro or a comparable Highway Capacity Manual analysis methodology.

2. The project would contribute at least two vehicle lengths (50 feet, assuming 25 feet per vehicle) to the queue.

[25] The entire ramp length from the stop line to the gore point is defined as the length of the ramp. If an auxiliary lane is provided on the freeway, then half the length of the auxiliary lane is added to the ramp storage length.

3. The average speed of mainline freeway traffic adjacent to the off-ramp during the analyzed peak hour(s) is greater than 30 mph.

Should a significant impact be identified, mitigation measures to be considered include TDM measures to reduce the project's trip generation, investments in active transportation or transit system infrastructure to reduce the project's trip generation, changes to the traffic signal timing / phasing or lane assignments at the ramp intersection, or physical changes to the off-ramp. Any physical change to the ramp would have to improve safety, not induce greater VMT, and not result in secondary environmental impacts.

CITY FREEWAY SAFETY ANALYSIS

Based on the Project's trip generation estimates and traffic distribution pattern detailed in Chapter 9, which was reviewed and approved by LADOT as part of the Project's Memorandum of Understanding (MOU), the Project under Full Buildout would add 25 or more peak hour trips to five off-ramps:

- SR 170 Southbound Off-ramp to Burbank Boulevard (Intersection #1)
- SR 170 Southbound Off-ramp to Magnolia Boulevard (Intersection #27)
- SR 170 Northbound Off-ramp to Magnolia Boulevard (Intersection #28)
- US 101 Eastbound Off-ramp to Tujunga Avenue (Intersection #35)
- SR 134 Westbound Off-ramp to Lankershim Boulevard (Intersection #37)

The 95th percentile ramp queue was calculated using the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016) (HCM) methodology used in the operating conditions analysis in Chapter 9. It incorporated signal timing data provided by the City for each of the signalized off-ramp intersections. Conditions were analyzed with and without Project Phase 1 traffic in Year 2026 and with and without Full Buildout of the Project in Year 2037 based on the traffic volumes developed Chapter 9. The queue lengths and off-ramp storage length are shown in Table 16 for Year 2026 and Table 17 for Year 2037. HCM worksheets are provided in Appendix E.

As shown in Table 16, under Future with Phase 1 Conditions (Year 2026), none of the queues would exceed the ramp storage length during either peak hour. Therefore, further evaluation of the significance criteria is not necessary at any location. The Project would not result in a significant impact and no mitigation measures are required based on Phase 1 Project traffic.

As shown in Table 17, under Future with Full Buildout Conditions (Year 2037), none of the queues would exceed the ramp storage length during either peak hour. Therefore, further evaluation of the significance criteria is not necessary at any location. The Project would not result in a significant impact and no mitigation measures are required based on Full Buildout Project traffic.

CALTRANS SAFETY REVIEW

The Caltrans Safety Guidance recommends that the lead CEQA agency (i.e., the City) overseeing a project's entitlement conduct a review of local traffic safety plans and the Project's potential adverse effect on safety or the implementation of those plans. Under the federal Highway Safety Improvement Program (HSIP), Caltrans developed *Local Roadway Safety: A Manual for California's Local Road Owners* (Caltrans, April 2020), the Local Roadway Safety Plan (LRSP), and the Systemic Safety Analysis Report Program (SSARP).

Each of the three Caltrans documents and programs are similar in purpose, each providing a framework for local agencies (i.e., the City) to identify safety problems and develop projects designed to improve safety. The LRSP and SSARP identify funded improvement projects and plans. A review of a list of funded improvement plans under the LRSP showed that none are located in the City as of October 1, 2020[26]. Under the SSARP, one small improvement project was identified for funding in the City[27]. While details of this project are not available, given the project budget ($275,000) and the size of the City, it is unlikely that the funds would be applied within the Study Area, and more unlikely still that the Project would interfere with implementation.

[26] https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/hsip/2020/lrspprojects20201001-a11y.pdf

[27] https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/hsip/2018/selectedapplications20160715.pdf

The HSIP itself allocates federal funding for safety programs. A review of the programs and projects selected for funding in HSIP cycles 7, 8, and 9[28] identified a number of programs in the City, but none of which were in the vicinity of the Study Area.

The City has a number of programs in place to proactively identify and manage traffic safety, such as Vision Zero with the HIN and the SRTS program. As was discussed in Chapter 4, the Project would not interfere with the implementation of Vision Zero improvements in the Study Area. Additionally, as discussed in Chapter 6, the Project would not introduce new traffic hazards nor significantly increase existing hazards. All Project access points are located on non-arterial streets and are designed, to the extent feasible, in accordance with MPP guidelines. Therefore, the Project would not have an adverse safety impact nor impede implementation of any safety improvement projects.

[28] https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program/approved-project-lists

TABLE 16
FREEWAY OFF-RAMP QUEUING SAFETY ANALYSIS - YEAR 2026

Off-ramp	Ramp Storage Length [a]	Peak Hour	95th Percentile Queue [b]		Exceeds Ramp Storage [c]
			Future without Project Conditions	Future with Phase 1 Conditions	
SR 170 Southbound Off-ramp to Burbank Boulevard (Intersection #1)	1,550	AM	970	1,140	NO
		PM	343	355	NO
SR 170 Southbound Off-ramp to Magnolia Boulevard (Intersection #27)	1,725	AM	1,398	1,498	NO
		PM	313	320	NO
SR 170 Northbound Off-ramp to Magnolia Boulevard (Intersection #28)	1,175	AM	383	430	NO
		PM	628	723	NO
US 101 Eastbound Off-ramp to Tujunga Avenue (Intersection #35)	750	AM	8	25	NO
		PM	53	73	NO
SR 134 Westbound Off-ramp to Lankershim Boulevard (Intersection #37)	825	AM	270	270	NO
		PM	238	235	NO

Notes:

[a] Includes ramp length to gore point, in feet, as well as half the length of any auxiliary lane, if provided.

[b] Queue length provided in feet, based on 25 feet per vehicle.

[c] Based on Future with Phase 1 Conditions queue.

TABLE 17
FREEWAY OFF-RAMP QUEUING SAFETY ANALYSIS - YEAR 2037

Off-ramp	Ramp Storage Length [a]	Peak Hour	95th Percentile Queue [b]		Exceeds Ramp Storage [c]
			Future without Project Conditions	Future with Full Buildout Conditions	
SR 170 Southbound Off-ramp to Burbank Boulevard (Intersection #1)	1,550	AM	1,130	1,325	NO
		PM	360	383	NO
SR 170 Southbound Off-ramp to Magnolia Boulevard (Intersection #27)	1,725	AM	1,605	1,725	NO
		PM	328	338	NO
SR 170 Northbound Off-ramp to Magnolia Boulevard (Intersection #28)	1,175	AM	408	493	NO
		PM	708	1,025	NO
US 101 Eastbound Off-ramp to Tujunga Avenue (Intersection #35)	750	AM	8	30	NO
		PM	60	113	NO
SR 134 Westbound Off-ramp to Lankershim Boulevard (Intersection #37)	825	AM	288	288	NO
		PM	248	258	NO

Notes:

[a] Includes ramp length to gore point, in feet, as well as half the length of any auxiliary lane, if provided.

[b] Queue length provided in feet, based on 25 feet per vehicle.

[c] Based on Future with Full Buildout Conditions queue.

Chapter 8

Non-CEQA Analysis: Pedestrian, Bicycle, and Transit Access Assessment

This chapter presents an assessment of the Project's effects on pedestrian, bicycle, and transit circulation in the vicinity of the Project Site. The choice to make a trip by a mode other than automobile is directly influenced by the perceived convenience and safety of the alternative mode and, therefore, the Project's improvements or deterioration of facilities serving pedestrians, bicyclists, or transit users is of critical importance.

EXISTING INFRASTRUCTURE

The Study Area is well-served by existing dedicated pedestrian, bicycle, and transit infrastructure, as discussed in Chapter 2.

Pedestrian Infrastructure

As shown in Table 5, there are sidewalks throughout the vicinity of the Project Site. However, every street adjacent to the Project Site has one or more sections of sidewalks that do not meet the widths designated in Mobility Plan 2035 or are missing or damaged. There are also crosswalks at most intersections. However, many of the crosswalks are not high-visibility continental crosswalks (with "ladder"-style striping pattern) that are currently standard in the City. Key locations with substandard crosswalks include the intersections of Tujunga Avenue & Chandler Boulevard (North), Lankershim Boulevard & Cumpston Street, three legs of Lankershim Boulevard & Chandler Boulevard (South), and two legs of Lankershim Boulevard & Weddington Street.

Figure 9 provides a map of potential pedestrian destinations in the vicinity of the Project Site, in accordance with TAG requirements.

Bicycle Infrastructure

Dedicated on-street bicycle lanes are provided on Chandler Boulevard (North) in the westbound direction and Chandler Boulevard (South) in the eastbound direction west of Lankershim Boulevard. On-street bicycle lanes are present in both directions on Chandler Boulevard between Lankershim Boulevard and Vineland Avenue. A two-way Class IV bicycle path travels within the East Lot immediately north of Chandler Boulevard between Fair Avenue and Vineland Avenue. Near the Project Site, on-street bicycle lanes exist in both directions on Vineland Avenue south of Burbank Boulevard, and the Chandler Bikeway, a Class IV bicycle path, extends east from Vineland Avenue alongside Chandler Boulevard.

Transit Infrastructure

As shown in Table 6, there are numerous bus stops in the vicinity of the Project Site, including adjacent to the Project Site at the intersections of Tujunga Avenue & Chandler Boulevard (North and South), Lankershim Boulevard & Chandler Boulevard, and Vineland Avenue & Chandler Boulevard. Some of these bus stops do not provide benches for seating and most do not provide shelters. The North Hollywood Metro Station and Metro G (Orange) Line station are also located at the Project Site and provide subway, local bus, and bus rapid transit, respectively. These stations provide benches and shelters. Transit routes serving the Project Site are summarized in Table 7 and mapped in Figure 11.

On-Street Parking

On-street parking exists on most of the streets adjacent to the Project Site as follows:

- 17 metered spaces on Cumpston Street adjacent to Parcel 1 (Blocks 1, 2, and 3)
- 10 metered spaces on Chandler Boulevard adjacent to Parcel 1 (Blocks 4 and 5/6)
- Eight metered spaces on Chandler Boulevard (South) adjacent to Block 0 West
- Approximately five unmetered spaces on Tujunga Avenue adjacent to Block 7
- Seven metered spaces on Bakman Avenue adjacent to Block 8
- Eight metered spaces on Weddington Street adjacent to Block 8

- Six metered spaces on Lankershim Boulevard adjacent to Block 8

Additionally, there are 17 metered and approximately 10 unmetered spaces on Chandler Boulevard adjacent to the East Lot.

Mobility Networks

Several streets adjacent to the Project Site are part of various mobility networks identified in Mobility Plan 2035, as shown in Figure 8. Cumpston Street, Tujunga Avenue, Bakman Avenue, and Vineland Avenue are part of the NEN. Lankershim Boulevard is part of the TEN. Chandler Boulevard east of Lankershim Boulevard is part of the BLN. Lankershim Boulevard and Chandler Boulevard west of Vineland Avenue (including Chandler Boulevard (North) and Chandler Boulevard (South) to the west of Lankershim Boulevard) are part of the Bicycle Network. Chandler Boulevard, Chandler Boulevard (South), Tujunga Avenue, Lankershim Boulevard, and Vineland Avenue are part of PED. Lankershim Boulevard and Vineland Avenue are in the HIN.

PROJECT EFFECTS ON INFRASTRUCTURE

The Project would generally improve the surrounding infrastructure for pedestrians, bicyclists, and transit users. The TAG provides a series of evaluation criteria to assess the Project's effects on infrastructure, detailed in Table 18 and summarized below.

- Pedestrian Infrastructure: All sidewalks adjacent to the Project Site would meet at least their standard widths according to Mobility Plan 2035 as well as complying with City requirements regarding ADA ramp access at crossing points. The Project would provide continental crosswalks at key locations and would not remove or degrade any existing pedestrian facilities.

- Bicycle Infrastructure: As shown in Figure 6, the Project will implement the shared street configuration on District Way and the connection through Parcel 1 to Lankershim Boulevard. The Project will install a bicycle crossing signal across Lankershim Boulevard at Chandler Boulevard (North) and Class IV bicycle lanes separated by bollards from

vehicular traffic on Fair Avenue between District Way and Chandler Boulevard and on Chandler Boulevard (North) between Lankershim Boulevard and Tujunga Avenue. The Project would allow for installation of Class IV bicycle lanes westbound on Chandler Boulevard and northbound on Lankershim Boulevard to Chandler Boulevard (North). The Project would also remove approximately 16 existing bicycle storage lockers at Block 0 West but would provide substantial numbers of new bicycle parking, including approximately 100 secure bicycle spaces for transit riders at one or more Metro Bike Hubs, and spaces at each Block for residents, employees, and guests, as well as space for Metro Bikeshare short-term bicycle rentals or similar first mile / last mile transportation options.

- Transit Infrastructure: The Project would remove all transit infrastructure associated with the existing bus plaza on Parcel 1 and some existing infrastructure (bus benches and shelters) at Block 0 West, to be replaced with new and enhanced infrastructure at the Consolidated Transit Center. This would include installation of exclusive bus lanes adjacent to Block 0 West on Chandler Boulevard (North) and Chandler Boulevard (South) and an exclusive bus right-turn lanes from Lankershim Boulevard to Chandler Boulevard (South) and from Tujunga Avenue to Chandler Boulevard (North) allowing clockwise bus circulation and curb loading as shown in Figure 3. Additionally, the Project would install bus benches and shelters at any remaining or reconfigured bus stops adjacent to the Project Site as necessary, as well as adjacent to the East Lot if applicable.

- Street Crossing Distance: The Project would result in an approximately six-foot increase in crossing distance across Chandler Boulevard (North) on the west side of Lankershim Boulevard, a 20-foot increase in crossing distance across Chandler Boulevard (North) on the east side of Tujunga Avenue, an approximately five-foot increase in crossing distance across Lankershim Boulevard on the north side of Chandler Boulevard (South), and an approximately 10-foot increase in crossing distance across Chandler Boulevard (South) on the west side of Lankershim Boulevard. It would also increase the future crossing distance across Tujunga Avenue on the south side of Chandler Boulevard (North) by up to 20 feet due to an increased turning radius to serve buses turning from northbound Tujunga Avenue to the eastbound Chandler Boulevard (North).

- Other Considerations: The roads around Block 0 West would be modified to serve transit operations at the Consolidated Transit Center. On Chandler Boulevard (South), the

general westbound travel lanes between Tujunga Avenue and Lankershim Boulevard would be eliminated and a westbound bus-only lane would be installed in their place. On Chandler Boulevard (North), an eastbound bus-only lane would be installed adjacent to Block 0 West (the general westbound travel lanes would remain). The Project would not remove any other existing transportation system components, would not remove, degrade, or narrow any existing pedestrian facilities, and would not remove or narrow any existing sidewalk-street buffering elements. It would increase the turning radii to better accommodate buses at the southeast corner of the intersection of Tujunga Avenue & Chandler Boulevard (North) and the northwest corner of Lankershim Boulevard & Chandler Boulevard (South), but both of those turns would be restricted to transit buses only and would not affect turning speeds.

On-Street Parking

The Project would have a minimal direct effect on the total number of on-street parking spaces. It would add several designated areas for short-term on-street parking within the private streets of Parcel 1, and in total would provide 34 on-street parking spaces within and around Parcel 1, an increase from the 27 spaces currently provided around Parcel 1[29]. It would also provide a small off-street public parking area (14 spaces) north of Chandler Boulevard between Klump Avenue and Fair Avenue and proposes to provide several dedicated areas for passenger loading and unloading, as shown in Figure 4. It would remove eight metered spaces on the north side of Chandler Boulevard (South) adjacent to Block 0 West. In total, the Project would directly result in the net loss of one on-street parking space and the addition of 14 off-street spaces in the public lot. To the extent that the Project reduces the number of metered parking spaces, it would pay the City for loss of revenue in accordance with LADOT policy.

Additionally, based on the current status of discussions between the City, Metro, and the Project, the City desires to upgrade existing bicycle facilities to Class IV and install new Class IV bicycle facilities, which would require the removal of existing on-street parking from various streets. These upgrades are unrelated to the Project and were in the planning stages before the Project was

[29] The 27 existing spaces are located on public streets and are metered. 21 of the 34 replacement spaces are located on Cumpston Street or Chandler Boulevard and could be metered. The remaining 13 spaces would be located on private streets within Parcel 1 and would not be metered by the City.

proposed. However, these bicycle facility upgrades and their related impact on on-street parking are noted here because it is anticipated that the upgrades in the vicinity of the Project may be implemented concurrent with and, in some cases, in connection with Project construction to achieve efficiencies and minimize disruption to the surrounding community.

As shown in Figure 6, Chandler Boulevard (North) between Tujunga Avenue and Lankershim Boulevard would be upgraded from a Class II bicycle lane to a Class IV protected bicycle lane, eliminating approximately four unmetered parking spaces. The Project would install a two-way Class IV bicycle lane on the east side of Fair Avenue between District Way and Chandler Boulevard, which would eliminate one unmetered space when considering lane striping designed to minimize the loss of parking. The potential installation of a two-way Class IV bicycle lane on the north side of Chandler Boulevard between Fair Avenue and Vineland Avenue would eliminate up to 17 metered spaces and 10 unmetered spaces. The potential installation of a one-way Class IV bicycle lane on the south side of Chandler Boulevard between Tujunga Avenue and Vineland Avenue would eliminate at least two spaces between Tujunga Avenue and Bakman Avenue and four spaces between Lankershim Boulevard and Fair Avenue when considering lane striping designed to minimize the loss of parking. In total, these bicycle facilities could result in the loss of up to 38 on-street parking spaces in the vicinity of the Project Site.

Proximity to Schools

It should be noted that Block 8, which would primarily provide up to 488,320 sf of office space (or more under the land use exchange option which reduces the amount of retail and restaurant space commensurately), is located near Lankershim Elementary School, which is south of Weddington Street and east of Bakman Avenue. Inbound access and the commercial loading access to Block 8 would be located on Weddington Street and outbound access would be located on Bakman Avenue north of Weddington Street. Both streets provide pedestrian routes to and from the school, and the school provides crossing guards at the intersections of Lankershim Boulevard & Chandler Boulevard (North) and Bakman Avenue & Weddington Street, as shown in Figure 14. Nonetheless, as discussed in Chapter 6, the Project would widen the sidewalks along the Project frontage to Mobility Plan 2035 standards and be designed in accordance with the MPP and, therefore, the Project would not negatively affect pedestrian access to Lankershim Elementary School.

PROJECT EFFECTS ON VOLUME

The Project would result in additional pedestrian, bicycle, and transit activity at and around the Project Site. The TAG provides a series of evaluation criteria to assess the Project's effects on volumes, detailed in Table 19. In summary, while the Project would increase pedestrian traffic to and from the Project Site, virtually all major pedestrian crossing points would be in continental crosswalks at signalized intersections. Two major crossing points that are not at signalized intersections would be at stop-controlled locations and would also have well-marked crosswalks, including across Klump Avenue & District Way and across Klump Avenue at the north side of Chandler Boulevard.

Figure 13 shows anticipated pedestrian paths of travel and relative volumes generated by the Project itself. Existing pedestrian activity in the vicinity of the Project Site is primarily related to the existing transit stations and bus stops and the commercial and residential development in the vicinity. This activity would not substantially change as a result of the Project, though more pedestrian trips to and from public transit would travel to the Consolidated Transit Center on the west side of Lankershim Boulevard, as bus activity would be concentrated there rather than within Parcel 1 as in the existing condition. The Project accommodates new pedestrian traffic with the various crosswalks proposed to be installed, including the key crossing point on Tujunga Avenue at Chandler Boulevard (North) between the West Lot and the Consolidated Transit Center.

Pedestrian activity generated by the Project is anticipated to be heaviest between proposed Metro parking areas (primarily the East Lot and the West Lot) and the Consolidated Transit Center and Metro B (Red) Line subway portal on Parcel 1. Secondarily, pedestrian activity would be heaviest within and to/from Parcel 1, where the majority of the Project's residential and commercial development is proposed. The mix of uses would generate internal pedestrian activity, and the commercial uses would draw patrons by foot or bicycle from the surrounding community and the Consolidated Transit Center.

Overall, bicycle activity would be heaviest on Parcel 1, both due to the amount of development there and the implementation of the proposed bicycle facility that would travel through Parcel 1 on District Way. However, the Project may not generate as much bicycle activity as a similar development project that did not have the same integration with major transit facilities as the Project. Because Project residents and employees can easily walk to the Metro B (Red) Line

station and the Consolidated Transit Center, there is limited need for bicycle trips as first mile / last mile connections to public transit routes.

The Project would generate substantial amounts of transit trips. However, given the high capacity of the primary transit routes (i.e., Metro B [Red] Line and Metro G [Orange] Line) and the variety of additional bus routes stopping at the Consolidated Transit Center, transit activity generated by the Project would not strain the capacity of the public transit system.

PROJECT FEATURES AND RECOMMENDED ACTIONS

In summary, the Project would provide the following features that would directly benefit pedestrian, bicycle, or transit access at and around the Project Site:

- Construction of the Consolidated Transit Center
- Installation of bus stops, benches, and shelters adjacent to the Project Site as necessary[30]
- Reconfiguration of the Metro B (Red) Line fare gates to allow free passage under Lankershim Boulevard between Parcel 1 and the Consolidated Transit Center
- Provision of at least 750 parking spaces for Metro
- Provision of Metro Bike Hubs for secure bicycle parking for transit users
- Construction of minimum 12-foot sidewalks all around the Project Site (including along private streets within Parcel 1)
- Dedicated pedestrian access to all Project development
- Proposed implementation of new continental crosswalks:
    - Across Lankershim Boulevard at the south side of Chandler Boulevard (North)
    - Across Tujunga Avenue at the south side of Chandler Boulevard (North)
    - Across Tujunga Avenue at the north side of Chandler Boulevard (South)
    - Across District Way at the west side of Fair Avenue
- Construction of the proposed bicycle route through Parcel 1 on District Way
- Provision of long-term and short-term bicycle parking at every Block
- Dedicated bicycle parking access to sidewalks at nearly every Block

[30] Metro would also replace bus benches and shelters adjacent to the East Lot if it develops that parcel.

Based on the analysis above, the Project would not result in substantial negative effects on pedestrian, bicycle, or transit access and, therefore, no improvements are necessary beyond those already proposed as features of the Project.

TABLE 18
PROJECT EFFECTS ON INFRASTRUCTURE

Evaluation Criteria [a]	**Evaluation of Project Effect**
Removal or degradation of existing sidewalks, crosswalks, pedestrian refuge islands, and/or curb extensions/bulbouts	The Project would not remove or degrade any existing sidewalks, crosswalks, pedestrian refuge islands, curb extensions, or bulbouts. Rather, all sidewalks adjacent to the Project Site would be widened (if necessary) to meet their standard widths according to Mobility Plan 2035. At some locations, the standard width would be met with additional width on the Project Site, as detailed in Table 4. Within Parcel 1, the network of publicly accessible private streets would all be lined with minimum 12-foot wide sidewalks, which is consistent with Mobility Plan 2035 standards for Local Streets. The Project would also provide or maintain continental crosswalks across Lankershim Boulevard at Chandler Boulevard (North and South), across Tujunga Avenue at the south side of Chandler Boulevard (North) and the north side of Chandler Boulevard (South), and across District Way at the west side of Fair Avenue. The Project itself provides dedicated pedestrian access points separate from vehicular access at all Blocks, as shown in Figure 5. These improvements would provide a more comfortable pedestrian experience, provide enhanced crossing protection and options, facilitate walking to and from the Project Site, and encourage the use of public transit through an enhanced pedestrian experience.
Removal or degradation of existing bikeways and/or supporting facilities (e.g., bikeshare stations, on-street bike racks/parking, bike corrals, etc.)	The Project would not remove any existing bicycle facilities. The Project would install bicycle infrastructure on District Way through the Project Site, on Fair Avenue from District Way to Chandler Boulevard, and on Chandler Boulevard (North) from Lankershim Boulevard to Tujunga Avenue as shown in Figure 6. It is designed to allow upgraded Class IV bicycle facilities on Chandler Boulevard from Fair Avenue to Lankershim Boulevard and new Class IV bicycle facilities on northbound Lankershim Boulevard from Chandler Boulevard to Chandler Boulevard (North). The Project would also remove approximately 16 existing Metro Bike Hub secure bicycle storage lockers at the Metro G (Orange) Line station, though the Project would provide new Metro Bike Hub spaces for at least 100 bicycles as well as designated locations for Metro's Bikeshare rental program or other first mile, last mile transportation alternatives. The Project would also provide bicycle parking at each Block for residents, employees, and guests pursuant to the District NoHo Specific Plan.
Removal or degradation of existing transit and/or local circulator facilities including stop, bench, shelter, concrete pad, bus lane, or other amenities	The Project would remove existing bus stops, benches, and shelters at the existing bus plaza on Parcel 1, as all existing bus plaza operations would move to the Consolidated Transit Center. The existing benches and shelters on Block 0 West would be removed but would be replaced with better facilities accommodating more riders as part of the development of the Consolidated Transit Center. Three existing bus stops on Lankershim Boulevard at Chandler Boulevard (South) (including one on each side of Lankershim Boulevard north of the intersection and one on the west side of Lankershim Boulevard south of the intersection) would remain.

TABLE 18 (CONTINUED)
PROJECT EFFECTS ON INFRASTRUCTURE

Evaluation Criteria [a]	**Evaluation of Project Effect**
	The Project would improve transit operations and accessibility through the construction of the Consolidated Transit Center, described in detail in Chapter 1 and shown in Figure 3. The Consolidated Transit Center would group most bus-based transit stops around and within one block (Block 0 West), along with providing access to the Metro B (Red) Line located underground. As such, the Consolidated Transit Center would substantially reduce street crossings for riders transferring from one transit route to another and lessen the walking distance required to transfer.
Removal of other existing transportation system elements supporting sustainable mobility	The existing transit center does not provide a dedicated area for passenger loading, though many passengers are dropped off and picked up within the Metro parking lot on Parcel 1. The Project proposes to provide vehicular loading spaces for transit riders at up to three locations within and around Parcel 1.
Increase street crossing distance for pedestrians; increase in number of travel/turning lanes; increase in turning radius or turning speeds	The Project would increase street crossing distances for pedestrians at several locations: • The crossing distance across Chandler Boulevard (North) on the west side of Lankershim Boulevard would be lengthened by approximately six feet. This would occur because the Project would widen Chandler Boulevard (North) into Block 0 West to accommodate bus loading along the northern edge of the Consolidated Transit Center. The design of Block 0 West includes a bulbout at the northeast corner to limit the crossing distance increase by six feet (rather than the 15 feet that Chandler Boulevard (North) would be widened west of the intersection). • The crossing distance across Chandler Boulevard (North) on the east side of Tujunga Avenue would be lengthened by approximately 20 feet. This would occur both because the south curb of Chandler Boulevard (North) would be shifted south and because the Project would provide a wider turning radius than existing at the southeast corner of the intersection of Tujunga Avenue & Chandler Boulevard (North) in order to facilitate turns by buses. Only buses would be allowed to travel eastbound on Chandler Boulevard (North), and therefore this turn would not be made by passenger vehicles (and would not result in increased turning speeds). It should be noted that the new crosswalk the Project would install across the south leg of the intersection would also have a longer crossing distance by approximately 12 feet due to the wide turning radius. This crosswalk would connect transit riders parking in the West Lot to the Consolidated Transit Center and would substantially increase safety for those people. • The crossing distance across Lankershim Boulevard on the north side of Chandler Boulevard (South) and the crossing distance across Chandler Boulevard (South) on the west side of Lankershim Boulevard would both be increased by approximately eight feet due toa wider turning radius on the northwest corner of that intersection to facilitate bus turns. As with the turning radius

TABLE 18 (CONTINUED)
PROJECT EFFECTS ON INFRASTRUCTURE

Evaluation Criteria [a]	**Evaluation of Project Effect**
	on the southeast corner of Tujunga Avenue & Chandler Boulevard (North), this turn would only be made by buses and would not result in increased turning speeds. Each of these changes are necessary components of the design of the Consolidated Transit Center. The Project would not result in an increase in the number of travel or turning lanes on any streets, nor would it result in other increased turning radii or turning speeds.
Removal, degradation, or narrowing of an existing sidewalk, path, crossing, or pedestrian access way	The Project would not remove, degrade, or narrow any existing sidewalk, path, crossing, or pedestrian way.
Removal or narrowing of existing sidewalk-street buffering elements (e.g., curb extension, parkway, planting strip, street trees, etc.)	The Project would not remove or narrow any existing sidewalk-street buffering elements. It would install street trees along all sidewalks throughout the Project Site.

Notes:
[a] Evaluation criteria from page 3-2 of *LADOT Transportation Assessment Guidelines* (LADOT, July 2020).

TABLE 19
PROJECT EFFECTS ON VOLUMES

Evaluation Criteria [a]	**Evaluation of Project Effect**
Would the Project result in an increase in pedestrian or vehicular volume, and thereby increase the need or attraction to cross a street at unmarked pedestrian crossings or unsignalized or uncontrolled intersections where a crossing is not available without significant rerouting. Refer to the Guidelines for Marked Crosswalks Across Uncontrolled Locations, in LADOT's *Manual of Policies and Procedures (MPP)*, Section 344, or Guidelines for Traffic Signals in MPP Section 353 to determine approval and warrant criteria for an additional crossing.	The Project would result in increases in both pedestrian volumes and vehicular volumes. Figure 12 shows anticipated pedestrian paths of travel and relative pedestrian volumes generated by the Project itself. Virtually all major crossing points are at signalized intersections that are or would be striped with continental crosswalks. Exceptions include crossings of Klump Avenue on the north side of Chandler Boulevard, which would be striped with a continental crosswalk but controlled by a stop sign, and across Klump Avenue at District Way and across District Way at Elmer Avenue, both of which would have decorative crosswalks and stop sign control. The Project proposes to install new crosswalks across the south leg of Tujunga Avenue & Chandler Boulevard (North), the north leg of Tujunga Avenue & Chandler Boulevard (South), the south leg of Lankershim Boulevard & Chandler Boulevard (North), and the west leg of District Way & Fair Avenue. Vehicular traffic volumes are further analyzed in Chapter 9. The increase in vehicular traffic volumes resulting from the Project would not degrade the pedestrian experience due to the robust pedestrian crossing infrastructure around the Project Site.
Would the Project result in new pedestrian demand between Project Site entries/exits and major destinations or transit stops expected to serve the development where there are missing pedestrian facilities (e.g., gaps in the sidewalk network) or substandard pedestrian facilities (e.g., narrow or uneven sidewalks, no crosswalks at intersections or mid-block, no marked crossing, or push button crossing rather than actuated, etc.)	With the Project, there would be no missing or substandard pedestrian facilities around the Project Site. The Project would substantially improve pedestrian accessibility and comfort on Parcel 1 with open space, retail and restaurant space, and seating areas.
Would the Project increase transit demand at bus stops that lack marked crossings, with insufficient sidewalks, or are in isolated, unshaded, or unlit areas.	With the Project, there would be no bus stops lacking marked crossings, having insufficient sidewalks, or in isolated, unshaded, or unlit areas adjacent to the Project Site.

Notes:
[a] Evaluation criteria from page 3-2 of *LADOT Transportation Assessment Guidelines* (LADOT, July 2020)

Chapter 9

Non-CEQA Analysis: Project Access, Safety, and Circulation Evaluation

This chapter presents an assessment of the Project's effects on access and circulation, both adjacent to the Project Site and in the surrounding area, once the Project is operational.[31] Negative effects of a project may consist of operational delays on surrounding streets or conflicts between vehicles and other vehicles, bicycles, or pedestrians. Such effects are not considered significant under CEQA but could require Project modifications or off-site improvements to ensure safe and efficient circulation around the Project Site.

ANALYSIS OVERVIEW

Two general types of analysis are required by LADOT in this assessment:

1. Operational Evaluation: The operational evaluation is a quantitative analysis of the effects of Project traffic at Project driveways and surrounding intersections where the Project would be expected to add at least 100 trips during the morning or afternoon peak hours. Potential negative effects to be identified include increases in average vehicular delay, worsening of intersection level of service (LOS), or vehicular queuing that would exceed turn pocket lengths and extend into through lanes, block cross streets, or contribute to congestion.

2. Passenger Loading Evaluation: The passenger loading evaluation determines whether the Project could adequately accommodate the demand it would generate for curbside passenger loading from TNCs such as Uber and Lyft or shared mobility services, as well as whether such operations could create safety conflicts with pedestrians or bicyclists.

A third type, evaluating roadway safety, is only required for transportation projects. The Project, though it includes elements that affect the transportation system, is primarily a land-use development project and, thus, the safety evaluation does not apply to the Project. Nonetheless, detailed analyses are provided in Chapters 4, 6, and 8 demonstrating how the Project prioritizes

[31] Effects of Project construction are analyzed in Chapter 10.

the safety of vulnerable roadway users (i.e., pedestrians, bicyclists, and transit users) through a focus on the pedestrian realm, locations of Project access points, etc.

OPERATIONAL EVALUATION OVERVIEW

The operational evaluation includes the following steps:

- Develop Project traffic estimates
- Collect existing traffic volumes and forecast future baseline traffic volumes
- Conduct operational analysis of study intersections and Project driveways

Each step is described in detail in the following sections.

PROJECT TRAFFIC

This section details the development of Project traffic estimates for the morning and afternoon commuter peak hours. In addition to trips generated by the Project's proposed land uses, the Project would result in the rerouting of existing trips by transit riders (due to the relocation of Metro parking for transit riders) and local buses (due to the relocation of the local transit bus station from Parcel 1 to the Consolidated Transit Center). The assumptions used in developing the Project traffic estimates were reviewed and approved by LADOT during development of this report as part of the MOU, a copy of which is provided in Appendix F.

Project Trip Generation

The number of vehicle trips expected to be generated by the Project's land uses was estimated using rates published in the Trip Generation Manual and, in the case of affordable housing units, the TAG. The Trip Generation Manual rates are based on surveys of similar land uses at sites around the country and are provided as both daily rates and morning and afternoon peak hour rates. The affordable housing rates in the TAG are based on surveys conducted within the City and are also provided as daily and peak hour rates. The trip generation rates relate the number

of vehicle trips traveling to and from the Project Site to the size of development of each land use. The rates applied to the Project are summarized in Table 20.

Appropriate trip generation reductions to account for trips shared between the Project land uses, public transit usage and pedestrian trips, and pass-by trips were made in accordance with the TAG and in consultation with LADOT:

Internal Capture. Internal capture is a method used to avoid double-counting of vehicle trips to a particular land use that result from the interaction between patrons already at the Project Site. Internal capture reductions were applied to the trip generation estimates at a rate of 10% for the retail and restaurant uses based on the likelihood and extent to which the commercial component of the Project would be patronized by residents and office employees.

Transit Usage. A 25% transit usage reduction was applied to the office, retail, and restaurant land uses as specified in the TAG for a development located adjacent to a Metro rail line (i.e., Metro B [Red] Line) or fixed-guideway busway (i.e., Metro G [Orange] Line). Though many residents would also use public transit, no transit usage credit was applied to the residential trip generation estimates because the residential trip rates used inherently account for transit usage. This likely results in a conservatively high estimate of vehicular trips to and from the Project's residential uses because the Project Site's abundance of high-quality transit options likely exceed, on average, those available at the sites surveyed to calculate the residential trip generation rates.

Pass-By Trips. To avoid double-counting of vehicle trips made by drivers already passing by the Project Site on their way to another destination, the retail and restaurant trip generation estimates were reduced by 50% and 20%, respectively, consistent with the guidelines from Attachment H of the TAG. This credit does not apply to Project trips generated at Project driveways or any intersections bordering the Project Site to appropriately capture the new turning movements associated with those pass-by trips turning toward or into the Project Site at these locations.

No trip generation credit was taken for the removal of the existing industrial and warehouse uses on Block 0 West and the East Lot, in part due to the inability to conduct valid empirical traffic counts at the driveways to those uses due to the COVID-19 pandemic restrictions. The exclusion of this credit makes the estimate of Project traffic more conservative.

The Project trip generation estimates, after accounting for the adjustments above, are shown in Table 21 for each Block. Table 22 provides an overall summary of Project trip generation by Block, as well as the total estimated trip generation for Phase 1 (Blocks 0, 5/6, 7, and 8) and Full Buildout of the Project. As shown, Phase 1 of the Project is estimated to generate a total of 908 trips during the morning peak hour (581 inbound, 327 outbound) and 932 trips during the afternoon peak hour (364 inbound, 568 outbound). Full Buildout is estimated to generate a total of 1,354 trips during the morning peak hour (737 inbound, 617 outbound) and 1,432 trips during the afternoon peak hour (665 inbound, 767 outbound).

Land Use Exchange. Trip generation estimates were also prepared for the Project when considering the alternative land use program in which up to 75,000 sf of retail and restaurant space is exchanged for 75,000 sf of office space. As shown in Table 23, the Project upon Full Buildout with the land use exchange is estimated to generate a total of 1,161 trips during the morning peak hour (648 inbound, 513 outbound) and 1,217 trips during the afternoon peak hour (509 inbound, 708 outbound). This represents a reduction of 193 trips during the morning peak hour and 215 trips during the afternoon peak hour compared with the Project without the land use exchange. Therefore, the Project without the land use exchange would have a greater effect on traffic conditions and was analyzed in this chapter.

Project Trip Distribution

The distribution of Project traffic throughout the surrounding streets and highways is dependent on the location of residential, commercial, and employment centers from which employees, residents, and patrons of the Project would be drawn, characteristics of the street and freeway system serving the Project Site, the location of the proposed driveways, and existing traffic conditions. Residential and office use traffic is expected to have different travel patterns than commercial use traffic. Each of the three primary categories of Project land uses (residential, office, and commercial) would tend to have distinct distribution patterns. Compared with residential trips, office trips tend to be more heavily to and from the freeways. Commercial (retail and restaurant) trips tend to be more local, as those uses typically draw visitors from a relatively small surrounding area (and, as discussed in detail in Chapter 5, the retail and restaurant uses are local-serving).

The general distribution patterns for the residential, office, and commercial uses are shown in Figures 15, 16, and 17, respectively. Because each Block has different access points, and in some cases different access points for different land uses within the same Block, each pattern was customized as necessary to provide access to each driveway. In this manner, the trips for each land use were distributed to the appropriate driveways on each block.

Intersection Selection

As dictated in the TAG, intersections should be chosen for detailed analysis if they meet any of the following conditions:

- Primary project driveways
- Intersections on either end of the block(s) on which the project is located
- Unsignalized intersections adjacent to the project or integral to the project's access and circulation
- Signalized intersections where the project would add 100 or more net new peak hour trips

When considering Project trip generation estimates and trip distribution patterns described above, a total of 39 intersections, including 27 signalized intersections and 12 unsignalized intersections, were selected for detailed analysis. They are listed in Table 24 and shown in Figure 18. Most Project driveways are not located at existing intersections and, therefore, were not included in the selection of study intersections. Project driveways are separately discussed in this chapter.

Project Traffic Assignment

The trip distribution patterns shown in Figures 15 through 17 were used to assign the Project-generated traffic through the Study Area based on the trip generation estimates summarized in Table 22 for Phase 1 and Full Buildout of the Project. Figure 19 illustrates the Phase 1 traffic volumes at the study intersections during typical weekday morning and afternoon peak hours and Figure 20 illustrates the Full Buildout traffic volumes. As indicated in Figures 19 and 20, the Project trips shown at the study intersections adjacent to the Project Site and all Project driveways do not include the pass-by trip credit, in accordance with the TAG.

Other Project-Related Traffic Effects

In addition to new trips generated by the Project land uses, the Project would also reroute existing trips related to Metro transit rider parking and transit buses. As described in Chapter 1, Metro currently provides 972 parking spaces for transit riders within Parcel 1 (with access from Cumpston Street, Fair Avenue, and Chandler Boulevard) and within the East Lot (with access on Fair Avenue). These spaces would be removed and replaced on the West Lot, the East Lot, and in Blocks 2, 3, and 7 as detailed in Table 2. For the purposes of rerouting traffic from the existing to the proposed parking areas, each Metro transit rider parking space was estimated to generate 0.3 inbound trips during the morning peak hour and 0.3 outbound trips during the afternoon peak hour based on the conservative assumption that approximately 30% of the spaces turn over during those peak hours. With the relocation of 972 total spaces, approximately 292 trips were rerouted during each peak hour.

Buses that currently stop in the existing bus plaza within Parcel 1 (with access to and from Fair Avenue) would be rerouted to stop on the periphery of Block 0 including, in some cases, stops on Lankershim Boulevard. The modified routes were determined by Metro, and the bus trips to be rerouted were estimated based on the current frequency of each route during the peak hours.

Additionally, with the elimination of the westbound general-purpose travel lanes on Chandler Boulevard (South) between Tujunga Avenue and Lankershim Boulevard to support the Consolidated Transit Center, the trips currently traveling on this segment were rerouted to alternatives, including Chandler Boulevard (North) and Magnolia Boulevard.

The net change in peak hour trips at each study intersection resulting from the three effects described above are detailed in Appendix G.

EXISTING AND FUTURE TRAFFIC VOLUMES

Existing Traffic Volumes

Intersection turning movement counts were collected at the study intersections during the weekday morning (7:00 AM to 10:00 AM) and afternoon (3:00 PM to 6:00 PM) peak periods in

September, October, and November 2019. At Intersection #7, Tujunga Avenue & Cumpston Street, which was not counted in 2019, the existing traffic volume was estimated based on nearby traffic counts because the COVID-19 pandemic in 2020 disrupted traffic patterns. The traffic counts and the estimated volume are provided in Appendix H.

When the traffic counts were collected, the Metro G (Orange) Line was temporarily detoured away from Block 0 via Tujunga Avenue, Cumpston Street, Fair Avenue, and Chandler Boulevard[32]. This resulted in additional bus traffic on those streets, as well as irregular turning movements where the Metro G (Orange) Line route crosses Tujunga Avenue. In order to mimic standard operating conditions for the Existing Conditions analysis, the Metro G (Orange) Line traffic was manually reassigned away from those streets and back to the existing transit station at Block 0. The peak hour trips removed and replaced at each study intersection are detailed in Appendix G.

Additionally, the traffic counts were increased by 1% to account for general growth in regional traffic between Year 2019 and 2020 in the same manner as described below for estimating future traffic conditions as described on page 3-11 of the TAG. With these adjustments incorporated, the Existing Conditions (Year 2020) peak hour traffic volumes are shown in Figure 21.

Future Traffic Volumes

Estimates of future traffic conditions were developed to evaluate the potential effects of the Project on the street system at the time it becomes operational (estimated to be Year 2026 for Phase 1 and Year 2037 for Full Buildout for the purposes of this analysis). Future conditions would be affected by changes to the roadway system and by growth in traffic. These factors are each described below.

Roadway System Improvements. As described in Chapter 2, anticipated roadway improvements were accounted for in the analysis of future conditions. Specifically, the Metro G (Orange) Line Improvements Project may eliminate left turns from Tujunga Avenue to Chandler Boulevard (North), requiring traffic currently using that turn to reroute. For the purposes of this analysis, it was assumed that the left-turn movement would be eliminated and those vehicles

[32] This was due to construction within the Metro G (Orange) Line bus plaza.

were rerouted to alternatives including Lankershim Boulevard to Chandler Boulevard (North), Tujunga Avenue to Cumpston Street, and Magnolia Boulevard to Colfax Avenue. The peak hour trips removed and replaced at each study intersection are detailed in Appendix G. While the changes to Tujunga Avenue under the Metro G (Orange) Line Improvements Project are expected to be physically implemented by the Project during Project construction for Metro's convenience, they would otherwise be implemented by Metro in the event the Project were not constructed and, therefore, are considered as part of the baseline future condition rather than as an effect of the Project.

The Metro North Hollywood to Pasadena and San Fernando Valley BRTs could also affect the capacity of roads within the Study Area if they include designation of bus-only lanes. However, because the alignments and configurations of those BRTs are not yet finalized, they were not accounted for in the analysis of future conditions provided in this chapter.

Ambient Traffic Growth. Existing traffic is expected to increase as a result of regional growth and development outside the Study Area. In consultation with LADOT, the near-term Phase 1 analysis assumes a regional growth rate of 1% per year, compounded, consistent with guidance on page 3-11 of the TAG. For completion of Phase 1 in Year 2026, this results in a total growth of 6.15% from Existing Conditions.

For the long-range forecast to Year 2037, the projected year of Project completion, it is likely that a 1% per year growth rate would substantially overestimate traffic growth. Therefore, in consultation with LADOT, the growth from Year 2026 to 2037 was estimated at 0.50% per year. This results in growth of 5.64% for that 11-year period. When added to the 6.15% growth to Year 2026, this results in a total growth forecast of 11.79% from Existing Conditions to Year 2037.

Related Project Traffic. This transportation assessment also considered the effects of Project traffic in relation to the Related Projects. Though the buildout years of many of these Related Projects are uncertain, and notwithstanding that some may never be approved or developed, they were all considered as part of this analysis and conservatively assumed to be completed by completion of Phase 1 in Year 2026. Therefore, the traffic growth due to the development of Related Projects considered in this analysis is highly conservative and overestimates the actual traffic volume growth in the Study Area that would likely occur prior to Project buildout. Using

these conservative assumptions, the effects of Project traffic were evaluated within the context of the worst-case cumulative impact of all prospective development.

Traffic estimates for the Related Projects were developed using the same process of trip generation, trip distribution, and trip assignment used in the development of Project traffic above. The cumulative total peak hour traffic volumes associated with the Related Projects are shown in Figure 22 at the study intersections.

Future without Project Conditions. The Future without Project Conditions peak hour traffic volumes are comprised of the Existing Conditions (Year 2020) traffic volumes from Figure 21 with adjustments for the Metro G (Orange) Line Improvements Project and with ambient and Related Project traffic growth. The Future without Project Conditions (Year 2026) peak hour traffic volumes are shown in Figure 23 and the Future without Project Conditions (Year 2037) peak hour traffic volumes are shown in Figure 24.

OPERATING CONDITIONS

The analysis of traffic operating conditions was conducted using the HCM methodology,[33] which calculates delay, in seconds, experienced by a vehicle passing through an intersection. For signalized intersections and all-way stop-controlled intersections, the average delay of all traffic passing through the intersection is reported. For two-way stop-controlled intersections (where a minor street with stop-sign control meets an uncontrolled major street), the worst-case delay experienced by any movement is reported. Typically, the worst-case delay is experienced by a vehicle attempting to turn left from the minor street onto the major street. For both signalized and unsignalized intersections, vehicular delay is converted to LOS, a metric ranging from A to F as shown in Table 25. Intersections operating at LOS A allow all vehicles to pass through with minimal delay, never having to wait through multiple signal cycles. Intersections operating at LOS F experience heavy congestion and long vehicle queues and delay. The HCM analysis also provides estimates of vehicle queuing lengths at various movements through each intersection based on the 95th percentile queue length. The HCM analysis of signalized intersections

[33] At several non-standard intersections with more than four legs, where the HCM methodology is not applicable, analysis was conducted using *Highway Capacity Manual, Special Report 209,* (Transportation Research Board, 2000) methodology, which allows for non-standard intersection configurations.

accounted for the existing traffic signal cycle lengths and timing plans in place according to City records. Consistent with LADOT policy, signal timing was optimized in the HCM analyses at intersections providing advance vehicle detection on all approaches. Intersection lane configurations used in the analysis are shown in Appendix I and the HCM output is provided in Appendix E.

Intersection LOS

Existing Conditions. Table 26 summarizes the LOS analysis for Existing Conditions for each of the study intersections. As shown, under Existing Conditions, 34 of the 39 study intersections operate at LOS D or better during both the morning and afternoon peak hours. The following intersections operate at LOS E or F during one or both peak hours:

- Intersection #5, Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard
- Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard
- Intersection #32, Tujunga Avenue / Riverside Drive & Camarillo Street
- Intersection #33, Lankershim Boulevard / Vineland Avenue & Camarillo Street
- Intersection #36, Vineland Avenue & Riverside Drive

Future Conditions (Year 2026). The Future with Phase 1 conditions (Year 2026) peak hour traffic volumes, shown in Figure 25, combine the Future without Project conditions (Year 2026) volumes from Figure 23 with the Phase 1 Project-Only traffic volumes from Figure 19.

Table 27 summarizes the LOS analysis for Future without Project conditions and Future with Phase 1 conditions for each of the study intersections. As shown, under Future without Project Conditions, 33 of the 39 study intersections are forecast to operate at LOS D or better during both the morning and afternoon peak hours. The following intersections are forecast to operate at LOS E or F during one or both peak hours:

- Intersection #5, Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard
- Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard
- Intersection #29, Tujunga Avenue & Magnolia Boulevard

- Intersection #32, Tujunga Avenue / Riverside Drive & Camarillo Street
- Intersection #33, Lankershim Boulevard / Vineland Avenue & Camarillo Street
- Intersection #36, Vineland Avenue & Riverside Drive

With Phase 1 constructed, under Future with Phase 1 conditions, a further three intersections would operate at LOS E or F:

- Intersection #1, SR 170 Southbound Off-ramp & Burbank Boulevard
- Intersection #21, Klump Avenue & Chandler Boulevard
- Intersection #31, Vineland Avenue & Magnolia Boulevard

Intersection #21, which would be created by the Project's extension of Klump Avenue to Chandler Boulevard, is proposed as a two-way stop-controlled intersection. The identified LOS F operating condition during the afternoon peak hour is based on the worst-case delay that would be experienced by drivers attempting to turn from Klump Avenue (a private street within the Project Site) onto Chandler Boulevard. This delay would not affect drivers on Chandler Boulevard.

Future Conditions (Year 2037). The Future with Full Buildout conditions (Year 2037) peak hour traffic volumes, shown in Figure 26, combine the Future without Project conditions (Year 2037) volumes from Figure 24 with the Full Buildout Project-Only traffic volumes from Figure 20.

Table 28 summarizes the LOS analysis for Future without Project conditions and Future with Full Buildout conditions for each of the study intersections. As shown, under Future without Project Conditions, 30 of the 39 study intersections are forecast to operate at LOS D or better during both the morning and afternoon peak hours. The following intersections are forecast to operate at LOS E or F during one or both peak hours:

- Intersection #1, SR 170 Southbound Off-ramp & Burbank Boulevard
- Intersection #4, Troost Avenue / SR 170 Northbound Off-ramp & Burbank Boulevard
- Intersection #5, Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard
- Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard
- Intersection #29, Tujunga Avenue & Magnolia Boulevard
- Intersection #31, Vineland Avenue & Magnolia Boulevard

- Intersection #32, Tujunga Avenue / Riverside Drive & Camarillo Street
- Intersection #33, Lankershim Boulevard / Vineland Avenue & Camarillo Street
- Intersection #36, Vineland Avenue & Riverside Drive

With the Project fully constructed, under Future with Full Buildout conditions, a further six intersections would operate at LOS E or F:

- Intersection #14, Colfax Avenue & Chandler Boulevard
- Intersection #16, Lankershim Boulevard & Chandler Boulevard (North)
- Intersection #21, Klump Avenue & Chandler Boulevard
- Intersection #28, SR 170 Northbound Ramps & Magnolia Boulevard
- Intersection #30, Lankershim Boulevard & Magnolia Boulevard
- Intersection #39, Lankershim Boulevard & Moorpark Street

Intersection Queuing

In addition to providing delay and LOS, the HCM analysis provides estimates of vehicle queuing lengths at various movements through each intersection based on the 95th percentile queue length. This analysis focuses on locations where the Project would add at least 50 feet (two vehicle lengths) to queues that could exceed turn pocket lengths during one or both peak hours. Under Future with Phase 1 conditions (Year 2026), there are 13 such locations, as shown in Table 29:

- Intersection #1, SR 170 Southbound Off-ramp & Burbank Boulevard (southbound left turn)
- Intersection #3, Colfax Avenue & Burbank Boulevard (northbound left turn)
- Intersection #5, Lankershim Boulevard & Burbank Boulevard (eastbound right turn and northbound left turn)
- Intersection #6, Vineland Avenue & Burbank Boulevard (westbound left turn)
- Intersection #16, Lankershim Boulevard & Chandler Boulevard (North) (northbound left turn)
- Intersection #18, Tujunga Avenue & Chandler Boulevard (South) (eastbound right turn)

- Intersection #20, Lankershim Boulevard & Chandler Boulevard (South) (westbound right turn)
- Intersection #26, Lankershim Boulevard & Weddington Street (westbound left turn)
- Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard (westbound left turn and southbound left turn)
- Intersection #28, SR 170 Northbound Ramps & Magnolia Boulevard (northbound left turn and right turn)
- Intersection #30, Lankershim Boulevard & Magnolia Boulevard (eastbound left turn and northbound left turn)
- Intersection #31, Vineland Avenue & Magnolia Boulevard (southbound left turn)
- Intersection #38, Lankershim Boulevard & Riverside Drive (southbound right turn)

Under Future with Full Buildout conditions (Year 2037) there are 16 such locations, as shown in Table 30. Compared with Future with Phase 1 conditions, five new intersections would be affected, along with two additional movements at intersections previously identified:

- Intersection #9, Lankershim Boulevard & Cumpston Street (southbound left turn)
- Intersection #14, Colfax Avenue & Chandler Boulevard (westbound right turn)
- Intersection #23, Vineland Avenue & Chandler Boulevard (West Leg) (northbound left turn)
- Intersection #29, Tujunga Avenue & Magnolia Boulevard (westbound left turn)
- Intersection #36, Lankershim Boulevard & Riverside Drive (southbound left turn)

Two intersections which were affected under Phase 1 were not affected under the Future with Full Buildout conditions (Year 2037):

- Intersection #26, Lankershim Boulevard & Weddington Street (westbound left turn)
- Intersection #31, Vineland Avenue & Magnolia Boulevard (southbound left turn)

In some cases, the identified queues could extend to or through upstream signalized intersections, including:

Intersection #16, Lankershim Boulevard & Chandler Boulevard (North). The northbound left-turn queue is projected to reach past Chandler Boulevard (Intersection #20) under both Future without Project (Year 2026) conditions and Future with Phase 1 conditions, as well as in Year 2037 with and without Project buildout. Because the two intersections are located little more than 200 feet apart, careful signal synchronization is necessary to manage queuing and traffic flow.

Intersection #20, Lankershim Boulevard & Chandler Boulevard (South). The westbound right-turn queue is projected to reach past the Project-created intersection of Klump Avenue & Chandler Boulevard under Future with Phase 1 (Year 2026) conditions. Under Future with Full Buildout (Year 2037) conditions, it would reach nearly to the existing intersection of Fair Avenue & Chandler Boulevard.

Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard. The westbound left-turn queue is projected to reach past Tujunga Avenue under both Future with Phase 1 (Year 2026) conditions and Future with Full Buildout (Year 2037) conditions. In practice, the queue likely would not extend this far as either the signal timing would be adjusted by LADOT[34] to provide additional signal green time to the left-turn lane, drivers would seek an alternative on-ramp, or a combination of both factors.

Intersection #28, SR 170 Northbound Ramps & Magnolia Boulevard. The eastbound left-turn queue is projected to reach past the SR 170 southbound ramps during the afternoon peak hour under all future conditions, with and without the Project.

Intersection #29, Tujunga Avenue & Magnolia Boulevard. The westbound left-turn queue is projected to reach past Bakman Avenue under Future with Full Buildout (Year 2037) conditions.

Intersection #38, Lankershim Boulevard & Riverside Drive. The southbound left-turn queue is projected to reach past the SR 134 eastbound off-ramp during the afternoon peak hour under all future conditions, with and without the Project.

[34] LADOT's Automated Traffic Surveillance and Control (ATSAC) system and the Adaptive Traffic Control System allows real-time monitoring and both manual and automatic adjustments to traffic signal timing in response to traffic conditions.

Access Points

The Project vehicular access points are illustrated in Figure 4. As shown, the access points to Parcel 1 are primarily on the private extension of Klump Avenue, with several additional access points on Cumpston Street, Elmer Avenue, and Fair Avenue. All vehicular access to each Block is from a private street, alley, Local Street, or Collector Street. Additionally, should Metro choose to develop the West and East Lots, access to the West Lot would be provided on Chandler Boulevard (North) and primary access to the East Lot would be provided on Chandler Boulevard, both of which are designated Boulevard II.

All access control systems in parking structures would be located far enough into the structure to meet City requirements and prevent queuing onto the adjacent streets. As shown in Table 22, most of the Blocks would generate very low peak hour volumes (i.e., fewer than approximately 100 trips in each direction during both peak hours). Block 5/6 would generate fewer than 150 trips in each direction during the peak hours, which is also a low volume (fewer than three vehicles per minute in each direction). The only access points with concentrated one-way traffic flow during either peak hour are the access points to Block 8, which, as an office development, would have heavy inbound traffic during the morning peak hour and heavy outbound traffic during the afternoon peak hour. Block 8 provides two lanes inbound on Weddington Street and two lanes outbound on Bakman Avenue and, therefore, would generate fewer than 200 vehicles per hour per lane.

The effects of Project traffic on City intersections were documented above, including changes in delay, LOS, and queuing. Project access points themselves are expected to operate at acceptable conditions during each peak hour based on the trip generation estimates by Block along with the fact that the access points are located on relatively low-volume streets (with designations of Collector Street or lower classification). The locations and operations of the Project access points would not contribute to additional queuing or congestion on surrounding streets.

PASSENGER LOADING EVALUATION

As described in Chapter 1 and shown in Figure 4, the Project proposes dedicated passenger loading areas at three locations adjacent to Parcel 1. A portion of a turnout on private property on

the south side of District Way west of Klump Avenue would be designated for passenger loading primarily serving Parcel 1 uses. It would provide two passenger loading spaces alongside six on-street parking spaces. On northbound Lankershim Boulevard north of Chandler Boulevard (North), a curb currently designated for taxi operations is proposed to be modified to allow pick-up or drop-off by private vehicles and TNCs such as Uber and Lyft. Also proposed is a designated passenger loading area on westbound Chandler Boulevard west of Klump Avenue in a turnout. The potential Chandler Bikeway alignment on this stretch of Chandler Boulevard would be routed between the curb and the passenger loading area, thus minimizing conflicts between vehicles and bicycles.

Together, these passenger loading areas serving Parcel 1 and transit riders would provide space for approximately 12 vehicles on public property. These loading areas would be equipped with an ADA curb ramp in compliance with City[35] and federal requirements for passenger loading areas. LADOT does not currently support modifying the existing taxi zone on Lankershim Boulevard. However, the Applicant will continue to coordinate with LADOT to explore curbside management strategies and passenger loading zone options prior to Project occupancy.

Minimum sidewalk widths, as defined by the Mobility Plan 2035 standards for each street's roadway designation, would be maintained adjacent to each curbside passenger loading area. Additionally, there are no on-street bicycle facilities on Lankershim Boulevard adjacent to the proposed loading area, and potential bicycle lanes on Chandler Boulevard would be routed between the curb and the proposed loading area and, therefore, would not result in any conflict with bicycles. District Way would function as a shared street, including adjacent to the two proposed loading spaces on that street, but bicycles would be allowed to use the full width of the street, thereby allowing riders to steer clear of passenger loading operations.

The demand for passenger loading at the Project Site would be generated both by Project uses and by transit riders. Currently, there is no dedicated place for passenger loading for transit riders, whether curbside or in the transit patron parking areas. With approximately 12 on-street passenger loading spaces proposed by the Project on Chandler Boulevard and Lankershim Boulevard, there would be capacity for hundreds of pick-ups or drop-offs per hour. With average

[35] Los Angeles Bureau of Engineering Special Order No. 01-1020, dated October 21, 2020.

drop-off dwell times of 30 seconds and average pick-up dwell times of 60 seconds[36], up to 720 vehicles per hour could pick up passengers or up to 1,440 vehicles per hour could drop off passengers (more than the total peak hour Project trip generation as shown in Table 22). The loading spaces on District Way would accommodate additional vehicles. While many more transit passengers would pass through the Consolidated Transit Center during the peak hours, most of them arrive and depart via a form of public transit (i.e., make a transfer at the Consolidated Transit Center). Those who do not transfer to or from a transit mode may travel as a pedestrian or bicyclist or drive their own vehicle. The remaining transit patrons – a fraction of the overall transit demand – are those who are dropped off or picked up and, thus, would use the passenger loading areas. These patrons, along with Project demand for passenger loading, could be accommodated at the locations proposed around the Project Site. Thus, should the proposed passenger loading areas be approved, there would be minimal incidences of passengers being picked up or dropped off in parking areas or travel lanes around the Project Site.

PROPOSED IMPROVEMENTS AND RECOMMENDED ACTIONS

The Project Applicant proposes a series of operational measures, design features, and public benefits that would improve accessibility and traffic circulation for all modes within and around the Project Site and reduce the effects of Project traffic.

Development of the Consolidated Transit Center

The Project would design and construct the Consolidated Transit Center to integrate bus and rail services at one purpose-built location. This would improve public transit accessibility, reduce transfer delays, and reduce at-grade crossings of Lankershim Boulevard by transit riders. It would also improve efficiency and reduce travel time for buses stopping at the Consolidated Transit Center. Along with the Consolidated Transit Center, the Project would construct new Metro parking to replace the existing lots on Parcel 1. The Consolidated Transit Center is described in detail in Chapter 1.

[36] *Managing High-Demand Curbside Passenger Loading Zones* (San Francisco Municipal Transportation Agency, December 2017), https://nacto.org/wp-content/uploads/2017/12/SFMTA_Danielle_Harris.pdf

New and Upgraded Pedestrian Infrastructure

The Project would install or upgrade pedestrian infrastructure at several locations. First, all public sidewalks adjacent to the Project Site would be widened where necessary to meet or exceed the width standards from Mobility Plan 2035.[37] Second, The Project would repaint existing crosswalks that would be affected by Project changes to curbs at the following locations:

- Tujunga Avenue & Chandler Boulevard (North)
- Tujunga Avenue & Chandler Boulevard (South)
- Lankershim Boulevard & Chandler Boulevard (North)
- Lankershim Boulevard & Chandler Boulevard (South)
- Across the Block 0 West access point on Tujunga Avenue

Third, the Project proposes to install new crosswalks at the following locations:

- Across the south leg of Tujunga Avenue & Chandler Boulevard (North)
- Across the north leg of Tujunga Avenue & Chandler Boulevard (South)
- Across the south leg of Lankershim Boulevard & Chandler Boulevard (North)
- Across the west leg of District Way & Fair Avenue

New Bicycle Infrastructure

The Project proposes to install a new two-way bicycle route through the Project Site as shown in Figure 6. Additionally, it would improve the westbound bicycle lane on Chandler Boulevard (North) between Tujunga Avenue and Lankershim Boulevard to a Class IV facility separated by bollards and would install a bicycle crossing signal across Lankershim Boulevard at Chandler Boulevard (North).

Within the Project Site, it would provide convenient and secure long-term and short-term bicycle parking at each Block along with parking for at least 100 bicycles at one or more Metro Bike Hubs and space for Metro's Bikeshare or similar first mile / last mile transportation options.

[37] In some locations, portions of the sidewalk would be provided on the Project Site, as summarized in Table 4.

TDM Program

The Project would incorporate various TDM measures to encourage the use of alternative transportation modes and reduce VMT and vehicle trips.
These measures include:

- Reduced parking supply
- Promotions and marketing
- Pedestrian network improvements
- Traffic calming improvements
- Implement on-street bicycle facilities
- Bicycle parking per LAMC

These measures are described in detail in Chapter 5. The TDM measures are not required to mitigate significant transportation impacts, and the potential reduction in Project trip generation resulting from these measures was conservatively excluded from the operational analysis described in this chapter.

Neighborhood Traffic Calming

The Project would provide $200,000 for an NTMP to provide traffic calming on residential streets potentially affected by Project traffic. Funding for neighborhood traffic calming improvements is proposed for the neighborhood northwest of the Project Site (including Beck Avenue, Camelia Avenue, and Cumpston Street) and the neighborhood southeast of the Project Site (including Blakeslee Avenue and Weddington Street). The NTMP process is described in detail in Chapter 11.

Passenger Loading Areas

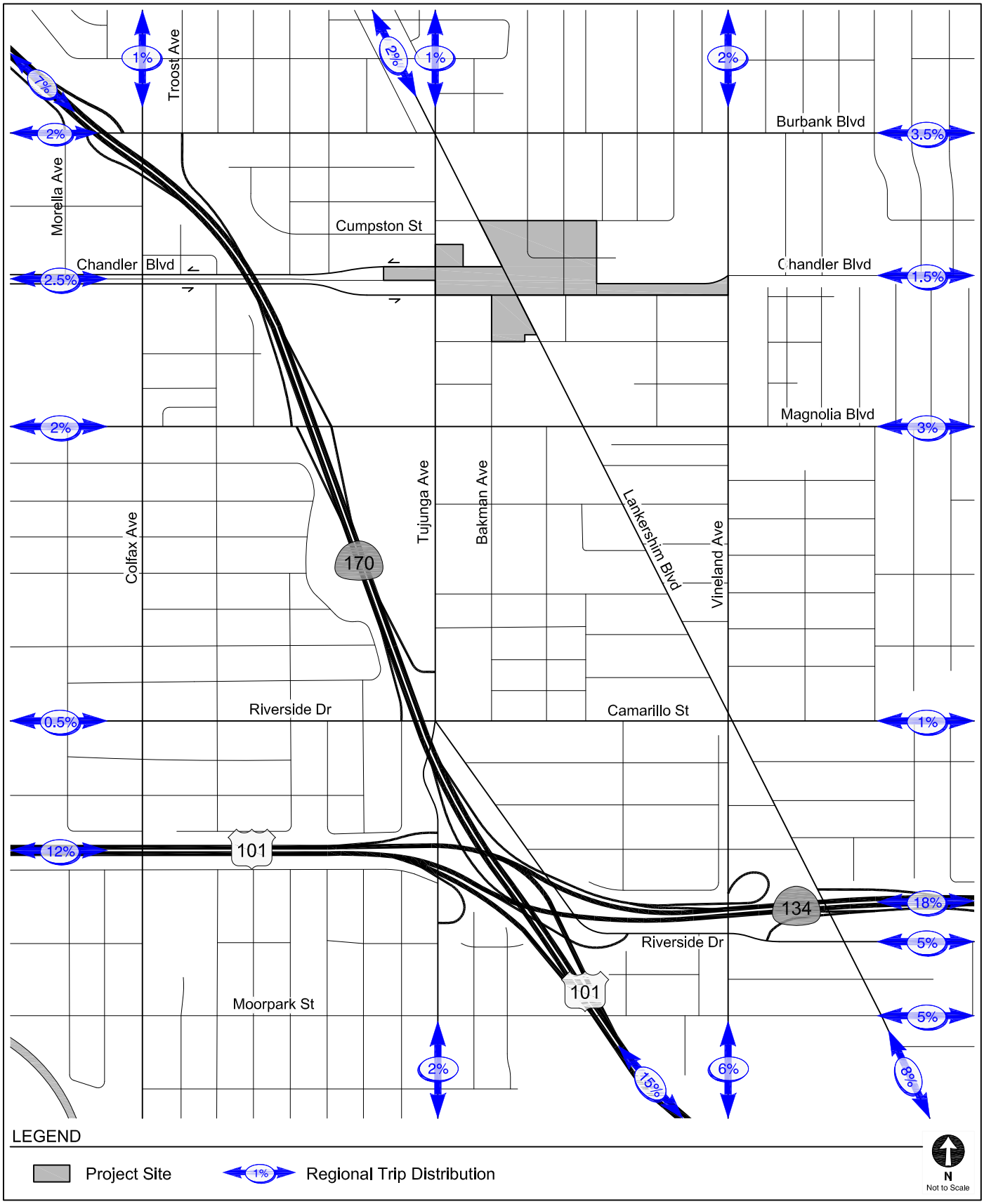
The Project Site does not currently provide dedicated space for passenger loading zones. The Project proposes to provide three on-street passenger loading areas, including one on District Way, one on Lankershim Boulevard, and one on Chandler Boulevard. As described in Chapter 1,

LADOT does not currently support modifying the existing taxi zone on Lankershim Boulevard. However, the Applicant will continue to coordinate with LADOT to explore curbside management strategies and passenger loading zone options prior to Project occupancy.

Additional Transportation Infrastructure Improvements

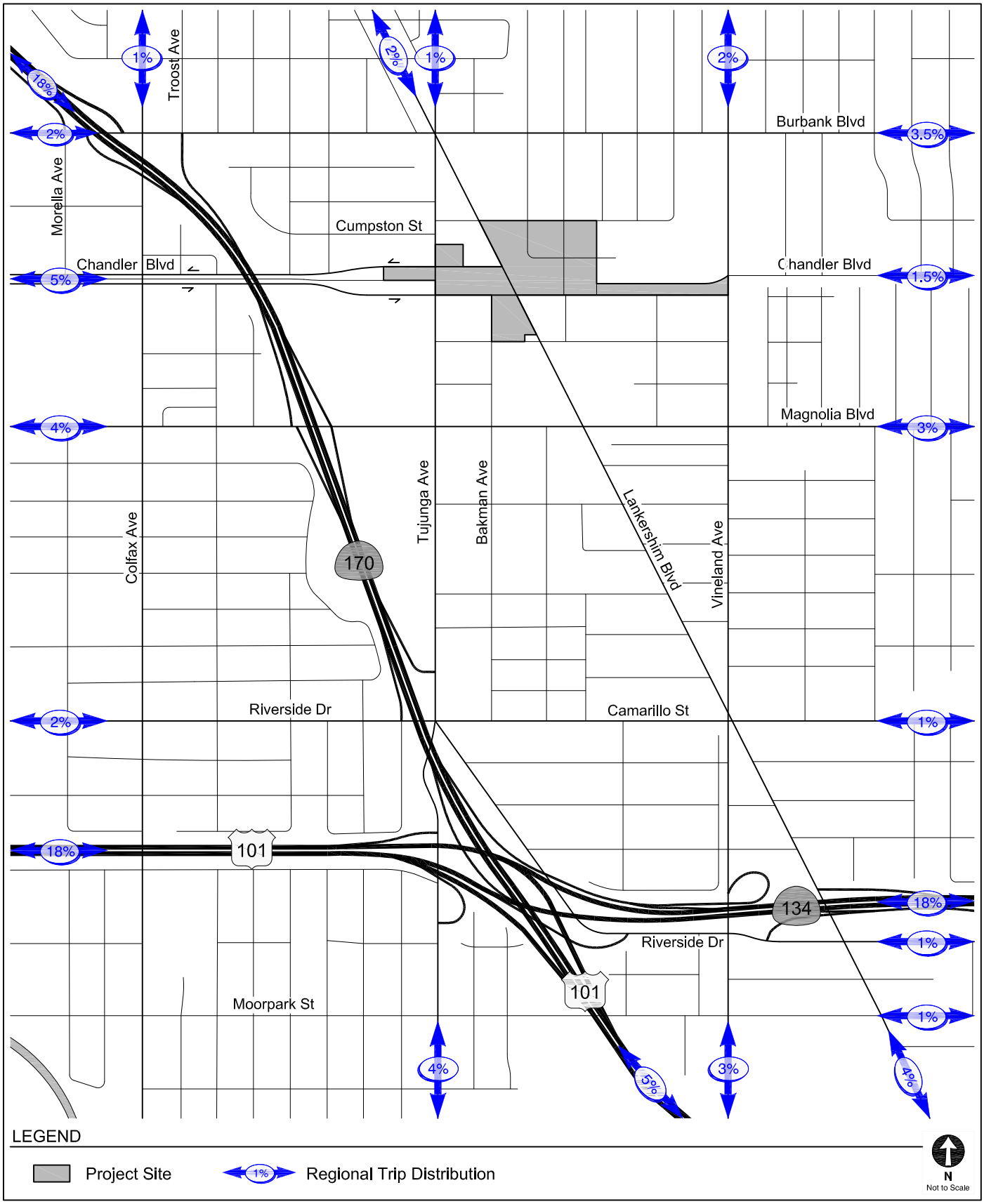
In consultation with LADOT, and according to the agreement detailed in Appendix J, the Applicant proposes to implement additional improvements at various locations within the Study Area:

- At Intersection #3, Colfax Avenue & Burbank Boulevard, the Project would install a closed-circuit television (CCTV) monitoring camera and connections to the City's Automated Traffic Surveillance and Control (ATSAC) system.
- At Intersection #5, Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard, the Project would install a CCTV camera and connections to the City's ATSAC system and extend the northbound left-turn pocket with roadway striping.
- At Intersection #9, Lankershim Boulevard & Cumpston Street, the Project proposes to install, subject to LADOT approval, a new southbound left-turn protected-permissive signal phase along with GridSmart pedestrian safety crossing controls providing modified signal timing to improve pedestrian safety.
- At Intersection #14, Colfax Avenue & Chandler Boulevard, the Project would install a CCTV camera and connections to the City's ATSAC system.
- At Intersections #16 and #20 on Lankershim Boulevard at Chandler Boulevard (North) and Chandler Boulevard, the Project would install GridSmart pedestrian safety crossing controls.
- At Intersection #25, Bakman Avenue & Weddington Street, adjacent to Block 8, the Project would install upgraded pedestrian ADA ramps.
- At Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard, the Project proposes to install, subject to LADOT approval, a new westbound left-turn protected-permissive signal phase.
- At Intersection #30, Lankershim Boulevard & Magnolia Boulevard, the Project would install a CCTV camera and connections to the City's ATSAC system.



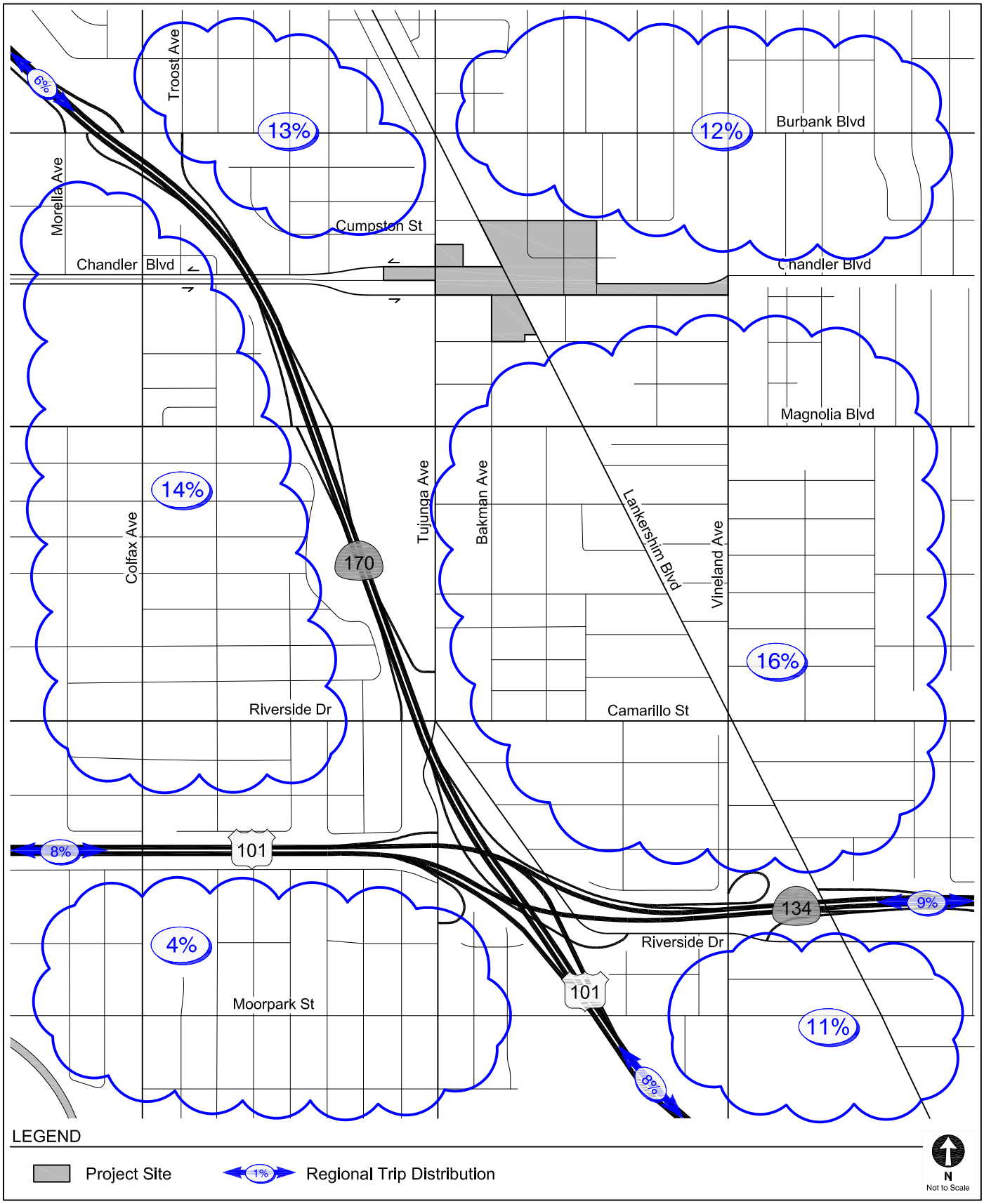
REGIONAL PROJECT TRIP DISTRIBUTION
RESIDENTIAL TRIPS

FIGURE 15



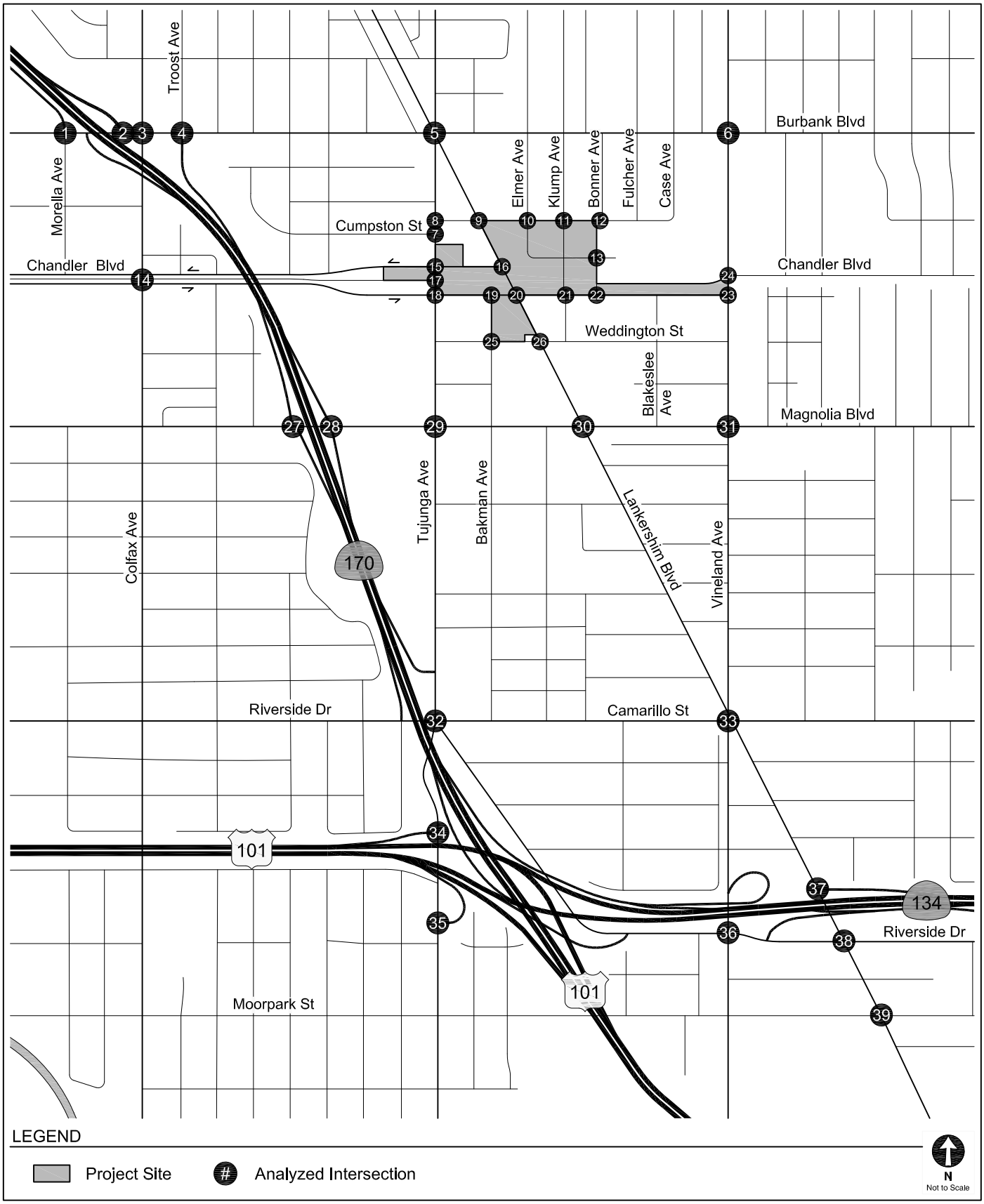
REGIONAL PROJECT TRIP DISTRIBUTION
OFFICE TRIPS

FIGURE
16



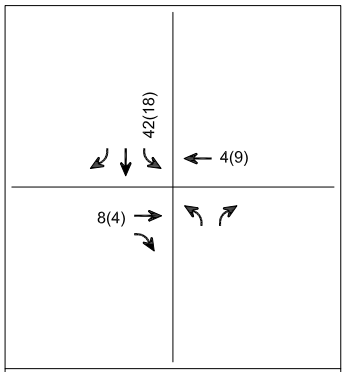
REGIONAL PROJECT TRIP DISTRIBUTION
RETAIL AND RESTAURANT TRIPS

FIGURE 17

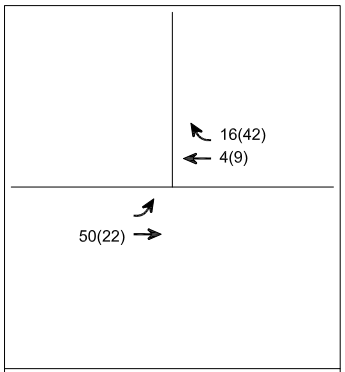


ANALYZED INTERSECTIONS

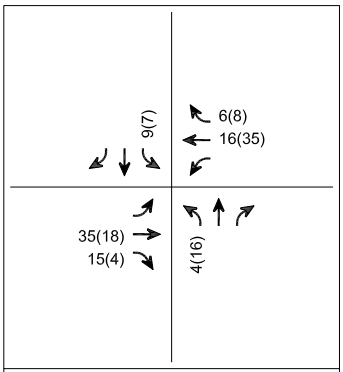
FIGURE 18



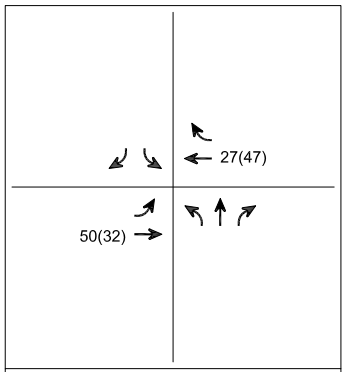
1. SR-170 SB Off-Ramp & Burbank Boulevard



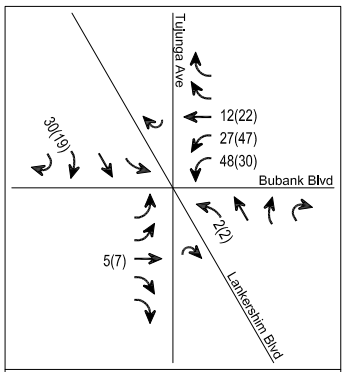
2. SR-170 NB On-Ramp & Burbank Boulevard



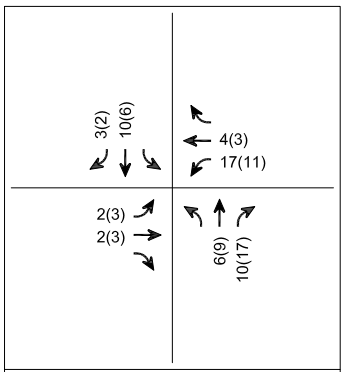
3. Colfax Avenue & Burbank Boulevard



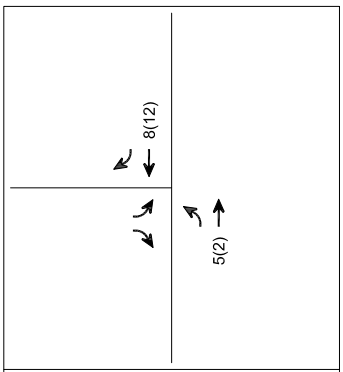
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



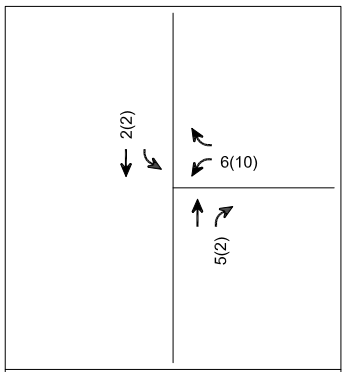
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



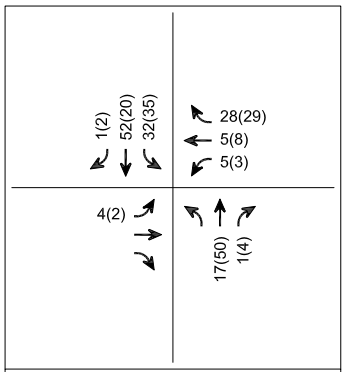
6. Vineland Avenue & Burbank Boulevard



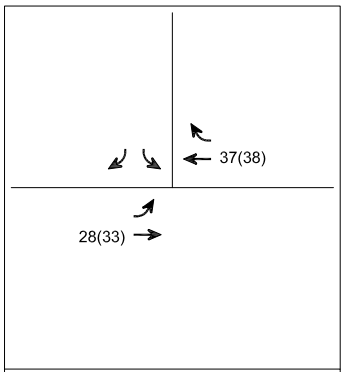
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street

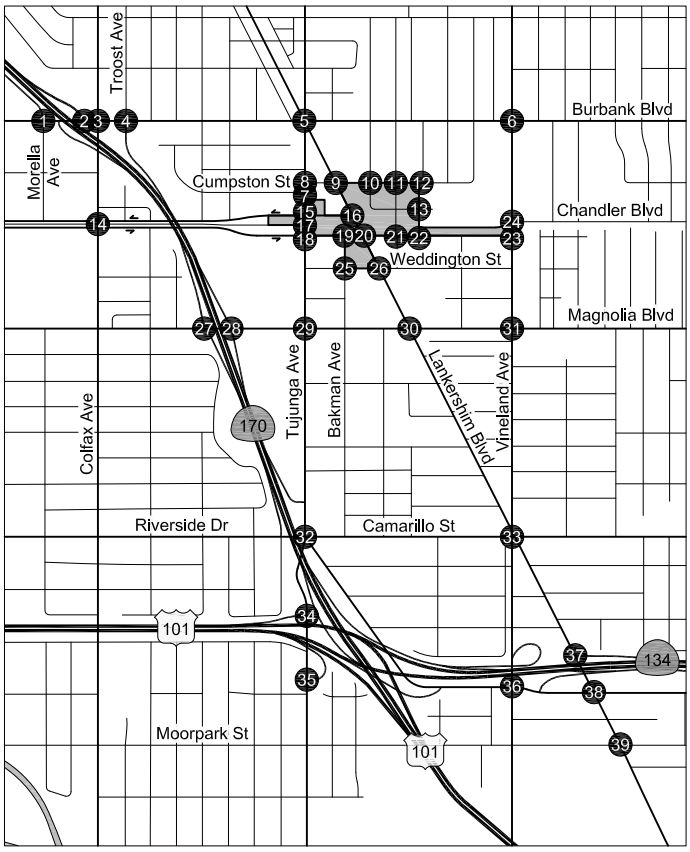
LEGEND

Project Site

Analyzed Intersection

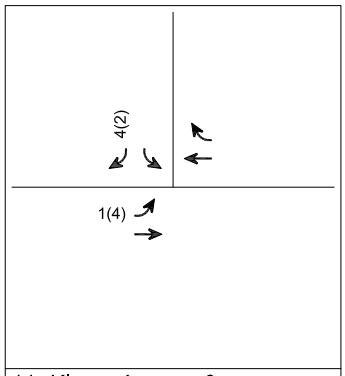
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

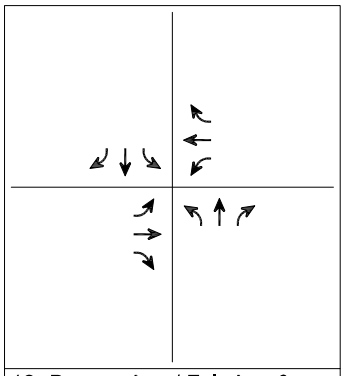


PROJECT PHASE 1 ONLY
PEAK HOUR TRAFFIC VOLUMES

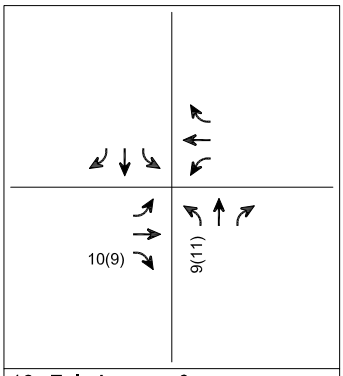
FIGURE 19



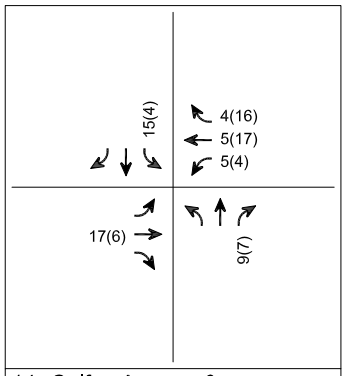
11. Klump Avenue & Cumpston Street



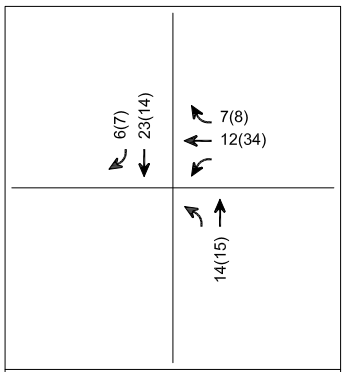
12. Bonner Ave / Fair Ave & Cumpston Street



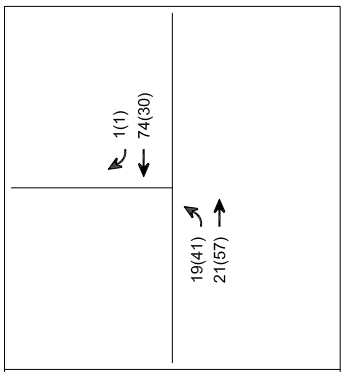
13. Fair Avenue & District Way



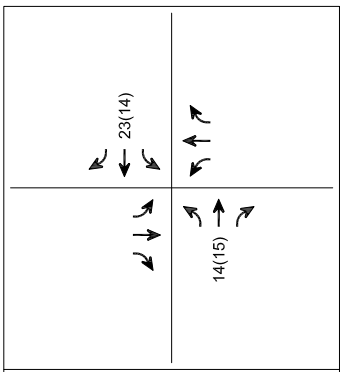
14. Colfax Avenue & Chandler Boulevard



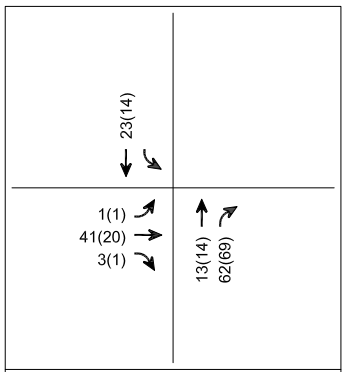
15. Tujunga Avenue & Chandler Boulevard WB



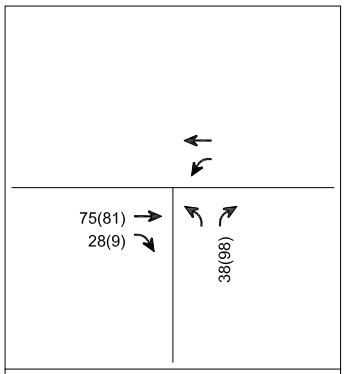
16. Lankershim Boulevard & Chandler Boulevard WB



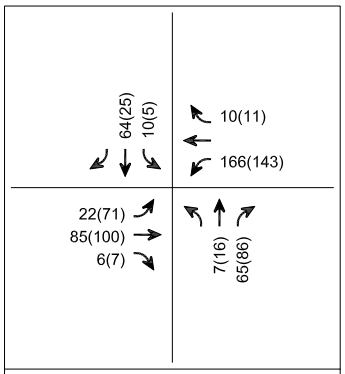
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

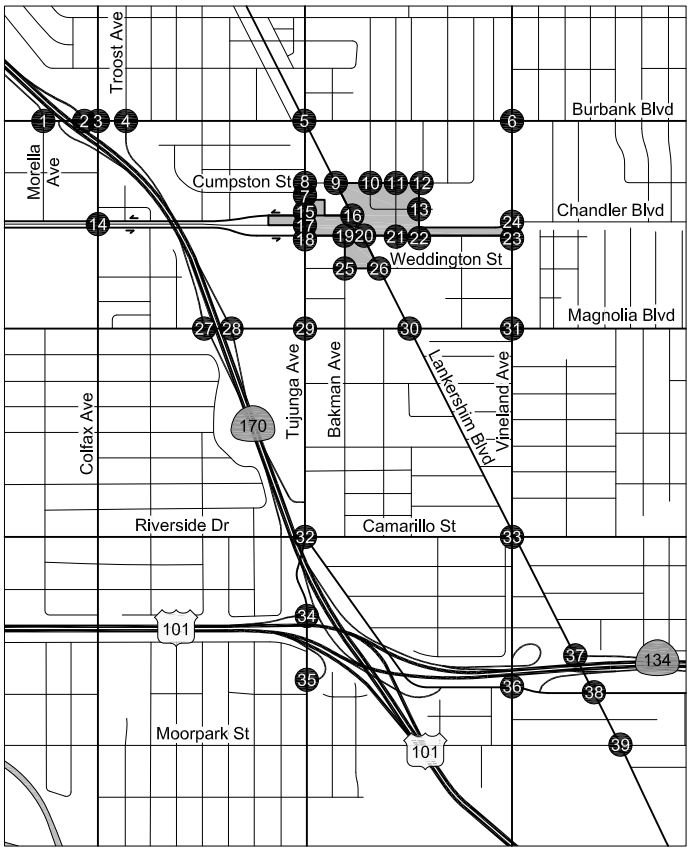
LEGEND

Project Site

Analyzed Intersection

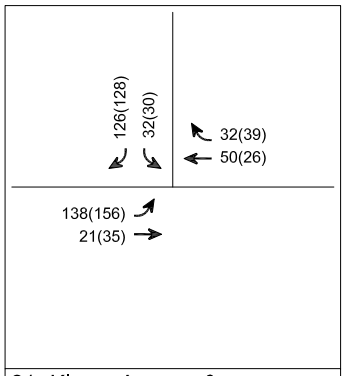
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

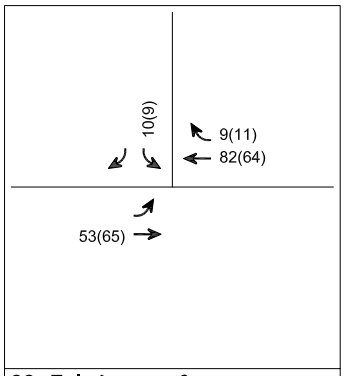


PROJECT PHASE 1 ONLY
PEAK HOUR TRAFFIC VOLUMES

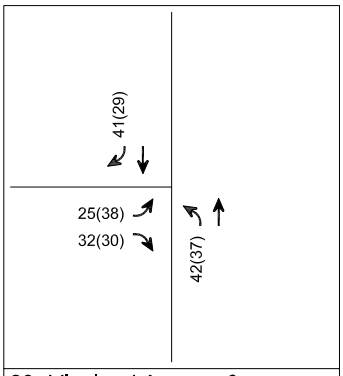
FIGURE 19 (CONT.)



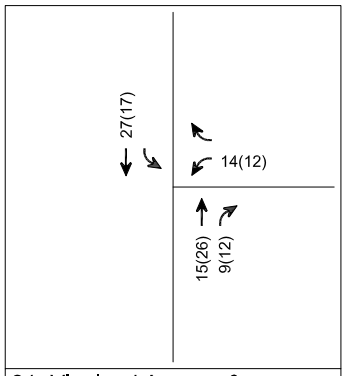
21. Klump Avenue & Chandler Boulevard



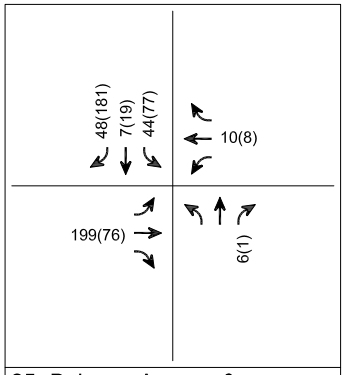
22. Fair Avenue & Chandler Boulevard



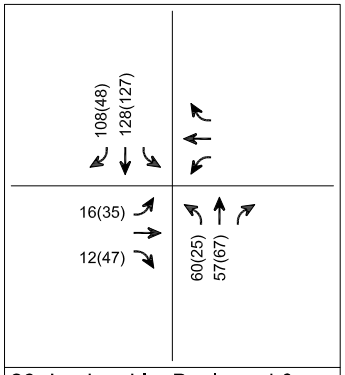
23. Vineland Avenue & Chandler Boulevard (West)



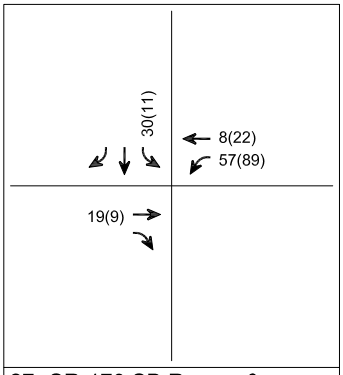
24. Vineland Avenue & Chandler Boulevard (East)



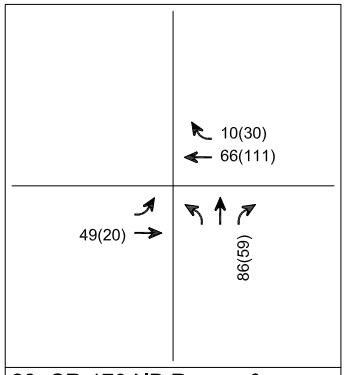
25. Bakman Avenue & Weddington Street



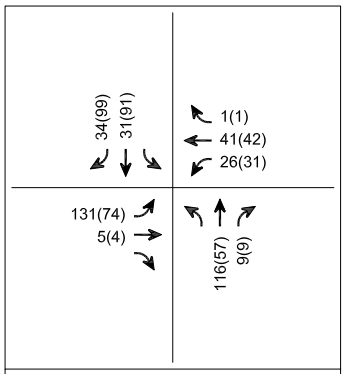
26. Lankershim Boulevard & Weddington Street



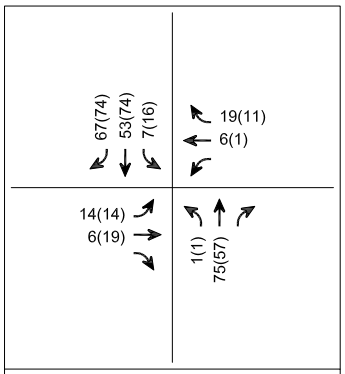
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard

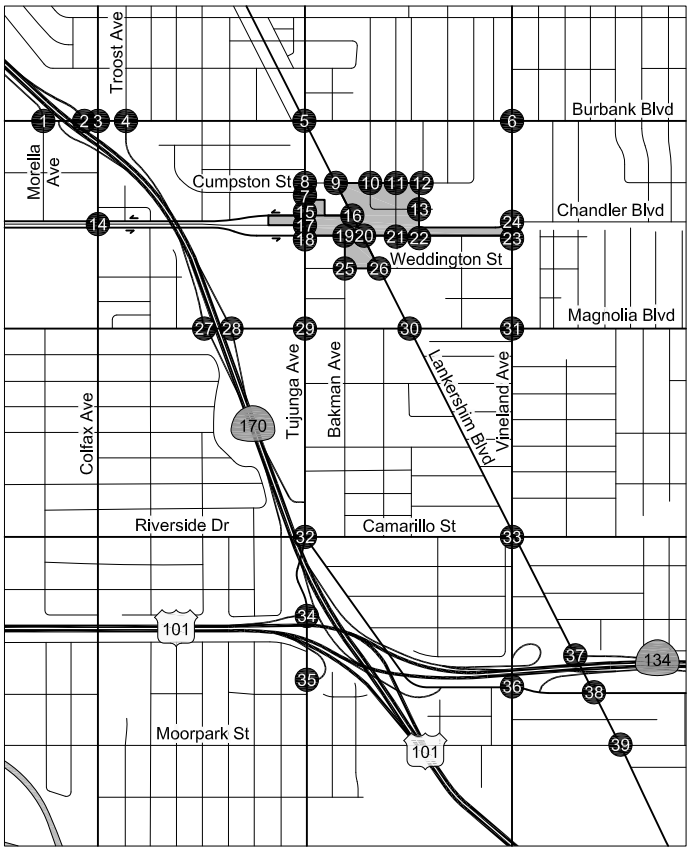
LEGEND

Project Site

Analyzed Intersection

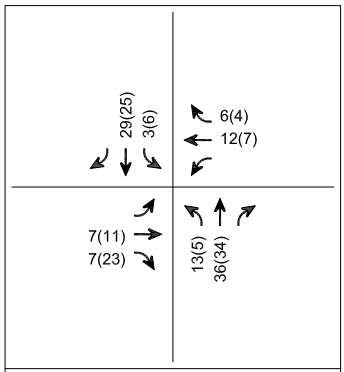
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

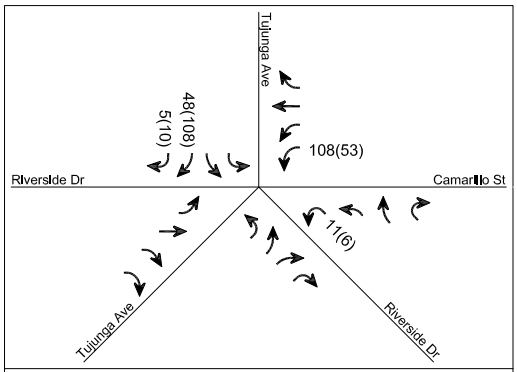


PROJECT PHASE 1 ONLY
PEAK HOUR TRAFFIC VOLUMES

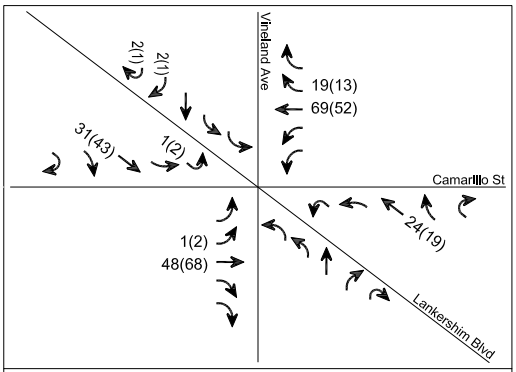
FIGURE 19 (CONT.)



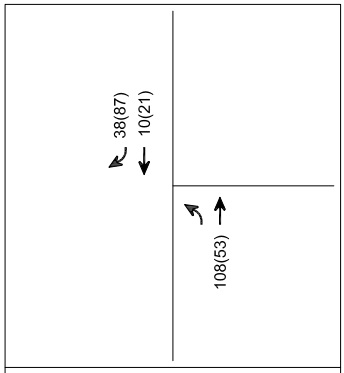
31. Vineland Avenue & Magnolia Boulevard



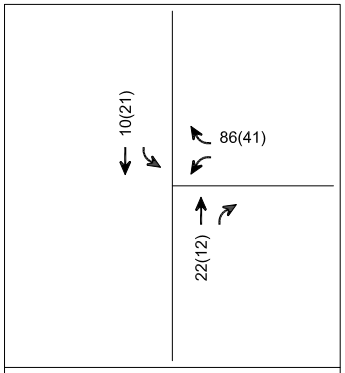
32. Tujunga Avenue / Riverside Drive & Camarillo Street



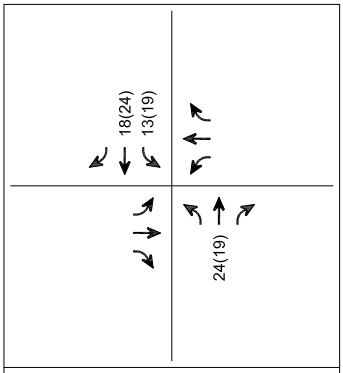
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



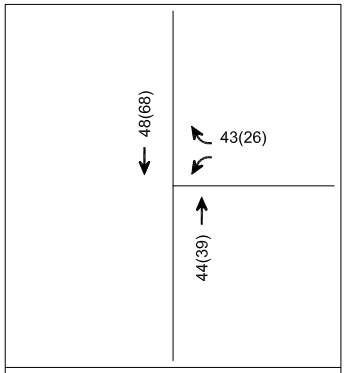
34. Tujunga Avenue & US 101 WB On-Ramp



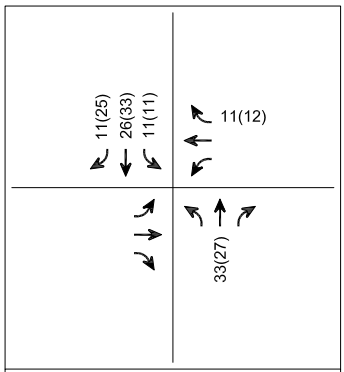
35. Tujunga Avenue & US 101 EB Off-Ramp



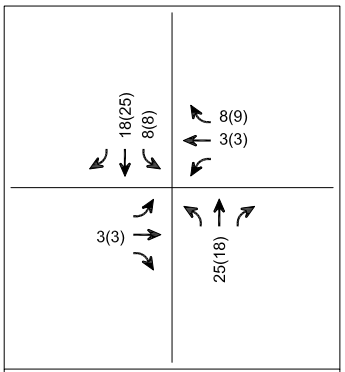
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

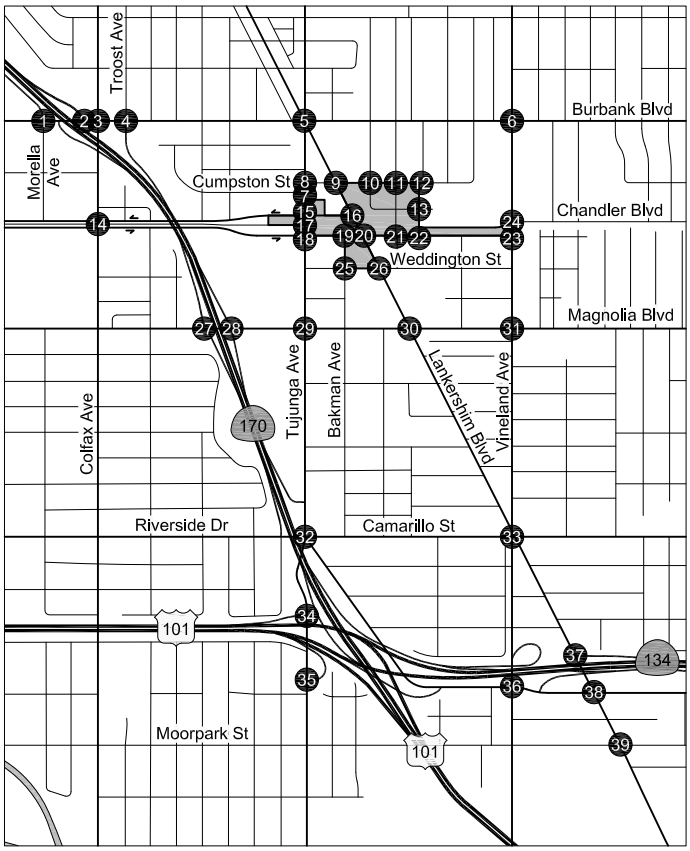
LEGEND

Project Site

Analyzed Intersection

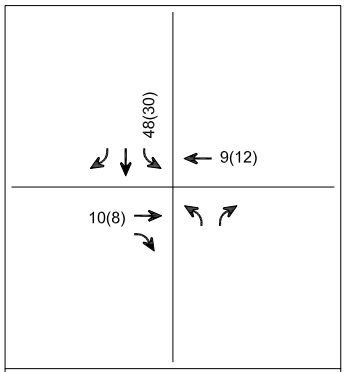
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

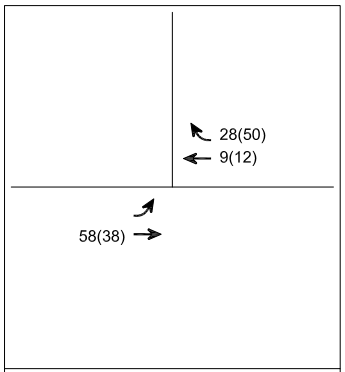


PROJECT PHASE 1 ONLY
PEAK HOUR TRAFFIC VOLUMES

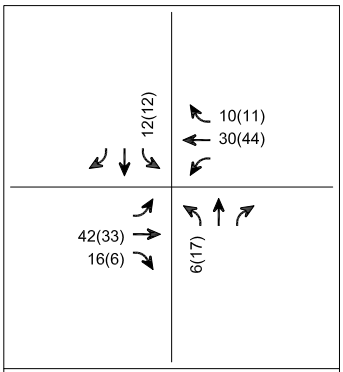
FIGURE 19 (CONT.)



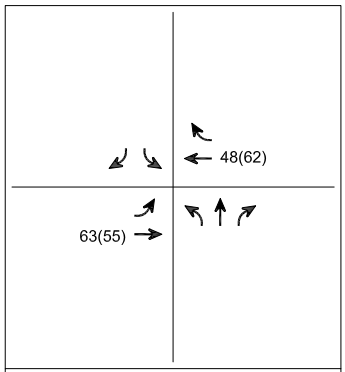
1. SR-170 SB Off-Ramp & Burbank Boulevard



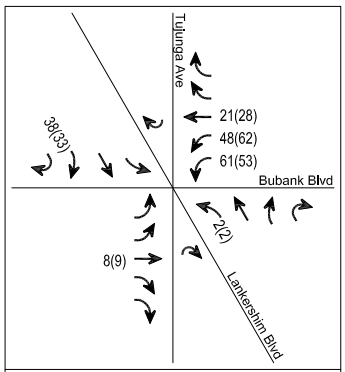
2. SR-170 NB On-Ramp & Burbank Boulevard



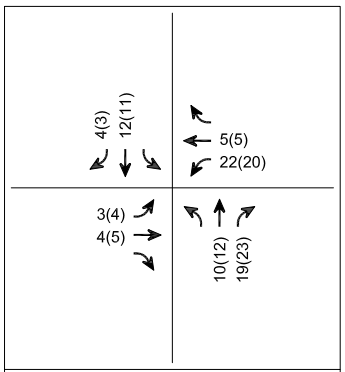
3. Colfax Avenue & Burbank Boulevard



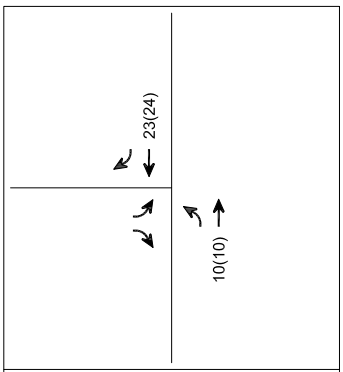
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



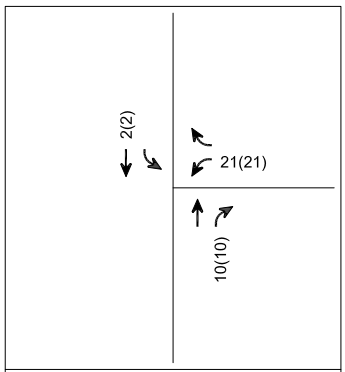
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



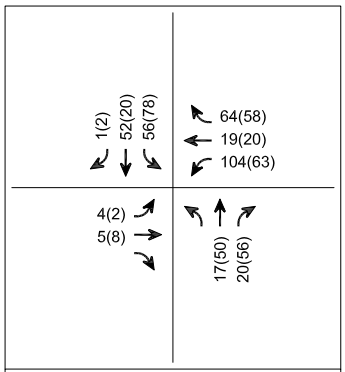
6. Vineland Avenue & Burbank Boulevard



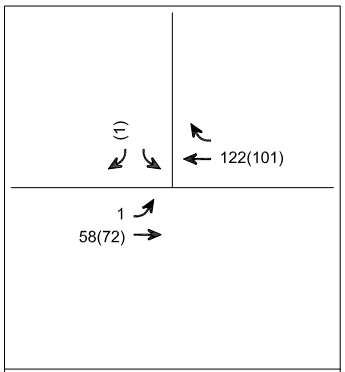
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street

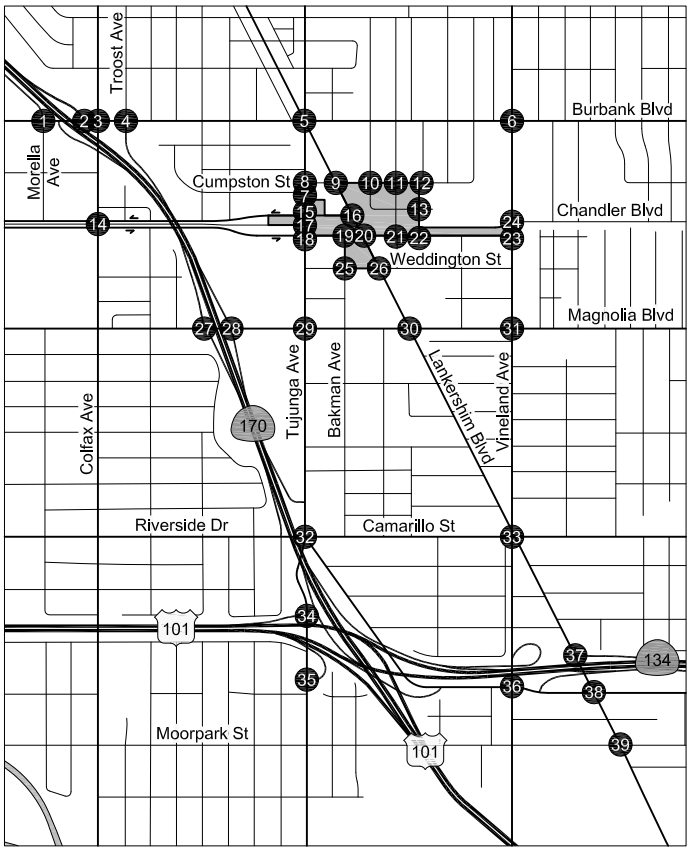
LEGEND

Project Site

Analyzed Intersection

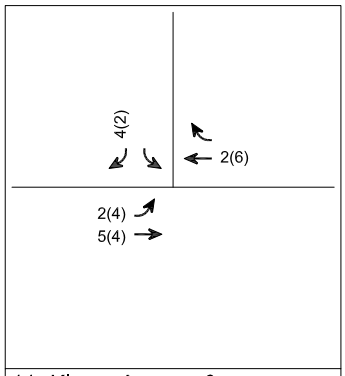
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

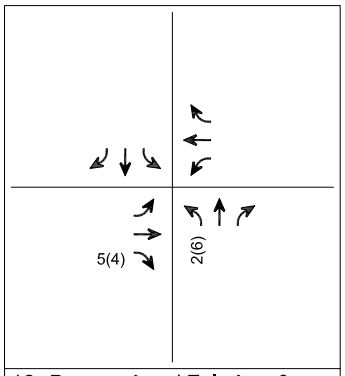


PROJECT FULL BUILDOUT ONLY
PEAK HOUR TRAFFIC VOLUMES

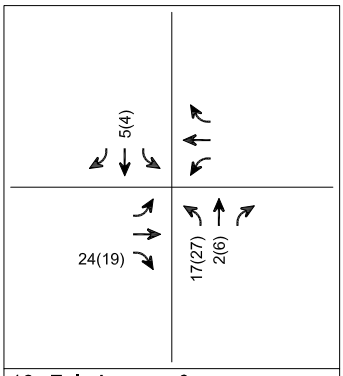
FIGURE 20



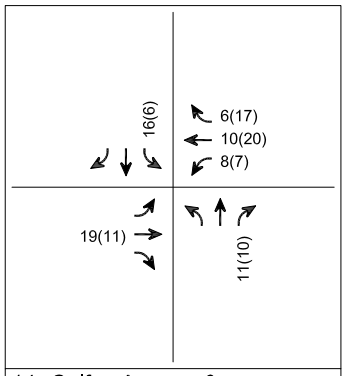
11. Klump Avenue & Cumpston Street



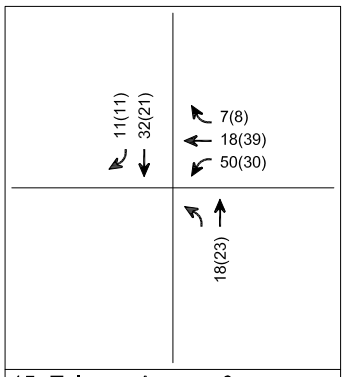
12. Bonner Ave / Fair Ave & Cumpston Street



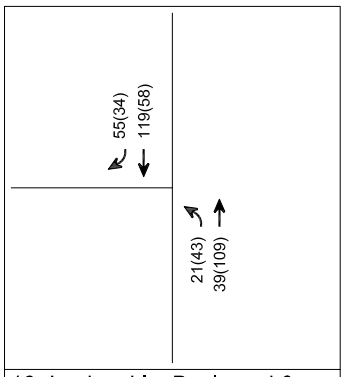
13. Fair Avenue & District Way



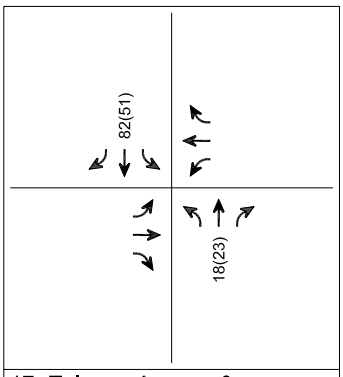
14. Colfax Avenue & Chandler Boulevard



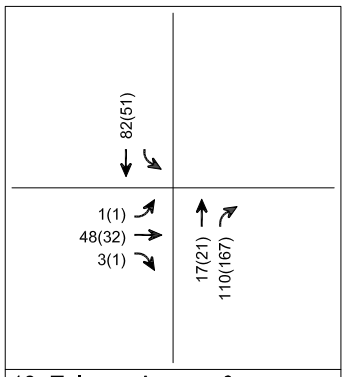
15. Tujunga Avenue & Chandler Boulevard WB



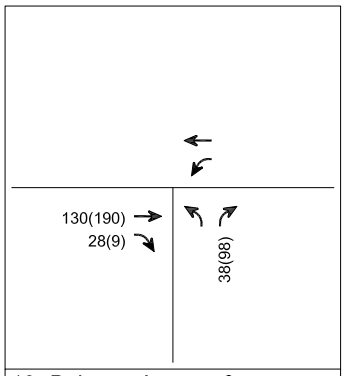
16. Lankershim Boulevard & Chandler Boulevard WB



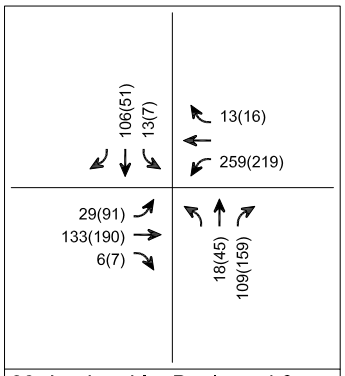
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

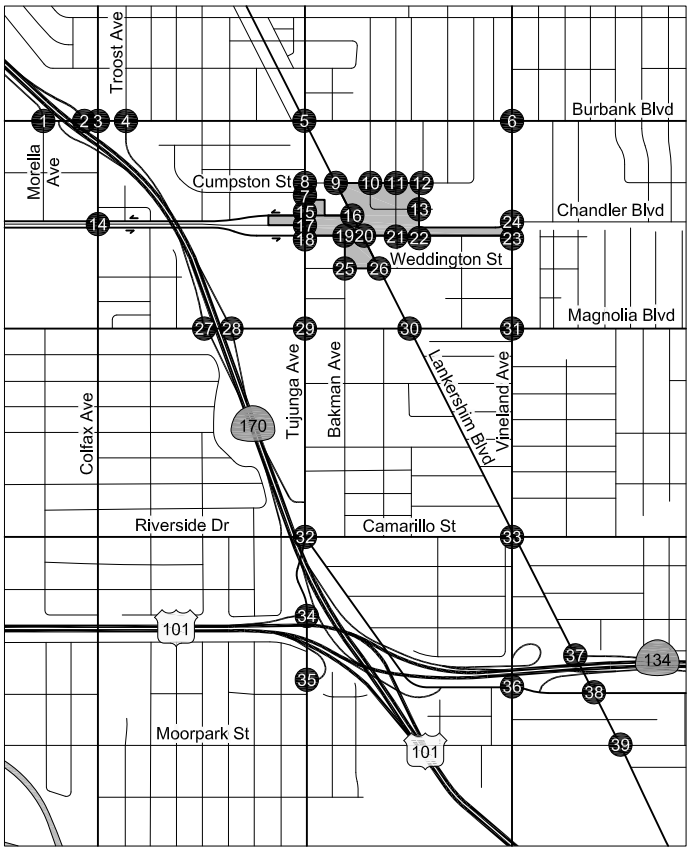
LEGEND

Project Site

Analyzed Intersection

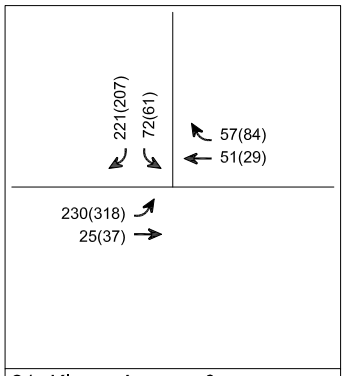
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

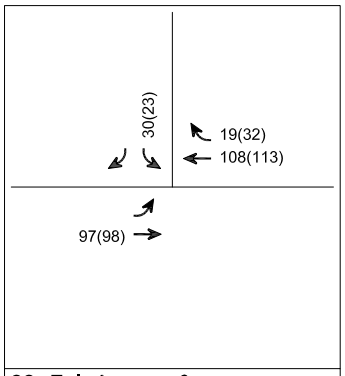


PROJECT FULL BUILDOUT ONLY
PEAK HOUR TRAFFIC VOLUMES

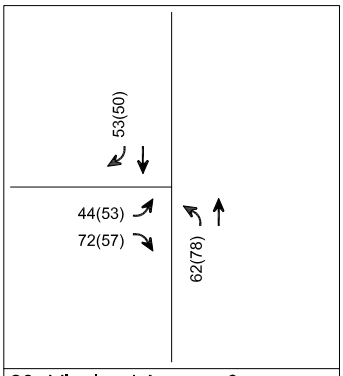
FIGURE 20 (CONT.)



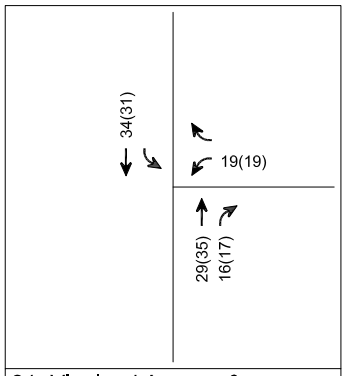
21. Klump Avenue & Chandler Boulevard



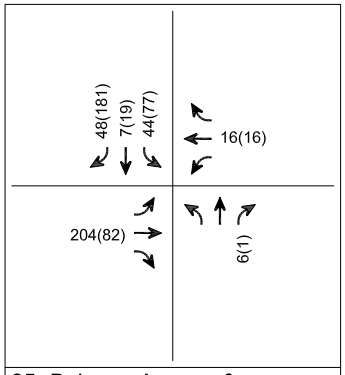
22. Fair Avenue & Chandler Boulevard



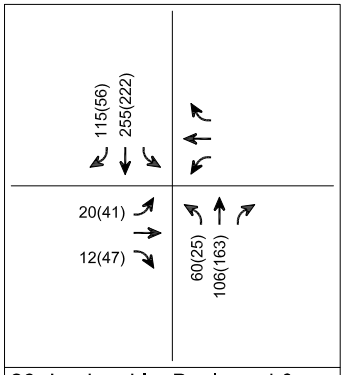
23. Vineland Avenue & Chandler Boulevard (West)



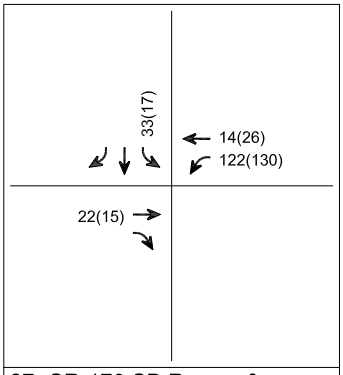
24. Vineland Avenue & Chandler Boulevard (East)



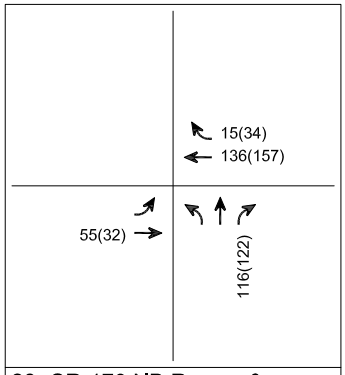
25. Bakman Avenue & Weddington Street



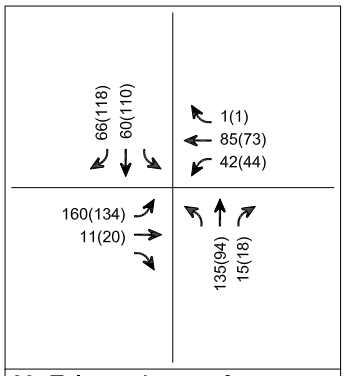
26. Lankershim Boulevard & Weddington Street



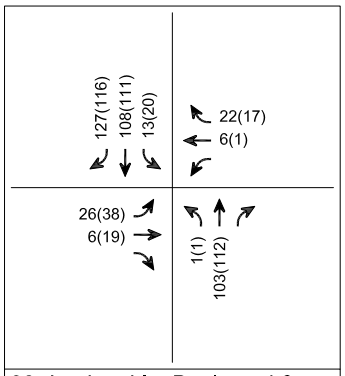
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard

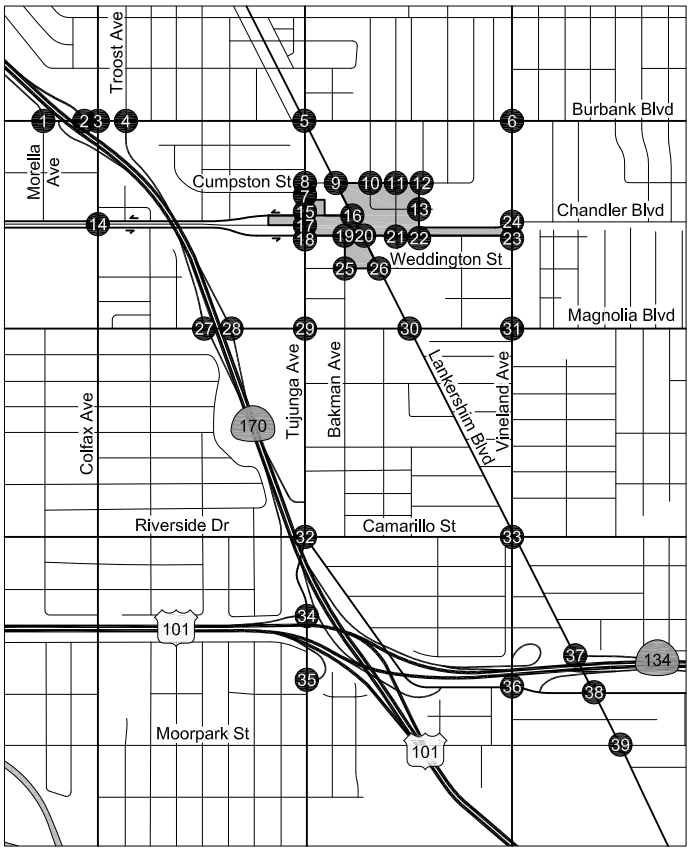
LEGEND

Project Site

Analyzed Intersection

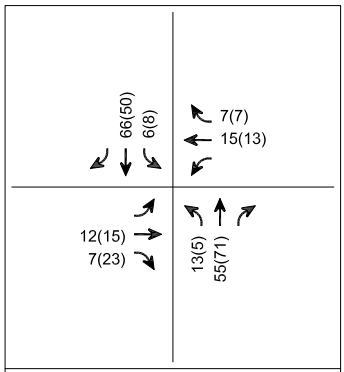
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

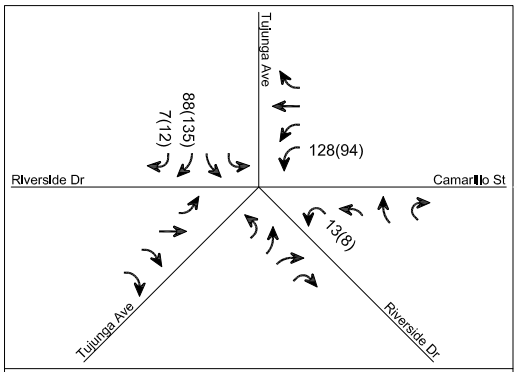


PROJECT FULL BUILDOUT ONLY
PEAK HOUR TRAFFIC VOLUMES

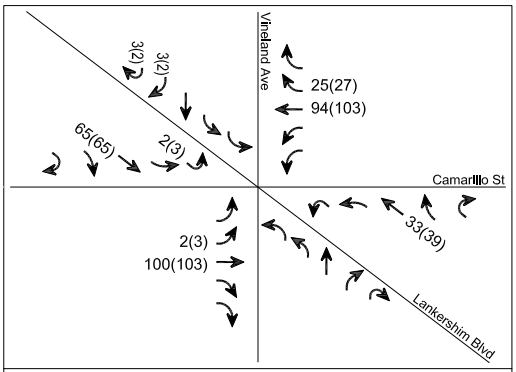
FIGURE 20 (CONT.)



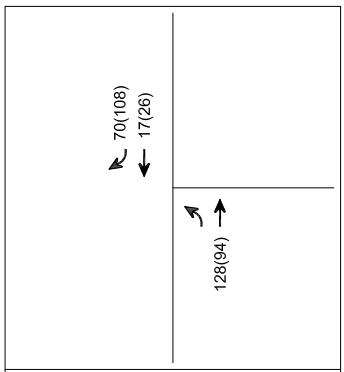
31. Vineland Avenue & Magnolia Boulevard



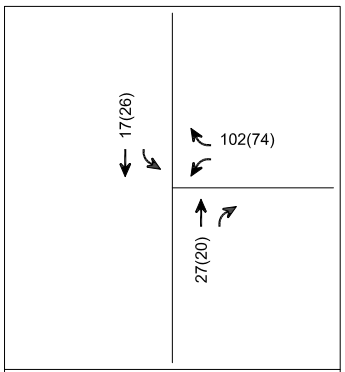
32. Tujunga Avenue / Riverside Drive & Camarillo Street



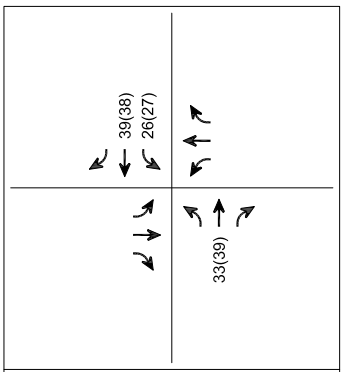
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



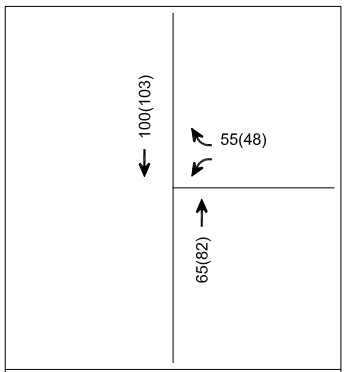
34. Tujunga Avenue & US 101 WB On-Ramp



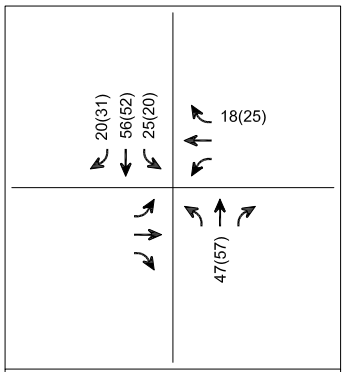
35. Tujunga Avenue & US 101 EB Off-Ramp



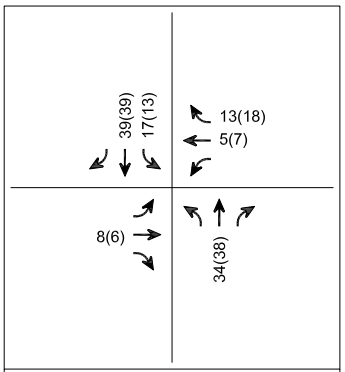
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

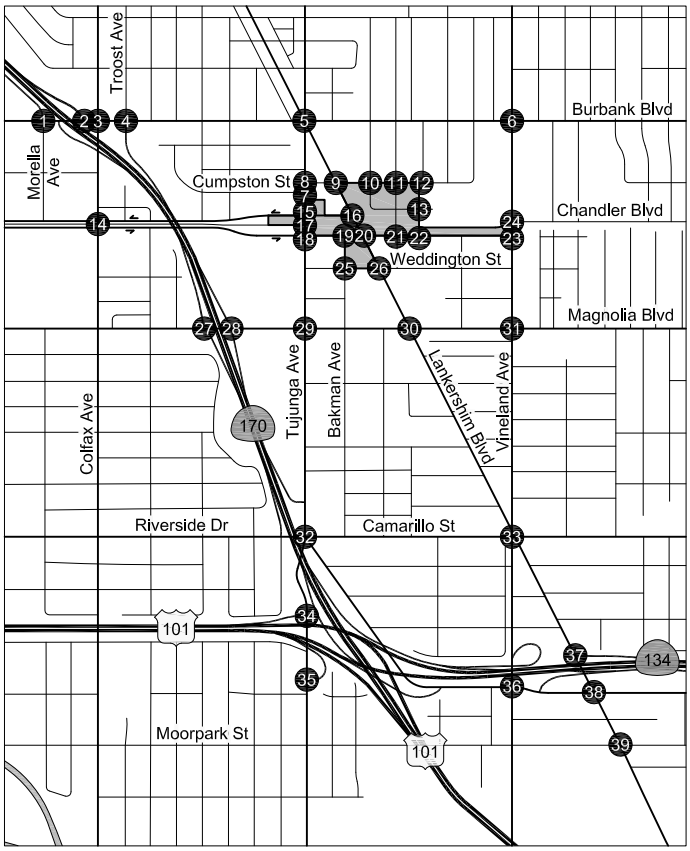
LEGEND

Project Site

Analyzed Intersection

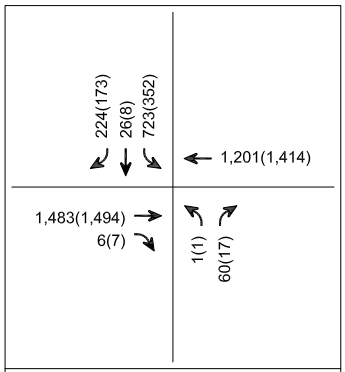
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

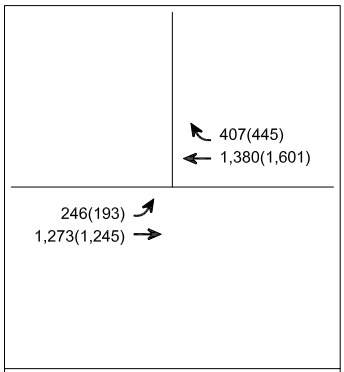


PROJECT FULL BUILDOUT ONLY
PEAK HOUR TRAFFIC VOLUMES

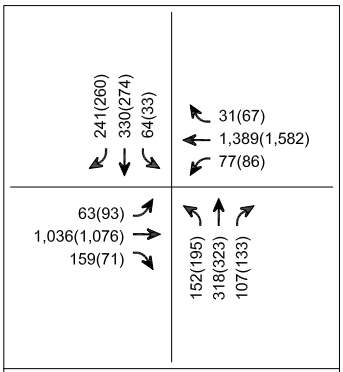
FIGURE 20 (CONT.)



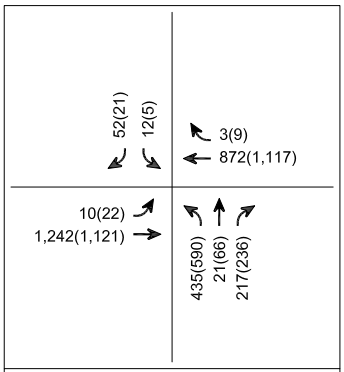
1. SR-170 SB Off-Ramp & Burbank Boulevard



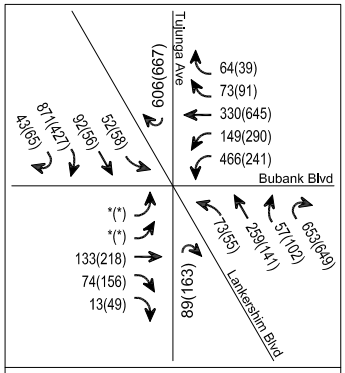
2. SR-170 NB On-Ramp & Burbank Boulevard



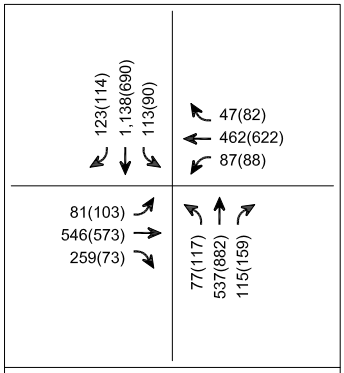
3. Colfax Avenue & Burbank Boulevard



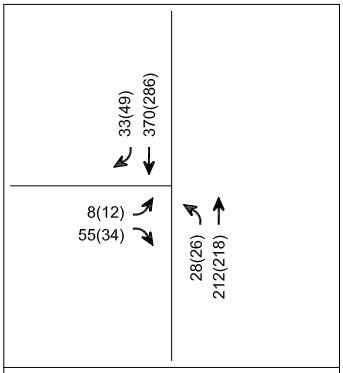
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



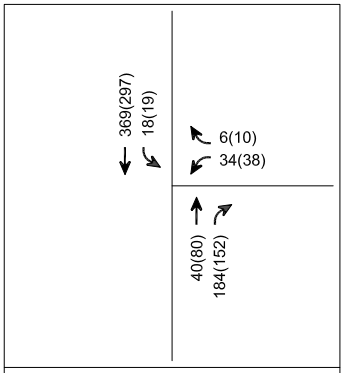
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



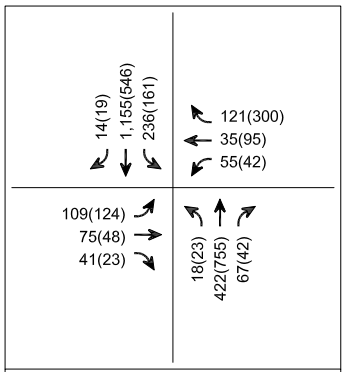
6. Vineland Avenue & Burbank Boulevard



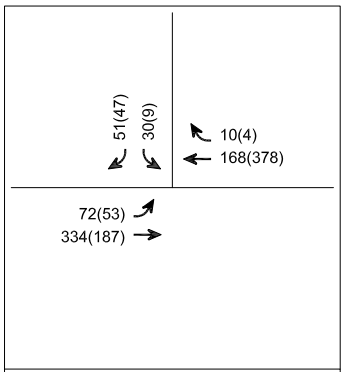
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street

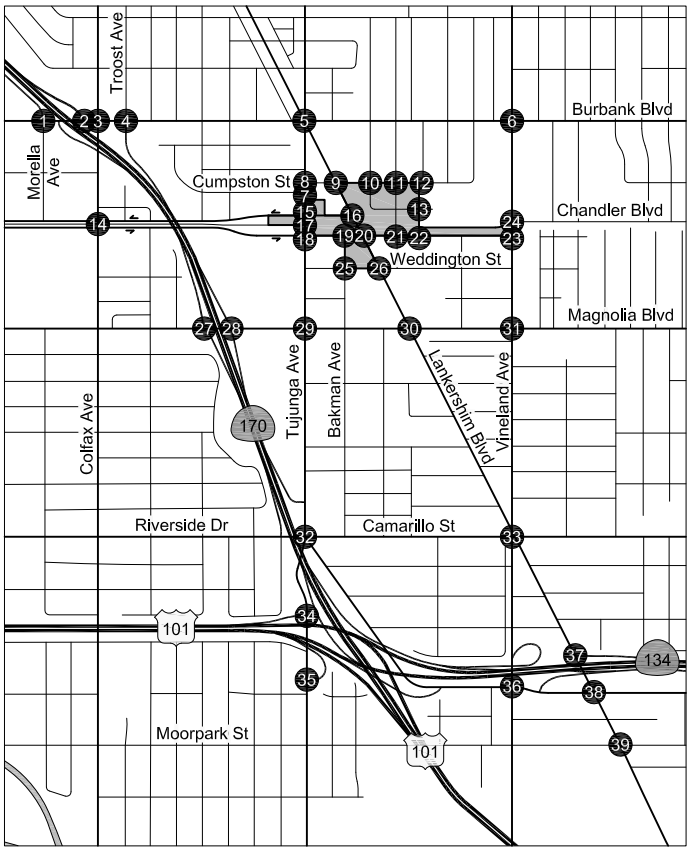


10. Elmer Avenue & Cumpston Street

LEGEND

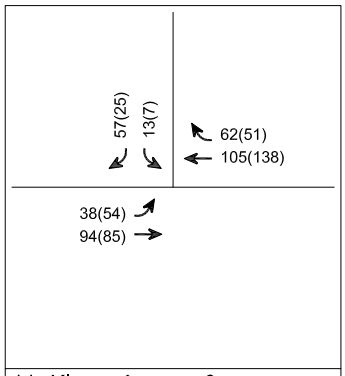
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

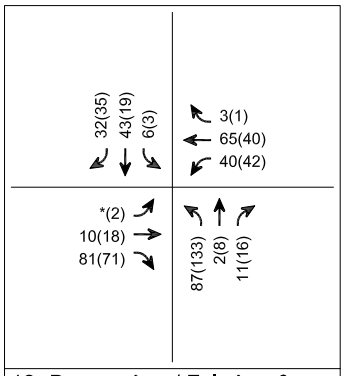


EXISTING CONDITIONS (YEAR 2020)
PEAK HOUR TRAFFIC VOLUMES

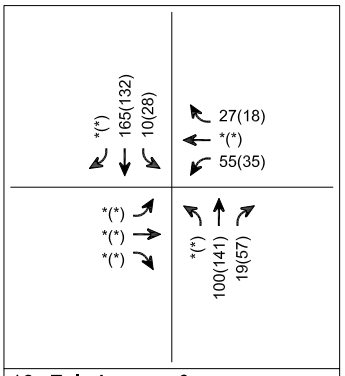
FIGURE 21



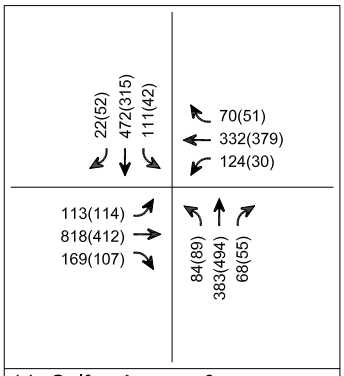
11. Klump Avenue & Cumpston Street



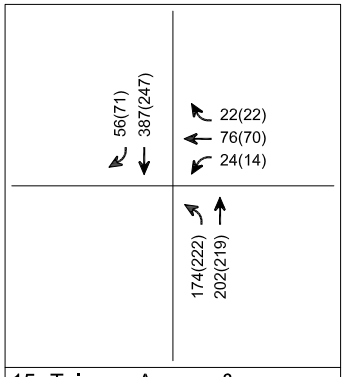
12. Bonner Ave / Fair Ave & Cumpston Street



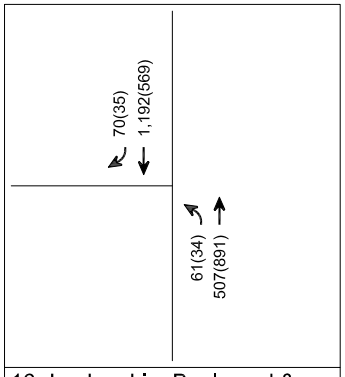
13. Fair Avenue & District Way



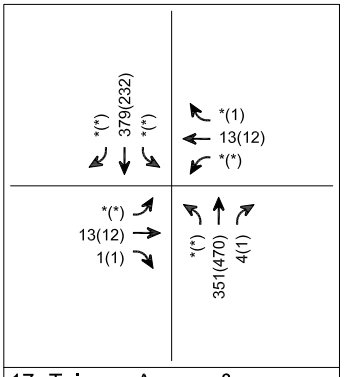
14. Colfax Avenue & Chandler Boulevard



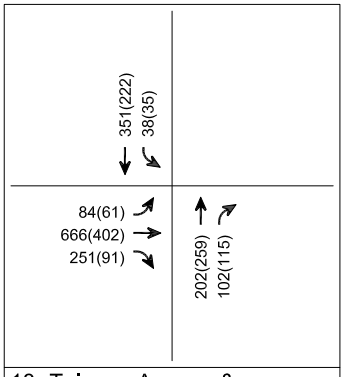
15. Tujunga Avenue & Chandler Boulevard WB



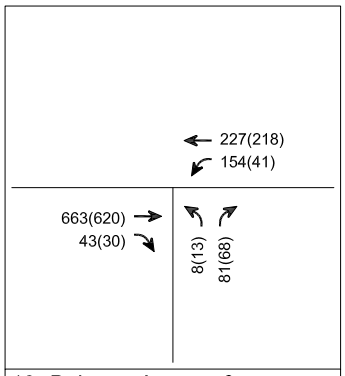
16. Lankershim Boulevard & Chandler Boulevard WB



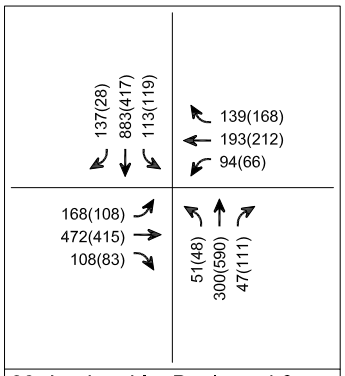
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard

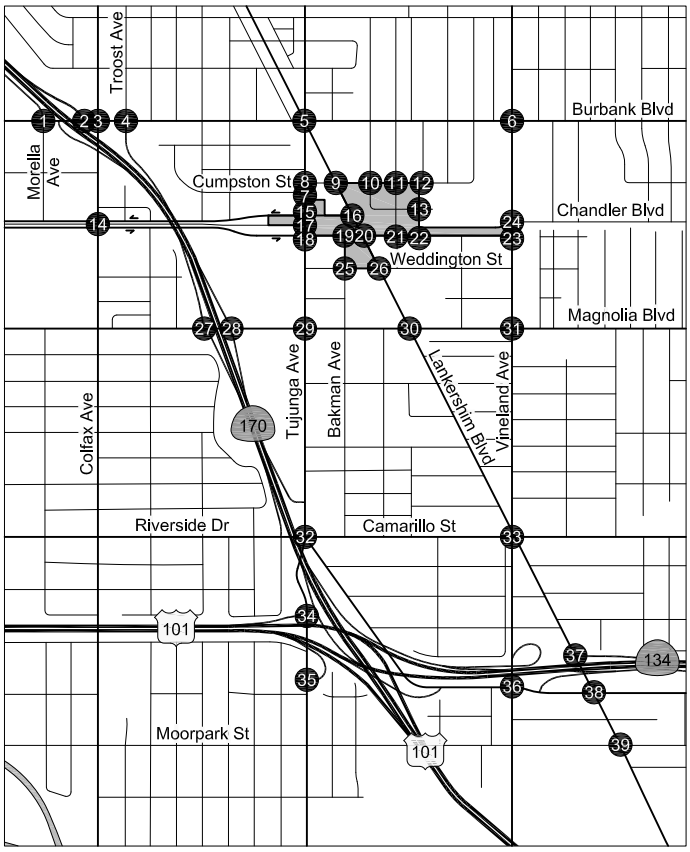


20. Lankershim Boulevard & Chandler Boulevard

LEGEND

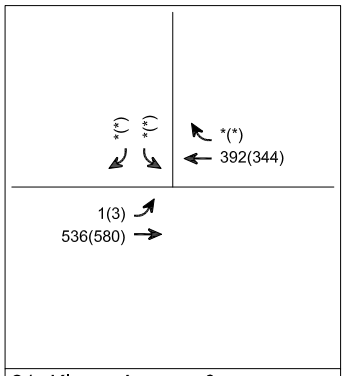
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

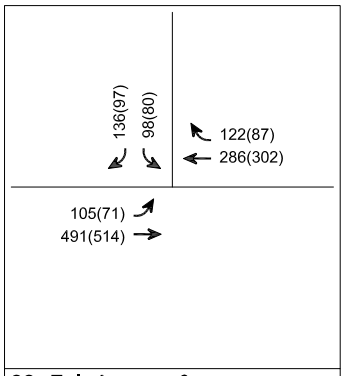


EXISTING CONDITIONS (YEAR 2020)
PEAK HOUR TRAFFIC VOLUMES

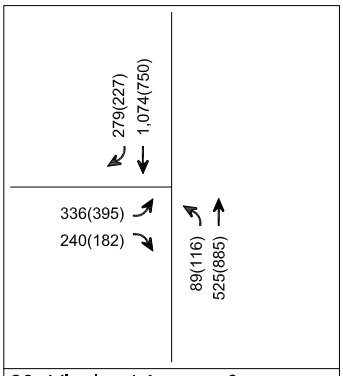
FIGURE 21 (CONT.)



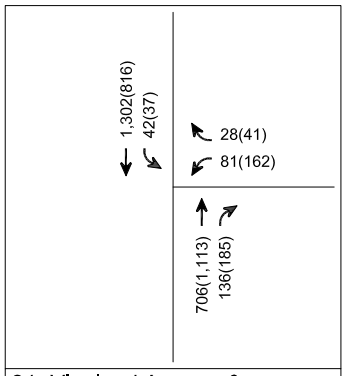
21. Klump Avenue & Chandler Boulevard



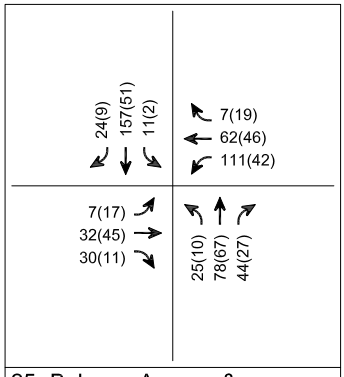
22. Fair Avenue & Chandler Boulevard



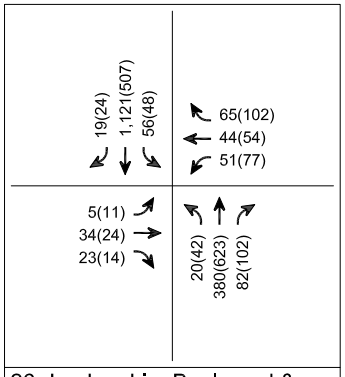
23. Vineland Avenue & Chandler Boulevard (West)



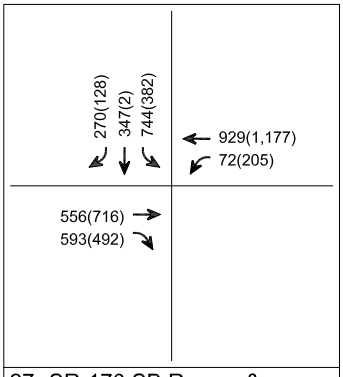
24. Vineland Avenue & Chandler Boulevard (East)



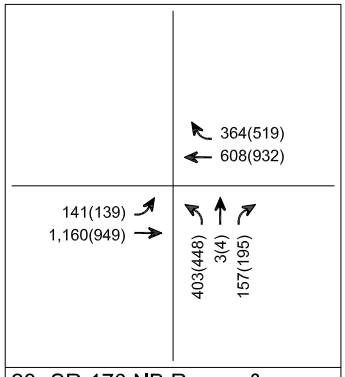
25. Bakman Avenue & Weddington Street



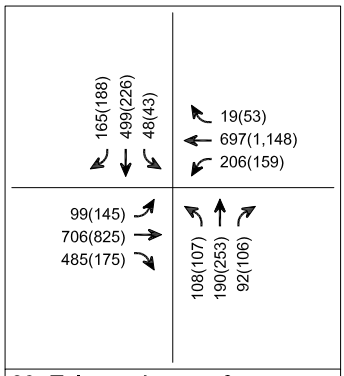
26. Lankershim Boulevard & Weddington Street



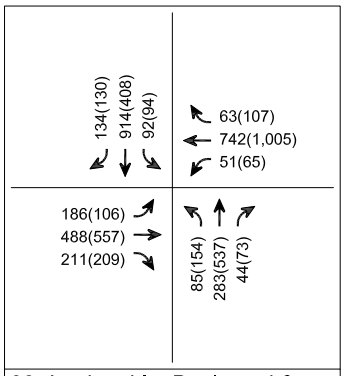
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard

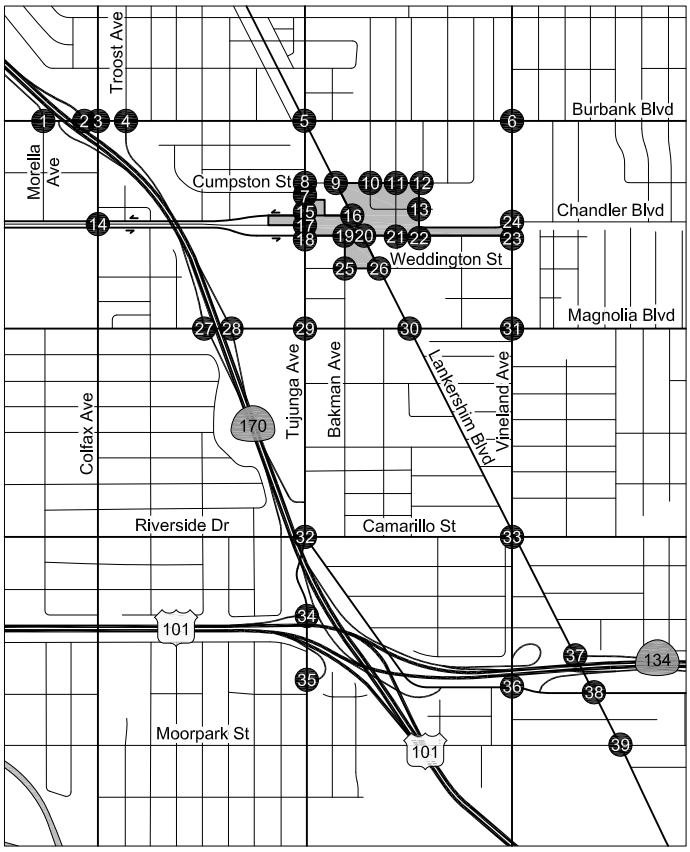


30. Lankershim Boulevard & Magnolia Boulevard

LEGEND

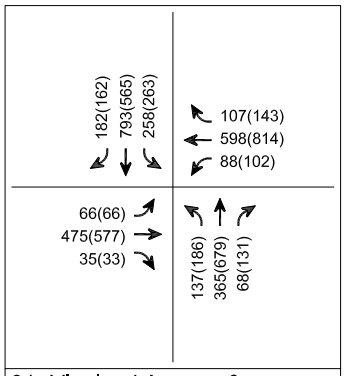
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

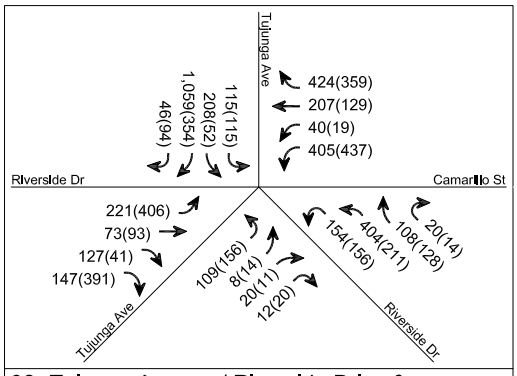


EXISTING CONDITIONS (YEAR 2020)
PEAK HOUR TRAFFIC VOLUMES

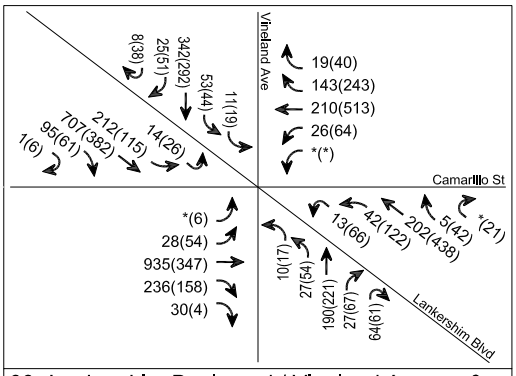
FIGURE
21 (CONT.)



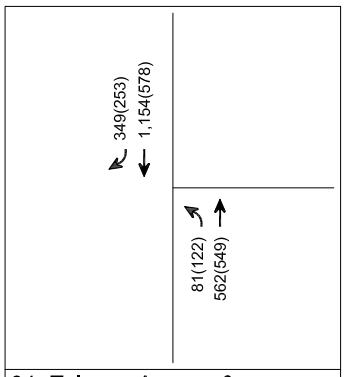
31. Vineland Avenue & Magnolia Boulevard



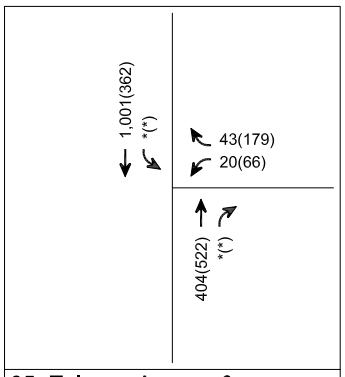
32. Tujunga Avenue / Riverside Drive & Camarillo Street



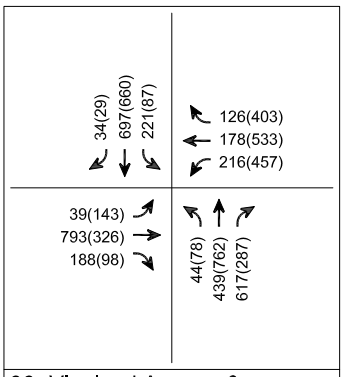
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



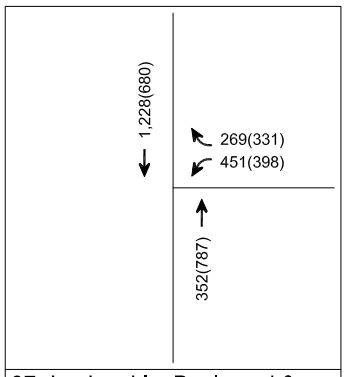
34. Tujunga Avenue & US 101 WB On-Ramp



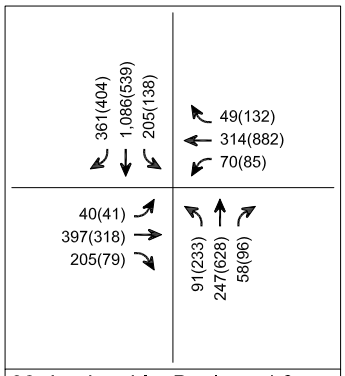
35. Tujunga Avenue & US 101 EB Off-Ramp



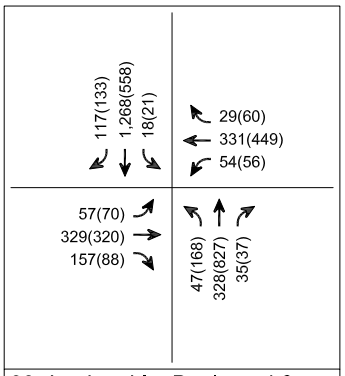
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive

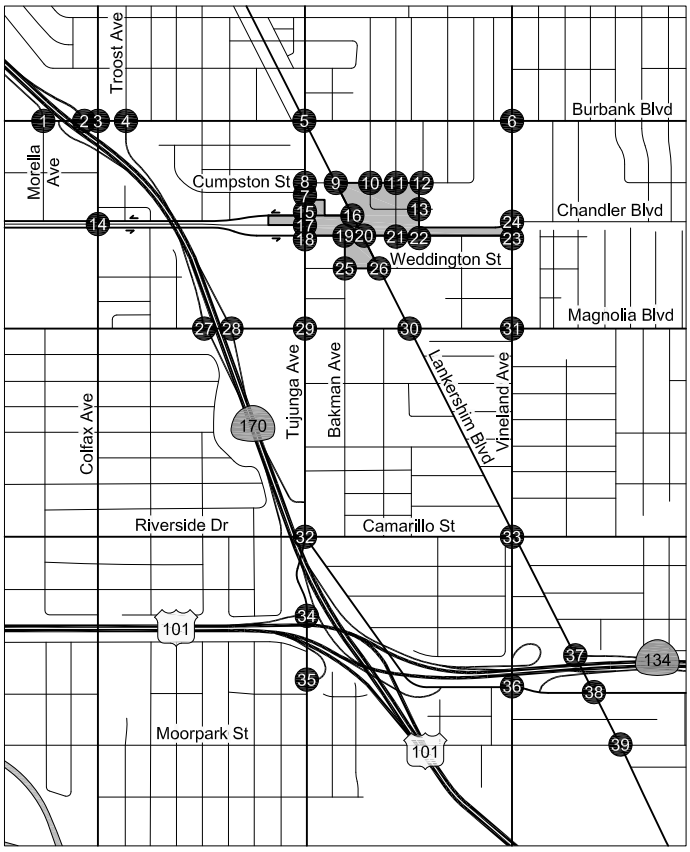


39. Lankershim Boulevard & Moorpark Street

LEGEND

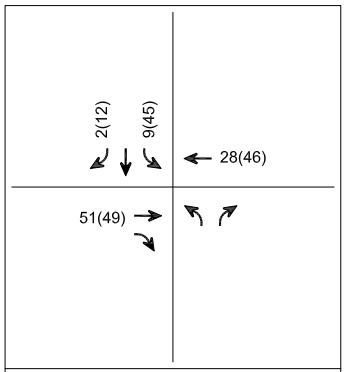
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

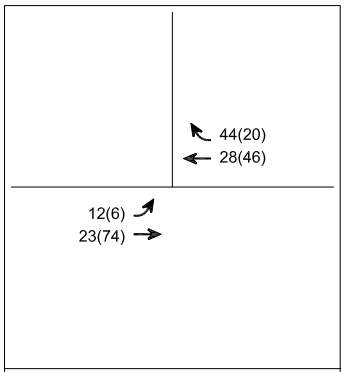


EXISTING CONDITIONS (YEAR 2020)
PEAK HOUR TRAFFIC VOLUMES

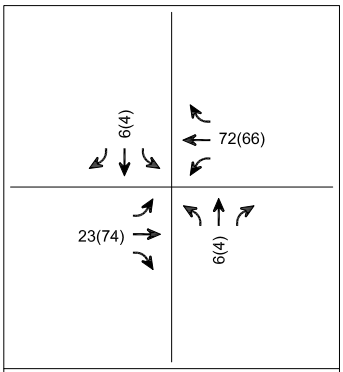
FIGURE 21 (CONT.)



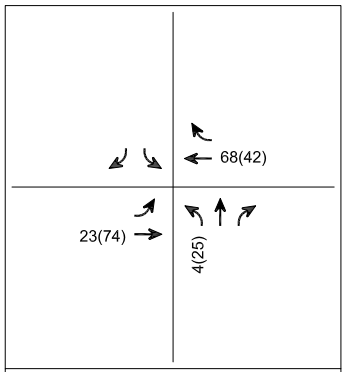
1. SR-170 SB Off-Ramp & Burbank Boulevard



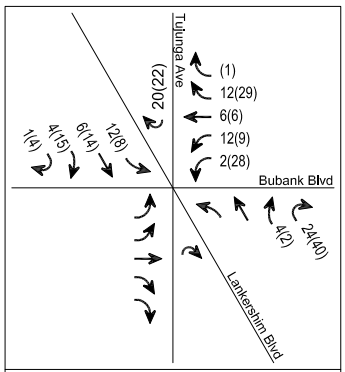
2. SR-170 NB On-Ramp & Burbank Boulevard



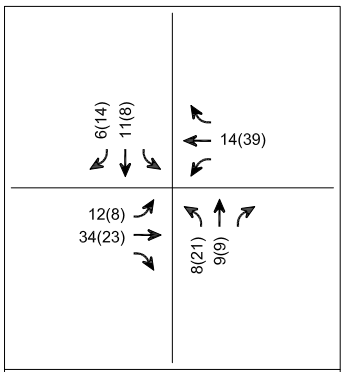
3. Colfax Avenue & Burbank Boulevard



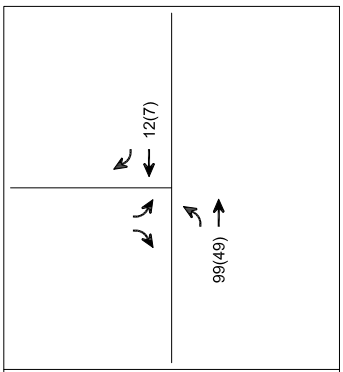
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



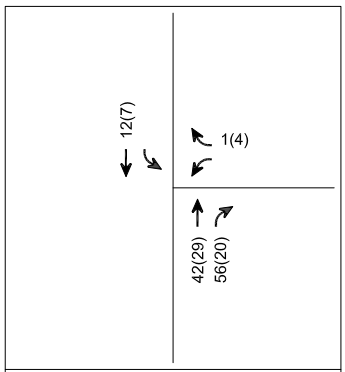
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



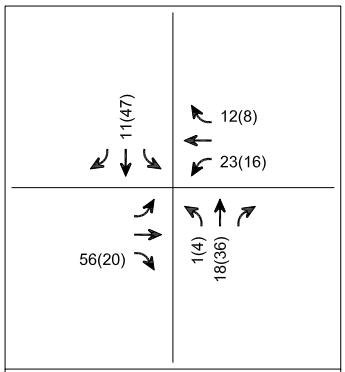
6. Vineland Avenue & Burbank Boulevard



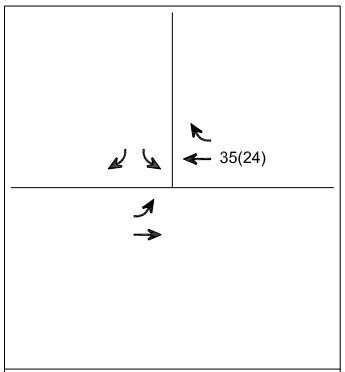
7. Tujunga Avenue & Cumpston Street (West)



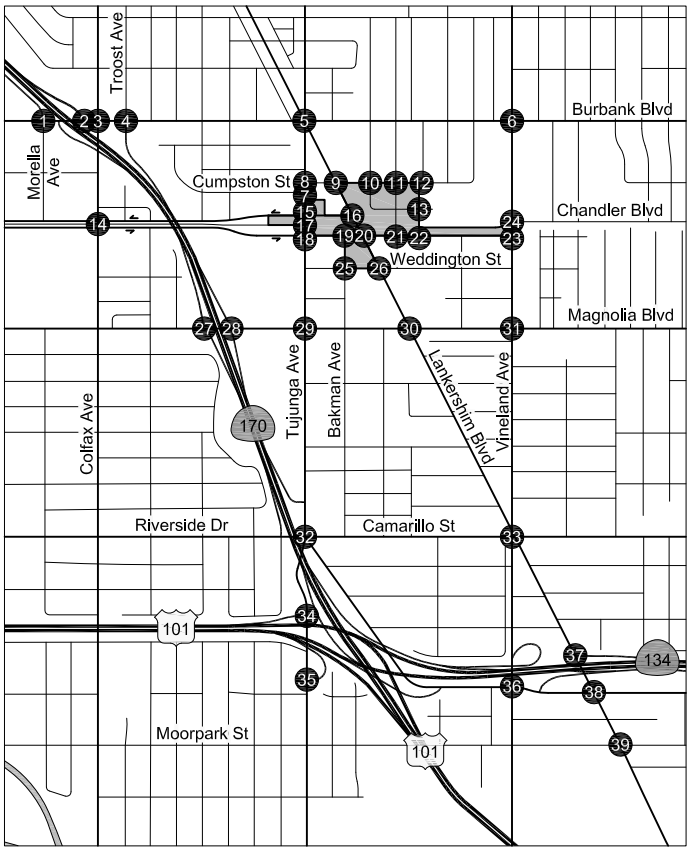
8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street



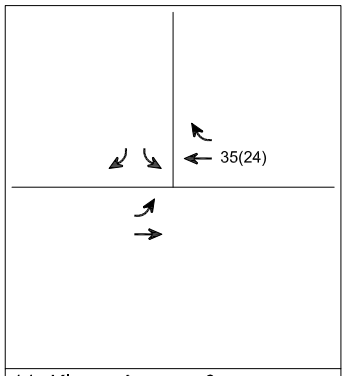
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

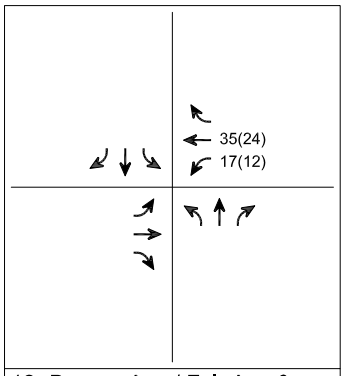
N
Not to Scale

RELATED PROJECT ONLY
PEAK HOUR TRAFFIC VOLUMES

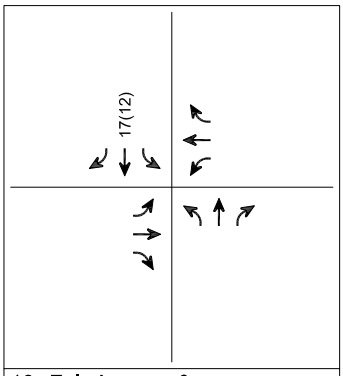
FIGURE 22



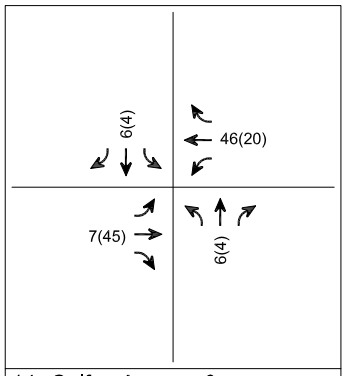
11. Klump Avenue & Cumpston Street



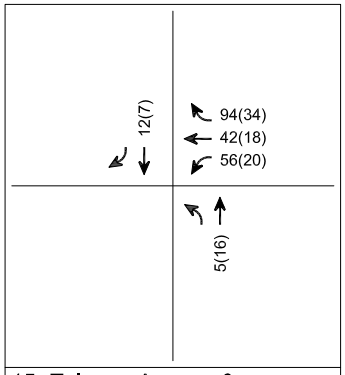
12. Bonner Ave / Fair Ave & Cumpston Street



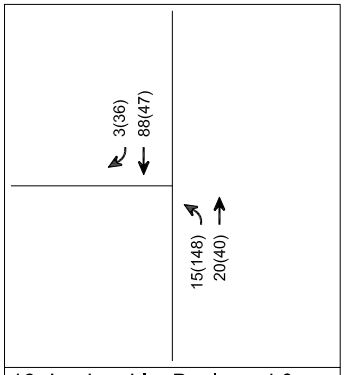
13. Fair Avenue & District Way



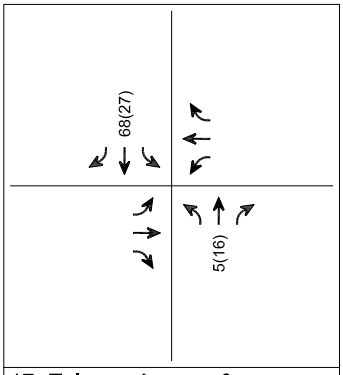
14. Colfax Avenue & Chandler Boulevard



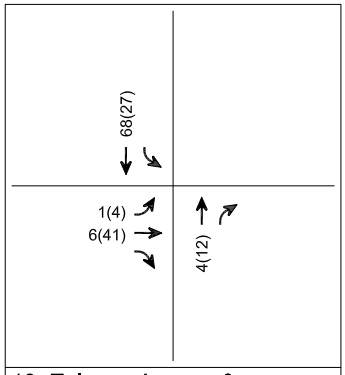
15. Tujunga Avenue & Chandler Boulevard WB



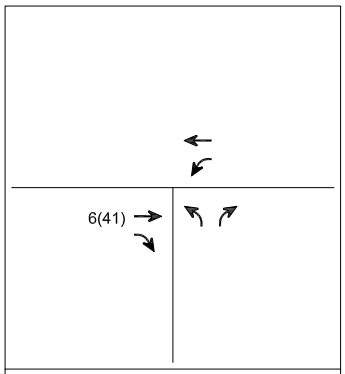
16. Lankershim Boulevard & Chandler Boulevard WB



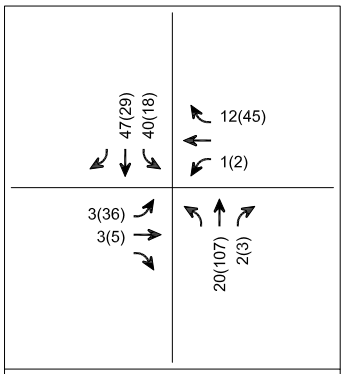
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

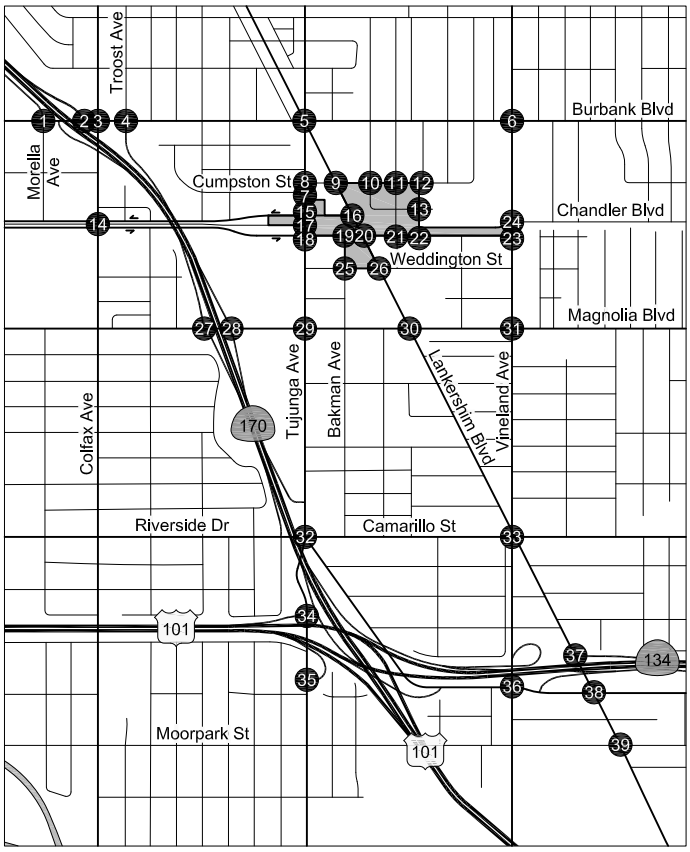
LEGEND

Project Site

Analyzed Intersection

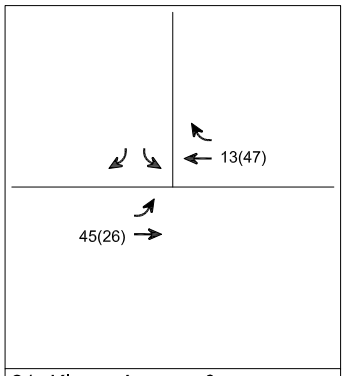
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

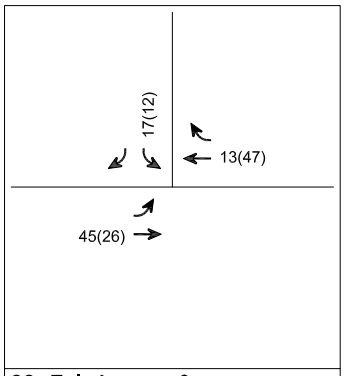


RELATED PROJECT ONLY
PEAK HOUR TRAFFIC VOLUMES

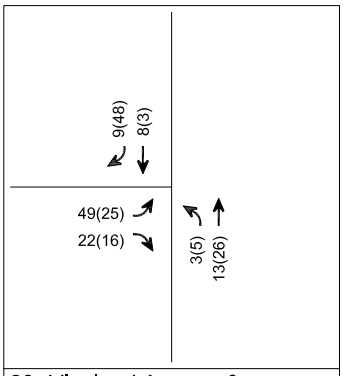
FIGURE 22 (CONT.)



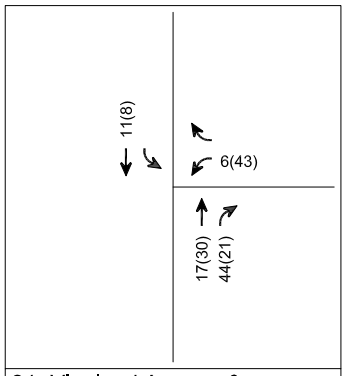
21. Klump Avenue & Chandler Boulevard



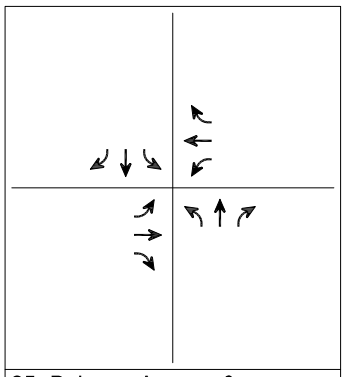
22. Fair Avenue & Chandler Boulevard



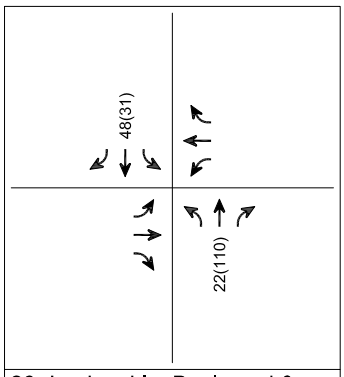
23. Vineland Avenue & Chandler Boulevard (West)



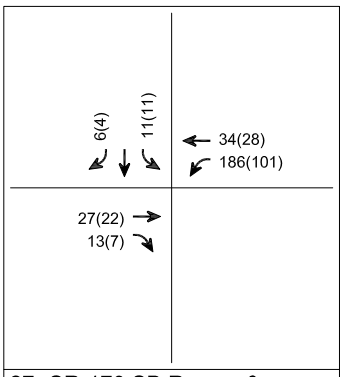
24. Vineland Avenue & Chandler Boulevard (East)



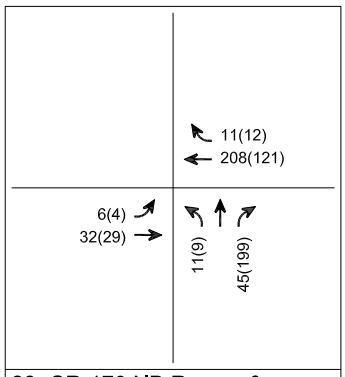
25. Bakman Avenue & Weddington Street



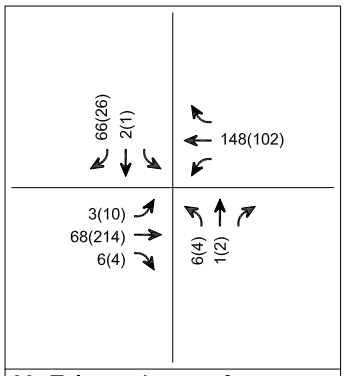
26. Lankershim Boulevard & Weddington Street



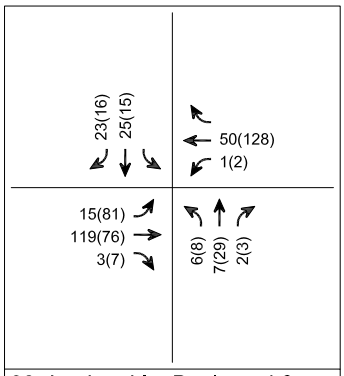
27. SR-170 SB Ramps & Magnolia Boulevard



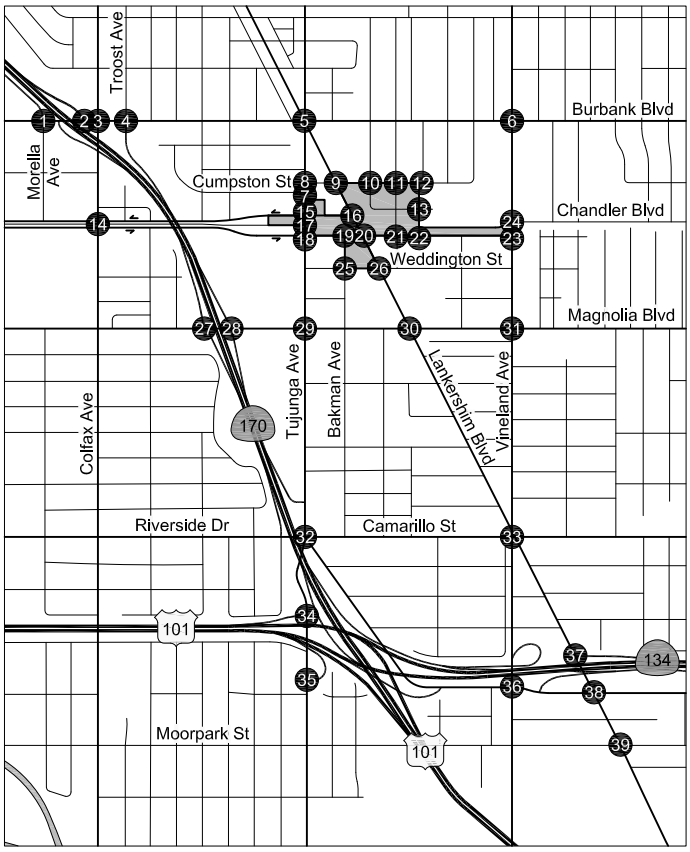
28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard



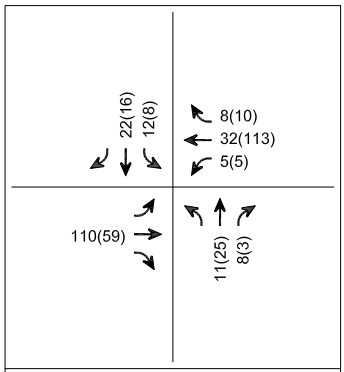
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

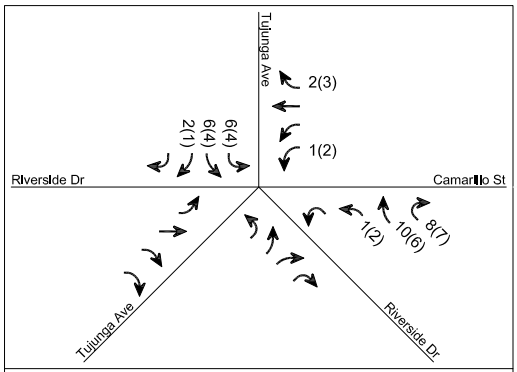
N
Not to Scale

RELATED PROJECT ONLY
PEAK HOUR TRAFFIC VOLUMES

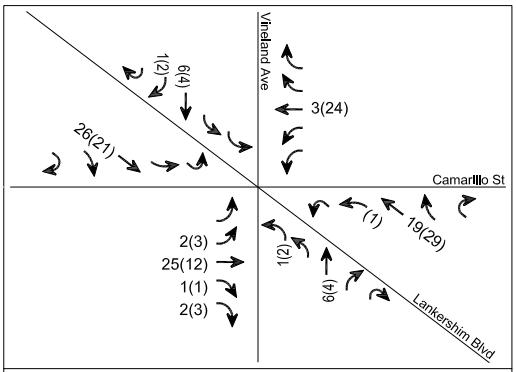
FIGURE 22 (CONT.)



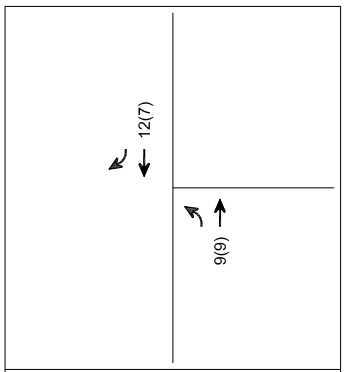
31. Vineland Avenue & Magnolia Boulevard



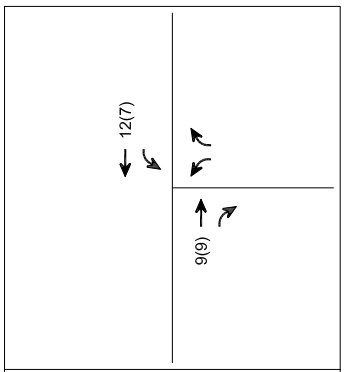
32. Tujunga Avenue / Riverside Drive & Camarillo Street



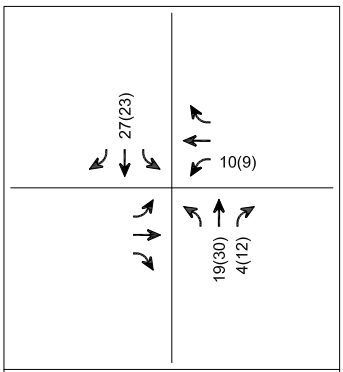
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



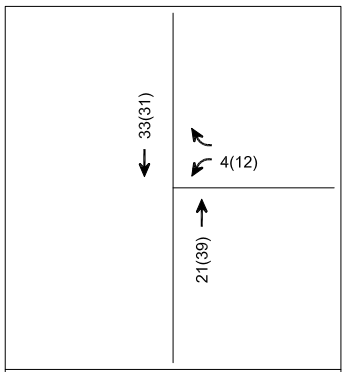
34. Tujunga Avenue & US 101 WB On-Ramp



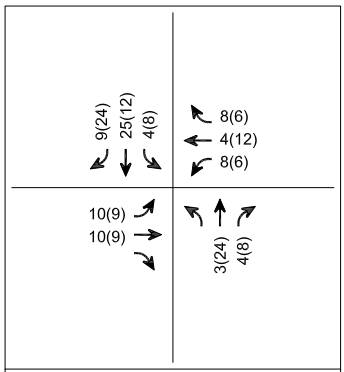
35. Tujunga Avenue & US 101 EB Off-Ramp



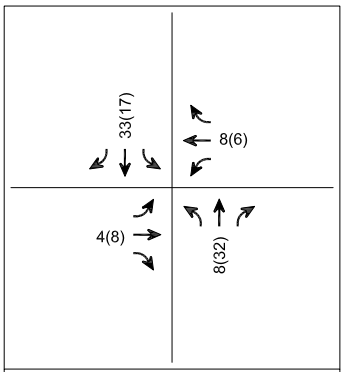
36. Vineland Avenue & Riverside Drive



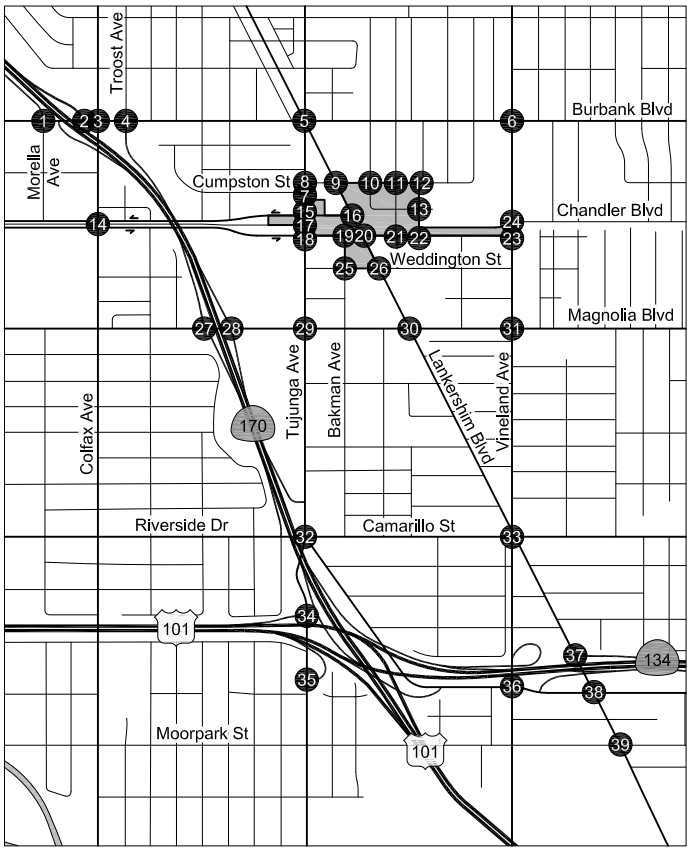
37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street



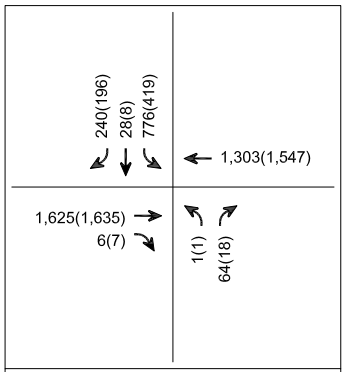
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

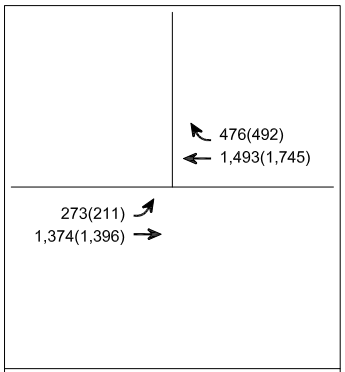
N
Not to Scale

RELATED PROJECT ONLY
PEAK HOUR TRAFFIC VOLUMES

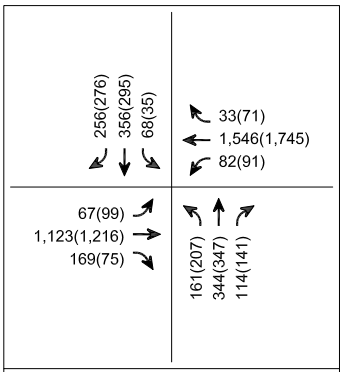
FIGURE 22 (CONT.)



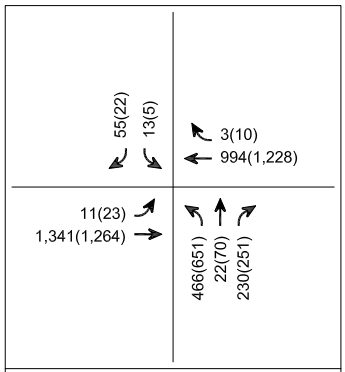
1. SR-170 SB Off-Ramp & Burbank Boulevard



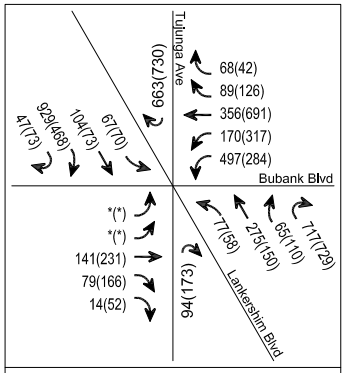
2. SR-170 NB On-Ramp & Burbank Boulevard



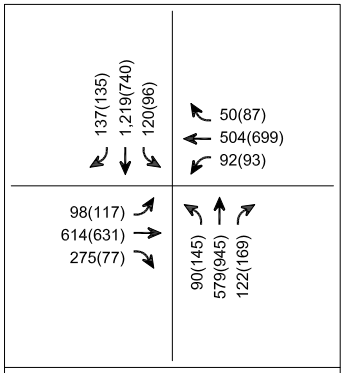
3. Colfax Avenue & Burbank Boulevard



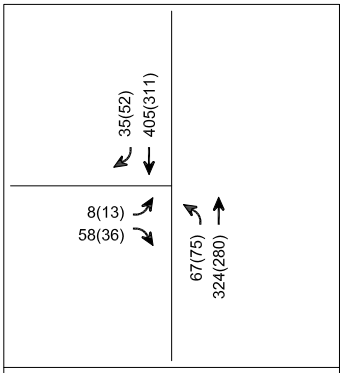
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



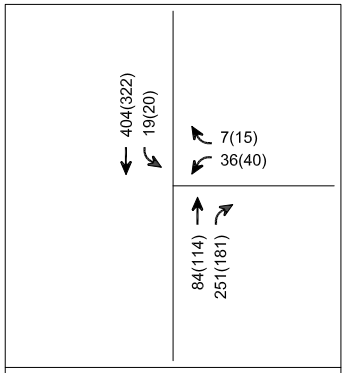
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



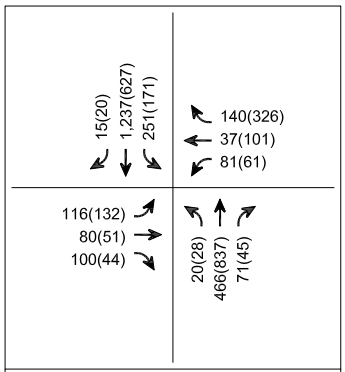
6. Vineland Avenue & Burbank Boulevard



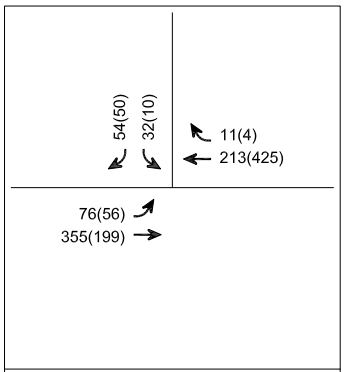
7. Tujunga Avenue & Cumpston Street (West)



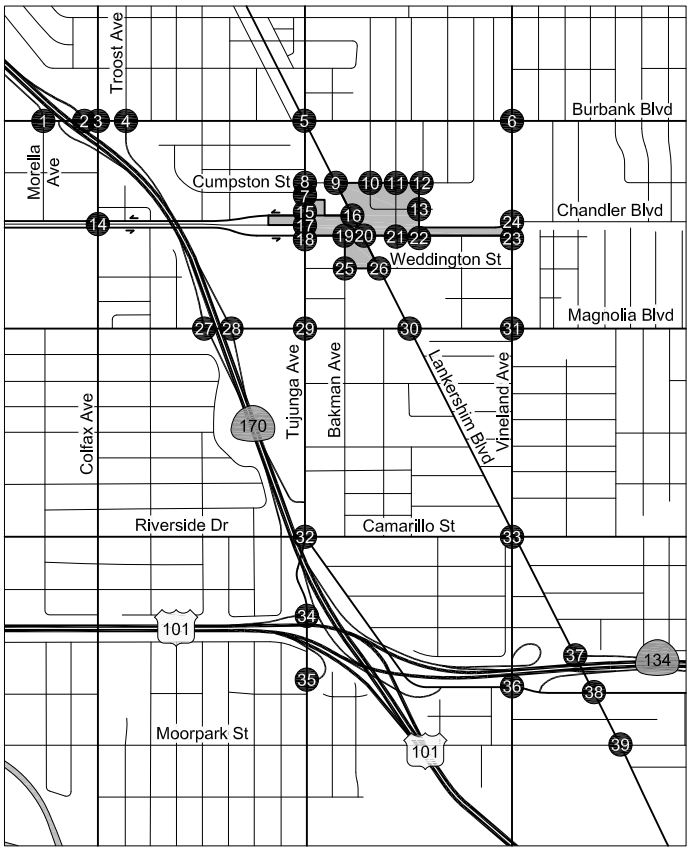
8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street



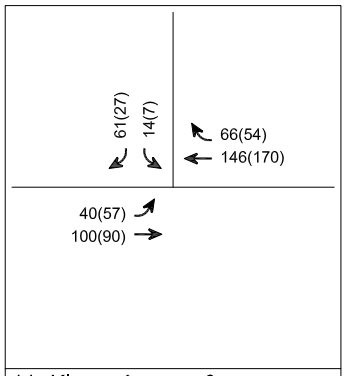
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

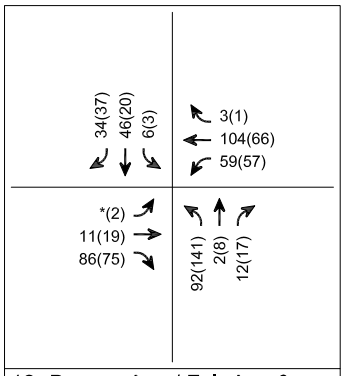
N
Not to Scale

FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

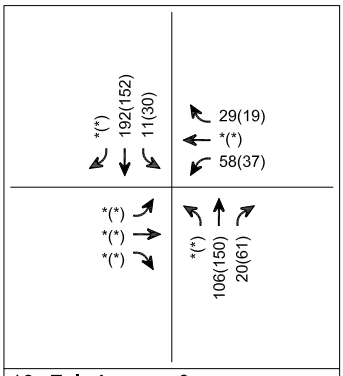
FIGURE 23



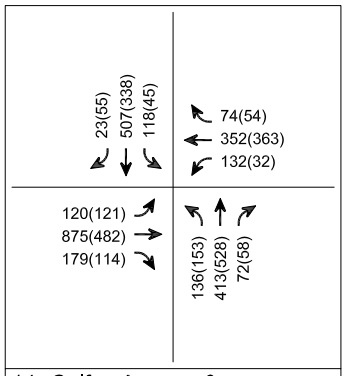
11. Klump Avenue & Cumpston Street



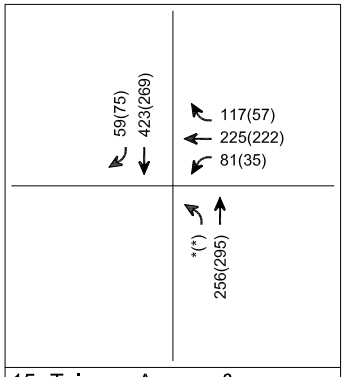
12. Bonner Ave / Fair Ave & Cumpston Street



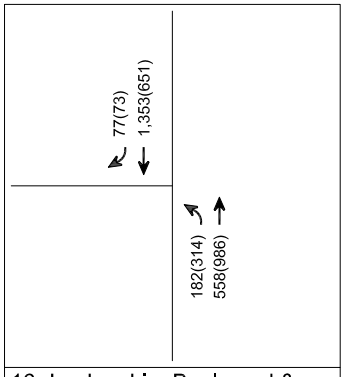
13. Fair Avenue & District Way



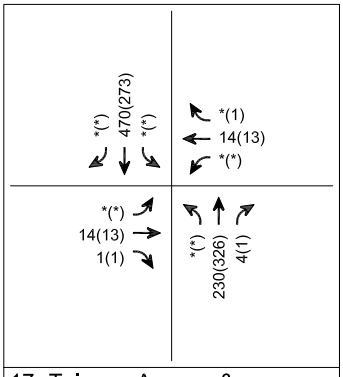
14. Colfax Avenue & Chandler Boulevard



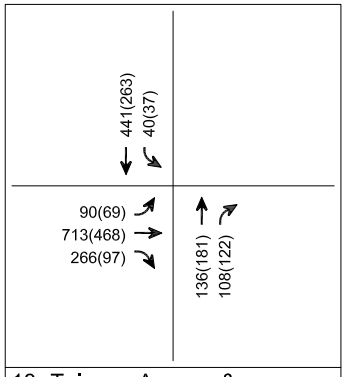
15. Tujunga Avenue & Chandler Boulevard WB



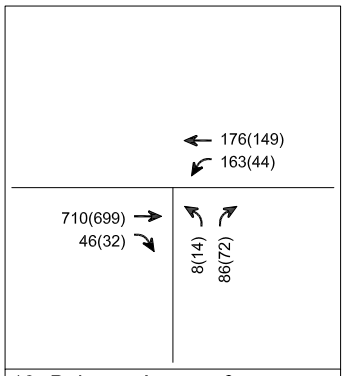
16. Lankershim Boulevard & Chandler Boulevard WB



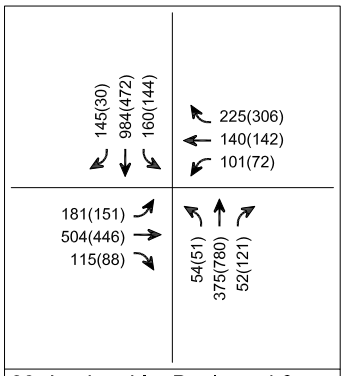
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard

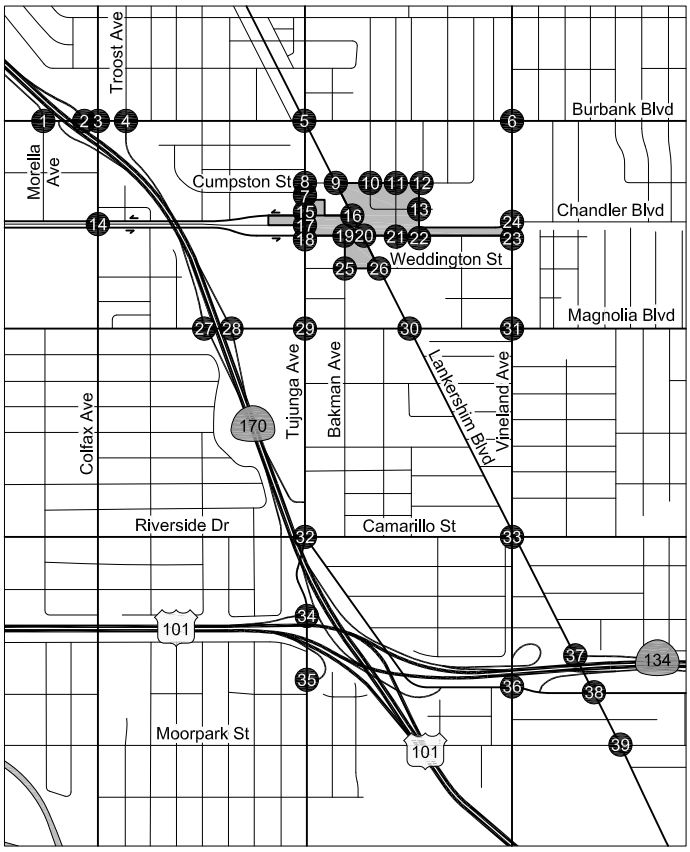


20. Lankershim Boulevard & Chandler Boulevard

LEGEND

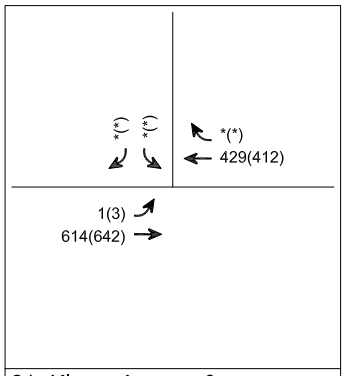
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

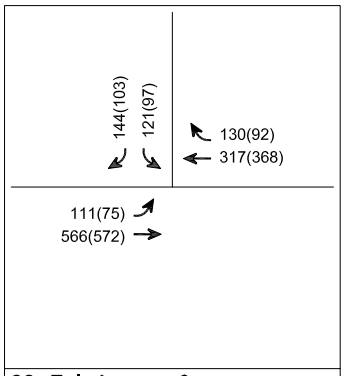


FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

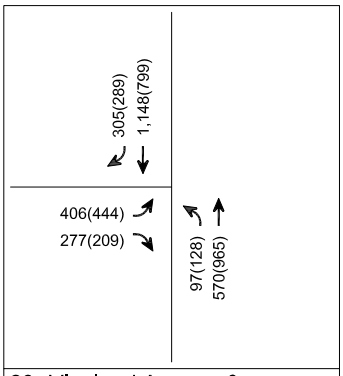
FIGURE 23 (CONT.)



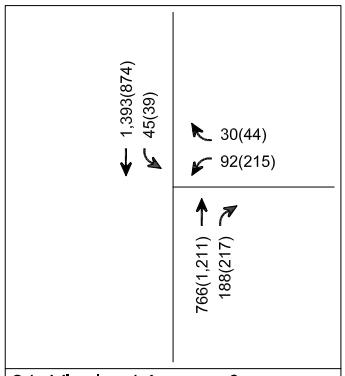
21. Klump Avenue & Chandler Boulevard



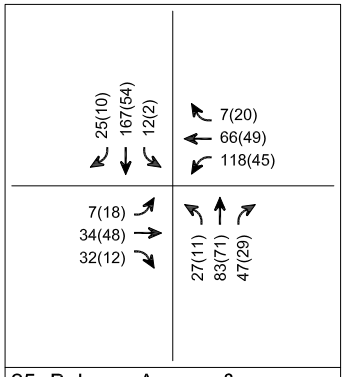
22. Fair Avenue & Chandler Boulevard



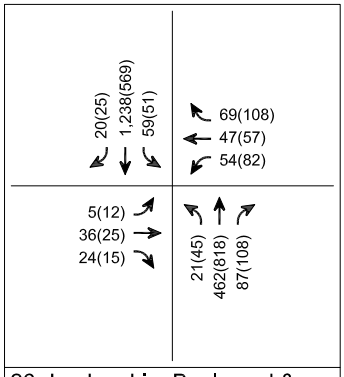
23. Vineland Avenue & Chandler Boulevard (West)



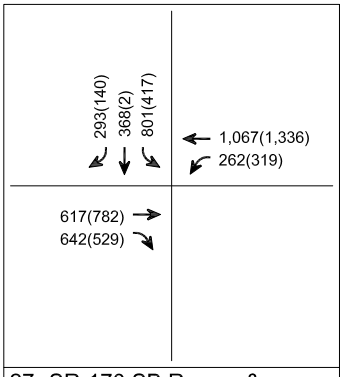
24. Vineland Avenue & Chandler Boulevard (East)



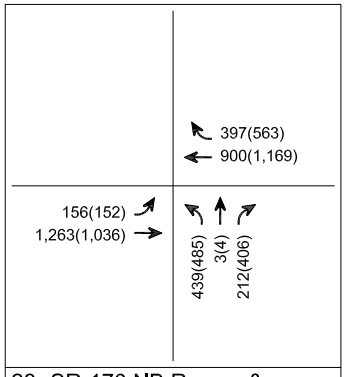
25. Bakman Avenue & Weddington Street



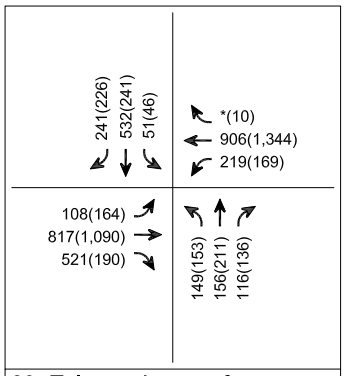
26. Lankershim Boulevard & Weddington Street



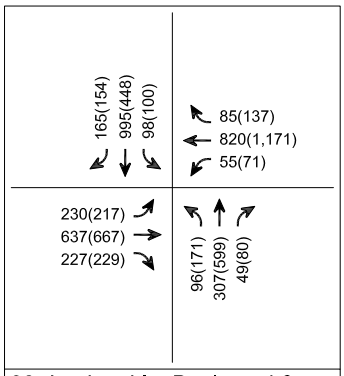
27. SR-170 SB Ramps & Magnolia Boulevard



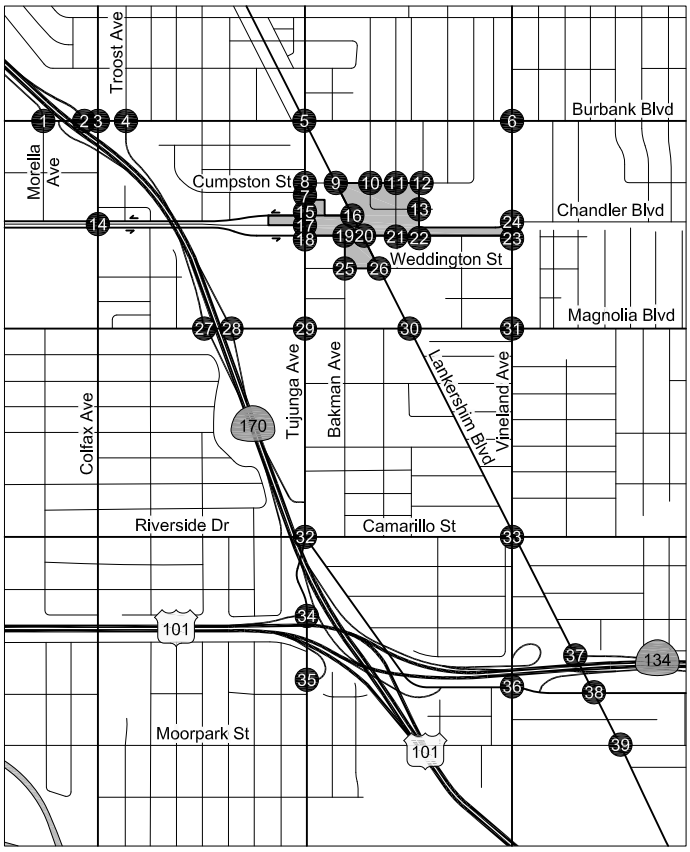
28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard



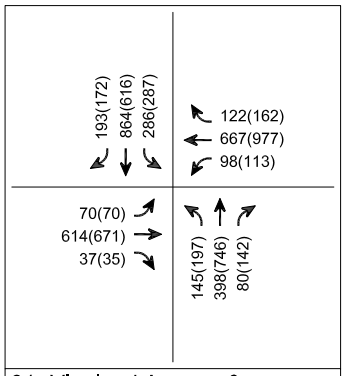
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

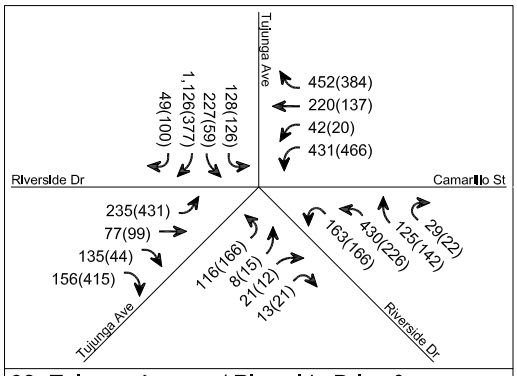
N
Not to Scale

FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

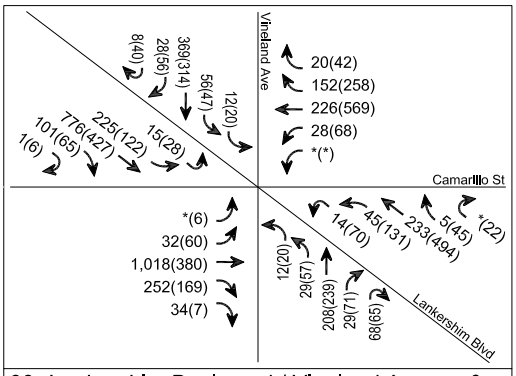
FIGURE 23 (CONT.)



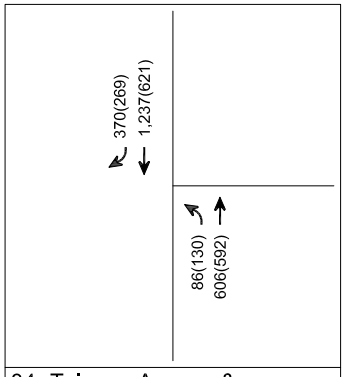
31. Vineland Avenue & Magnolia Boulevard



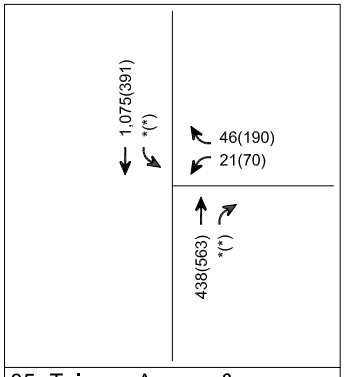
32. Tujunga Avenue / Riverside Drive & Camarillo Street



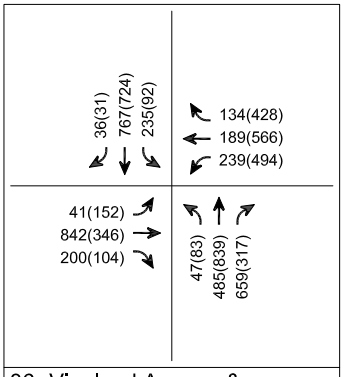
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



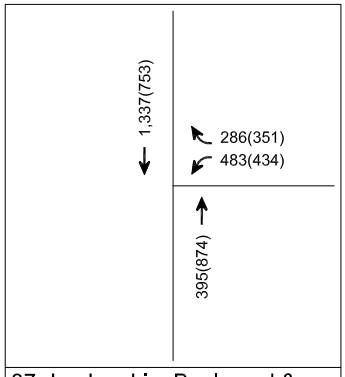
34. Tujunga Avenue & US 101 WB On-Ramp



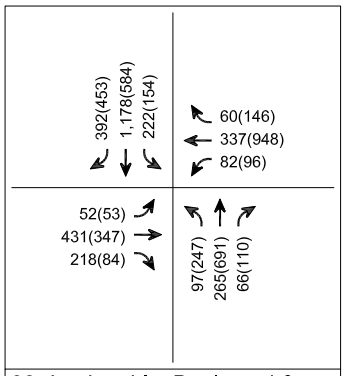
35. Tujunga Avenue & US 101 EB Off-Ramp



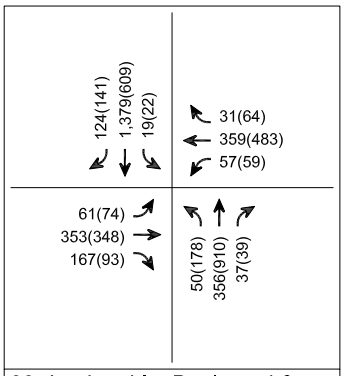
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive

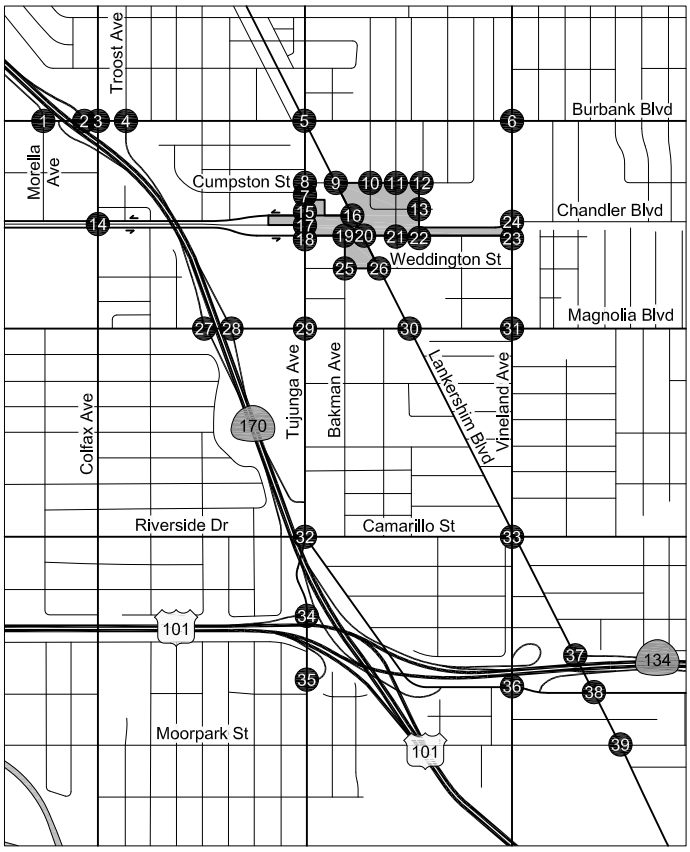


39. Lankershim Boulevard & Moorpark Street

LEGEND

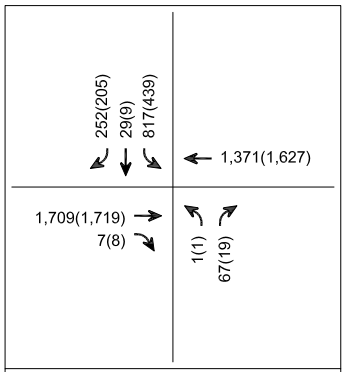
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

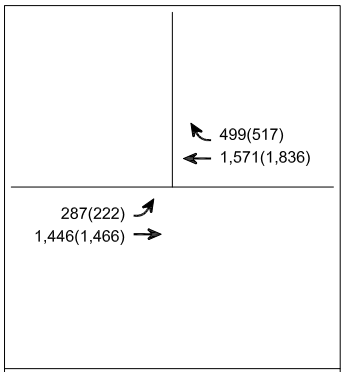


FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

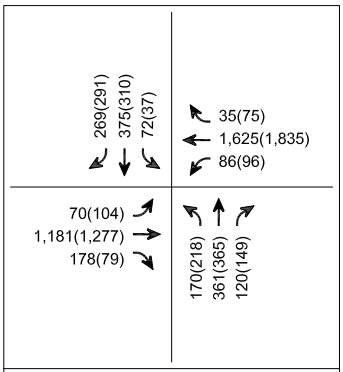
FIGURE 23 (CONT.)



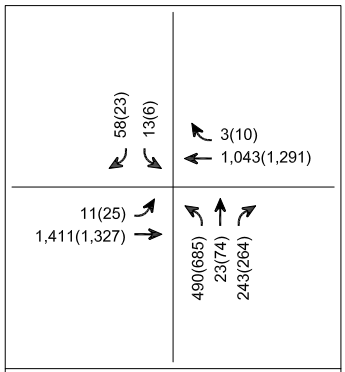
1. SR-170 SB Off-Ramp & Burbank Boulevard



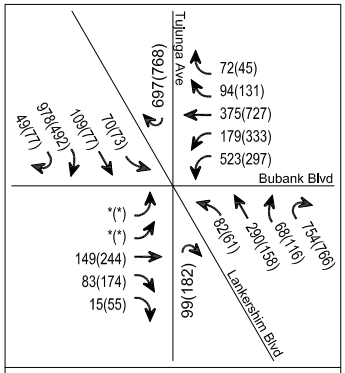
2. SR-170 NB On-Ramp & Burbank Boulevard



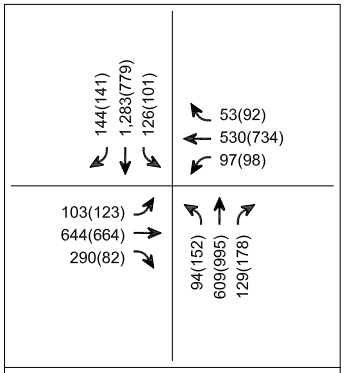
3. Colfax Avenue & Burbank Boulevard



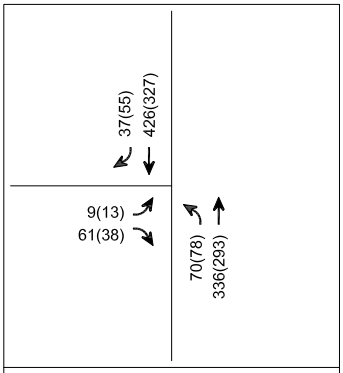
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



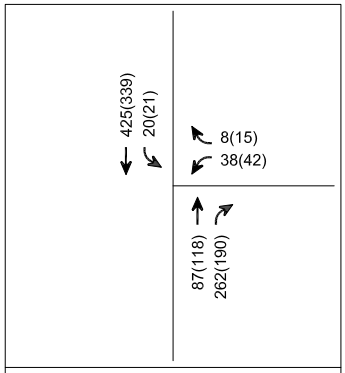
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



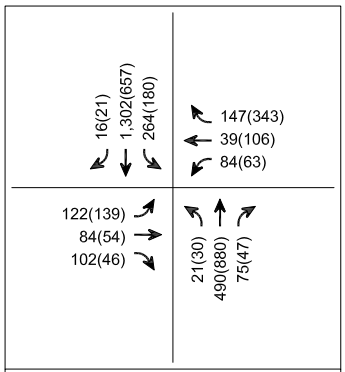
6. Vineland Avenue & Burbank Boulevard



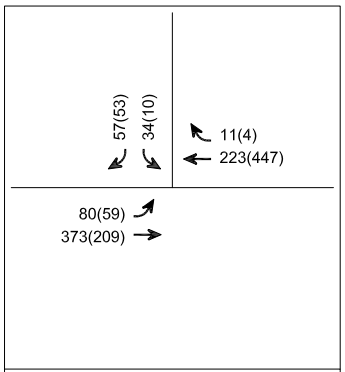
7. Tujunga Avenue & Cumpston Street (West)



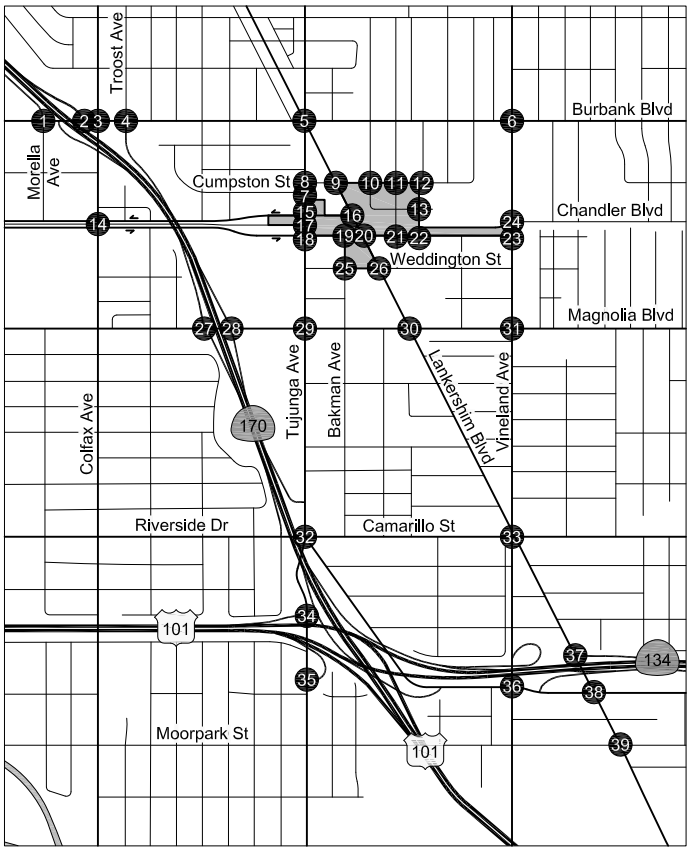
8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street



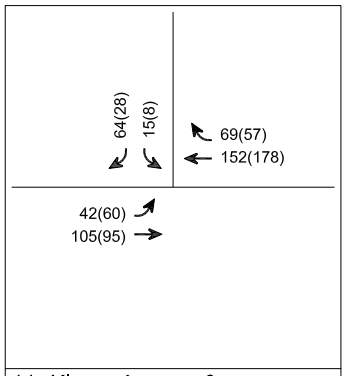
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

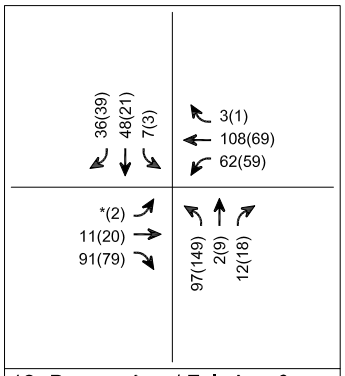
N
Not to Scale

FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2037)
PEAK HOUR TRAFFIC VOLUMES

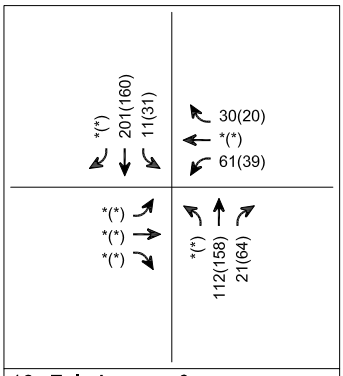
FIGURE 24



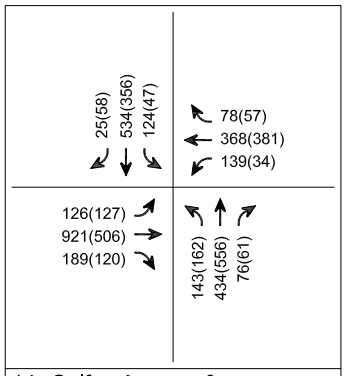
11. Klump Avenue & Cumpston Street



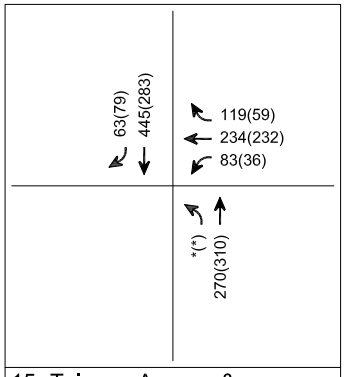
12. Bonner Ave / Fair Ave & Cumpston Street



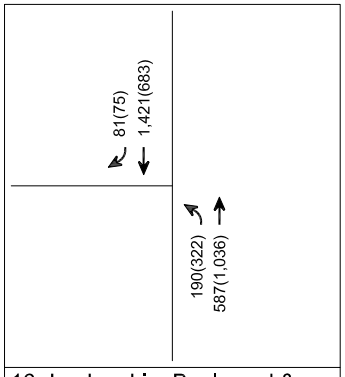
13. Fair Avenue & District Way



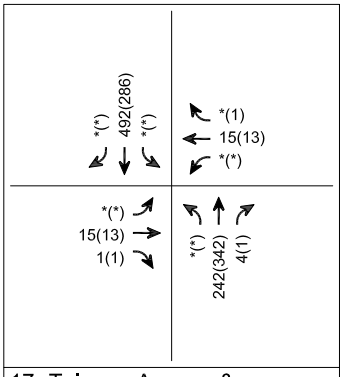
14. Colfax Avenue & Chandler Boulevard



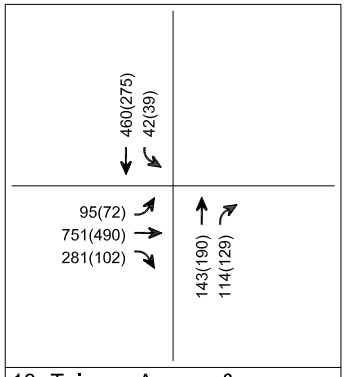
15. Tujunga Avenue & Chandler Boulevard WB



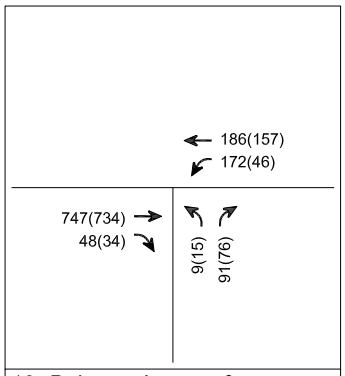
16. Lankershim Boulevard & Chandler Boulevard WB



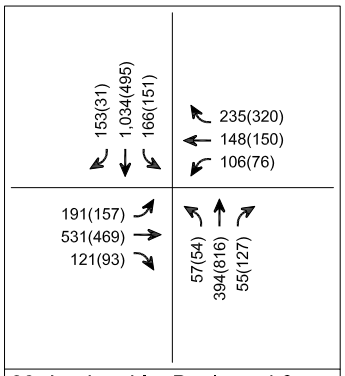
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard

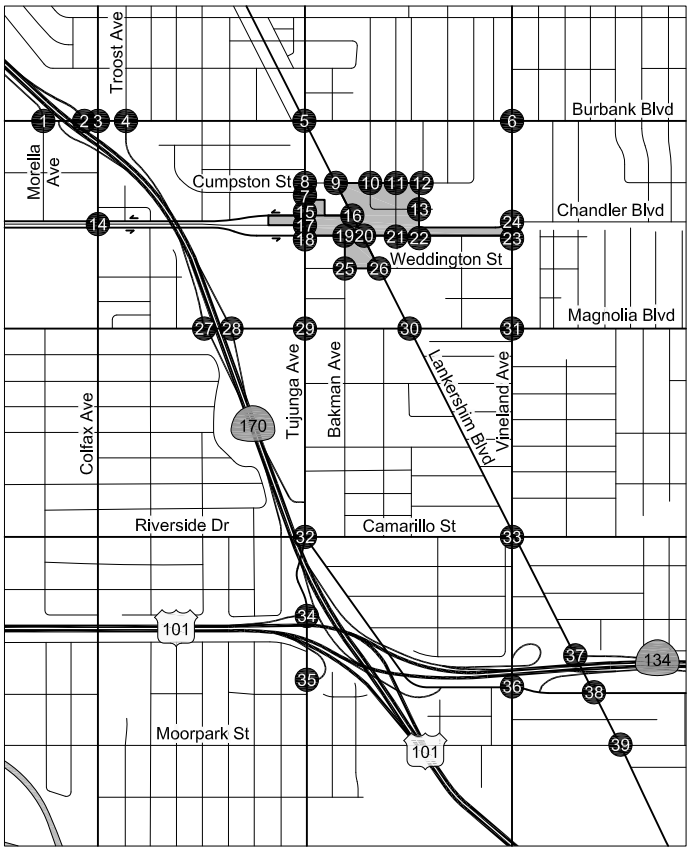


20. Lankershim Boulevard & Chandler Boulevard

LEGEND

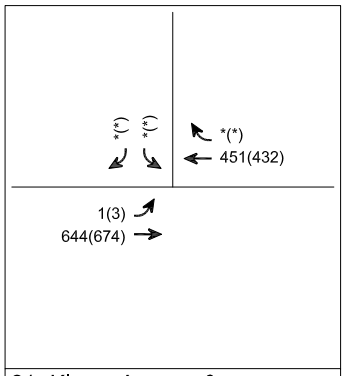
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

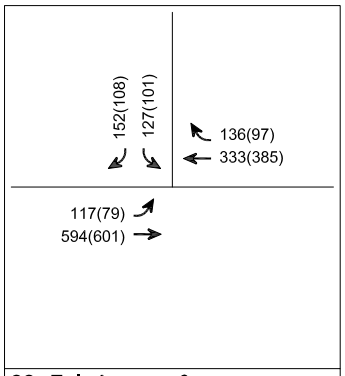


FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2037)
PEAK HOUR TRAFFIC VOLUMES

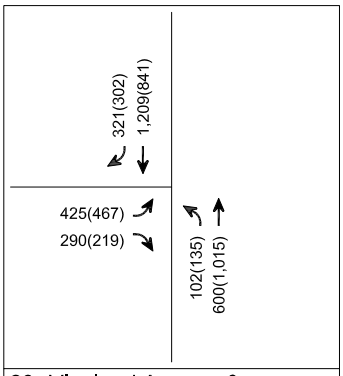
FIGURE 24 (CONT.)



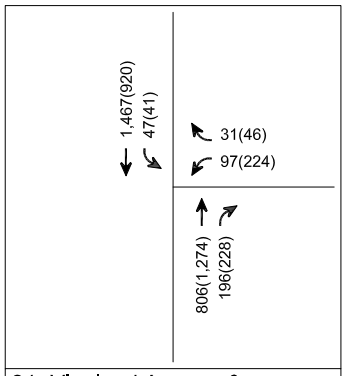
21. Klump Avenue & Chandler Boulevard



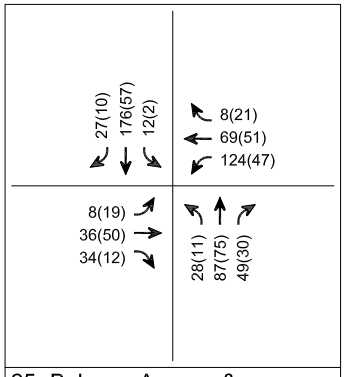
22. Fair Avenue & Chandler Boulevard



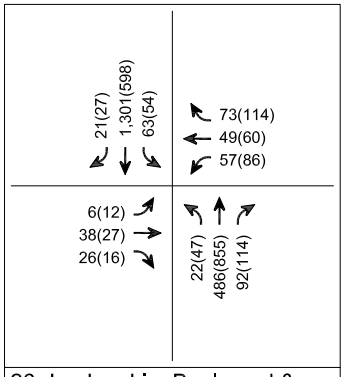
23. Vineland Avenue & Chandler Boulevard (West)



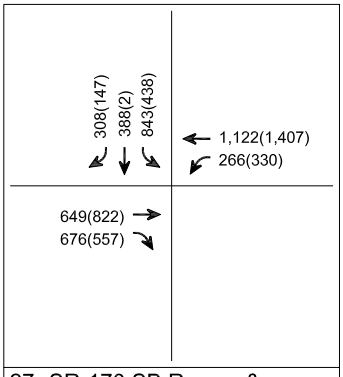
24. Vineland Avenue & Chandler Boulevard (East)



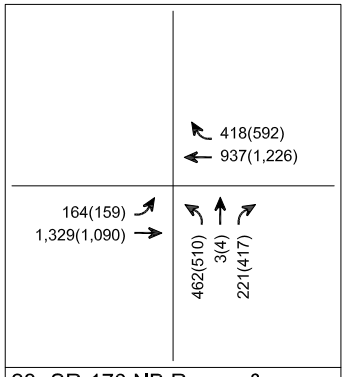
25. Bakman Avenue & Weddington Street



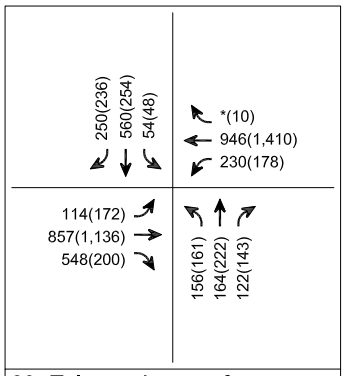
26. Lankershim Boulevard & Weddington Street



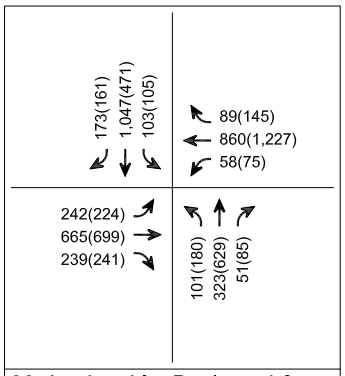
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard

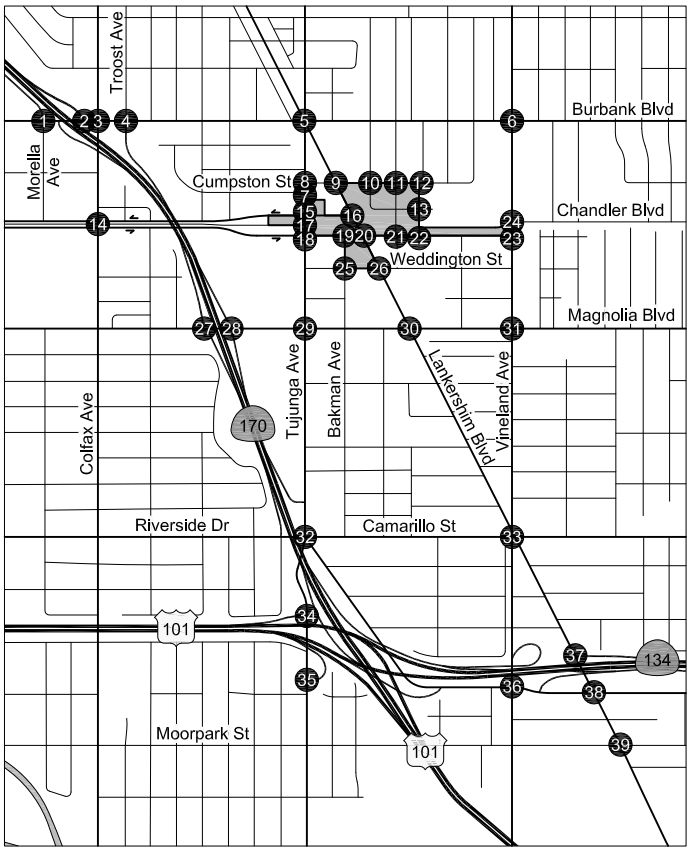


30. Lankershim Boulevard & Magnolia Boulevard

LEGEND

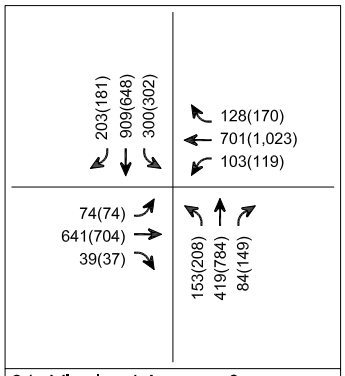
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

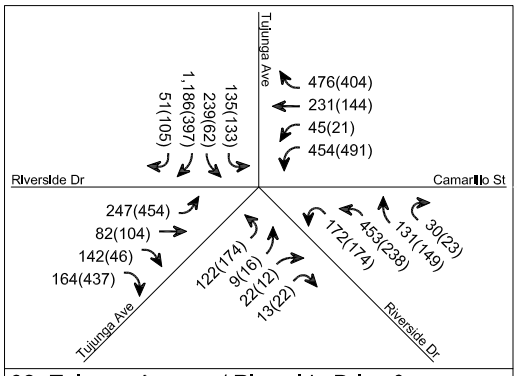


FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2037)
PEAK HOUR TRAFFIC VOLUMES

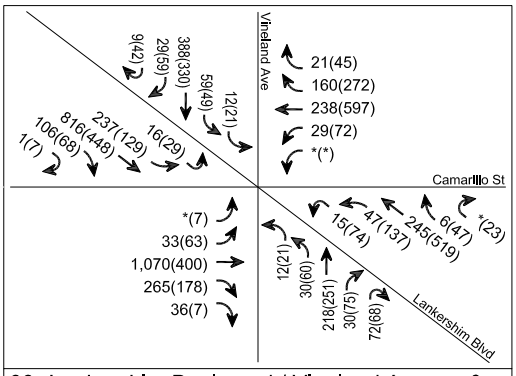
FIGURE 24 (CONT.)



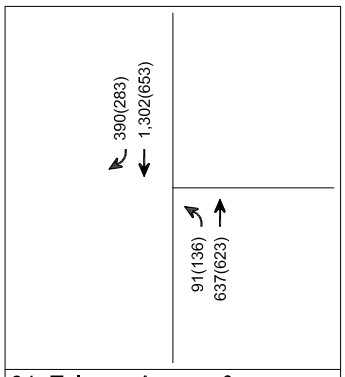
31. Vineland Avenue & Magnolia Boulevard



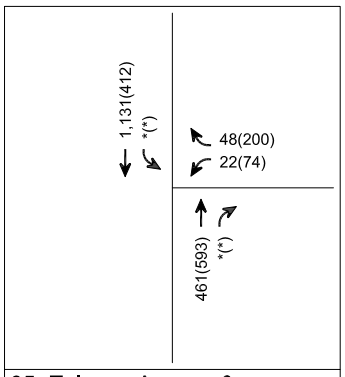
32. Tujunga Avenue / Riverside Drive & Camarillo Street



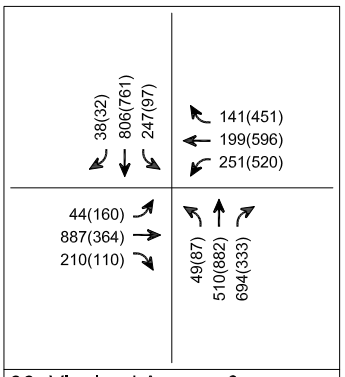
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



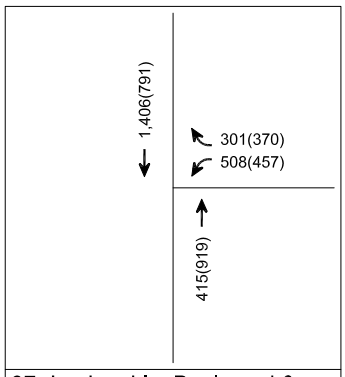
34. Tujunga Avenue & US 101 WB On-Ramp



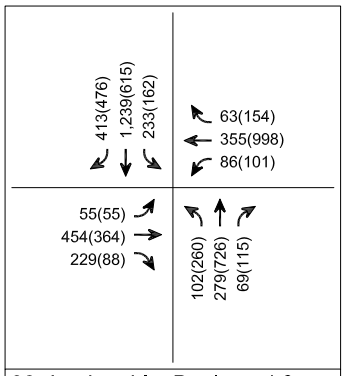
35. Tujunga Avenue & US 101 EB Off-Ramp



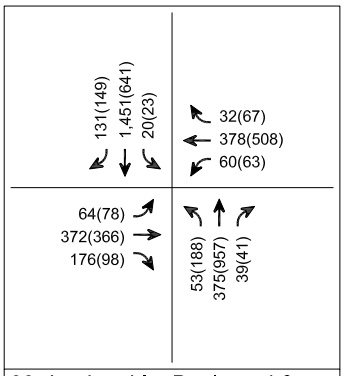
36. Vineland Avenue & Riverside Drive



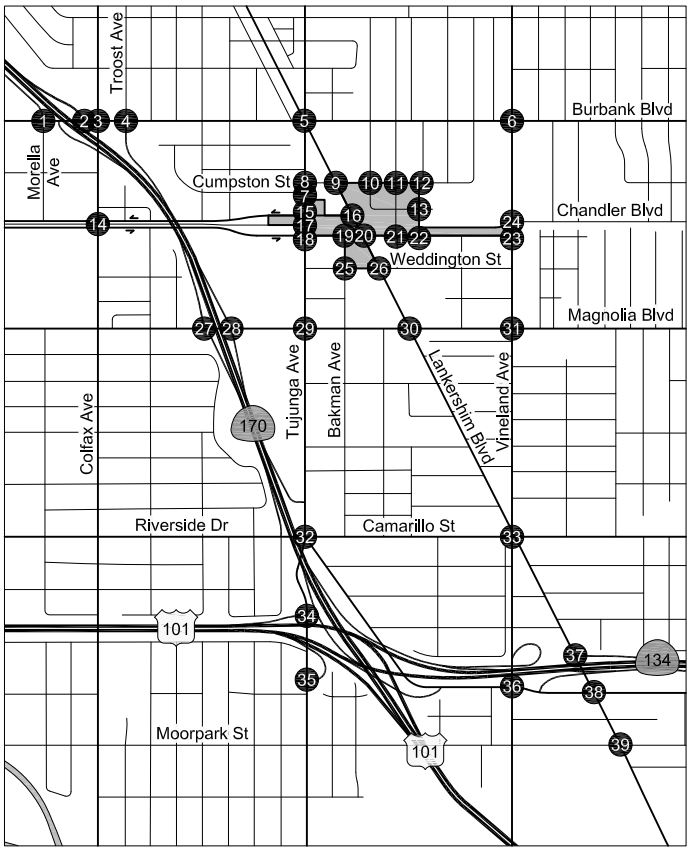
37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street



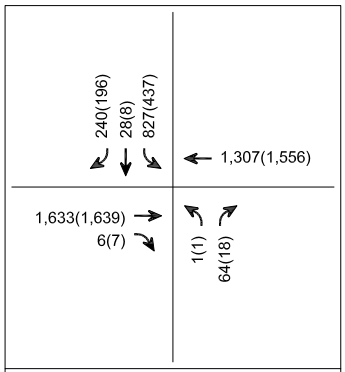
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

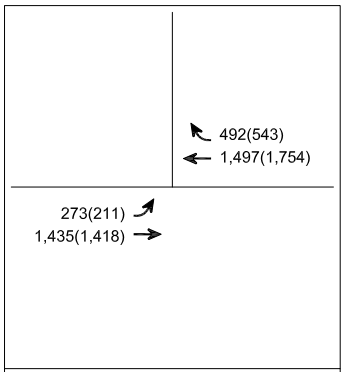
N
Not to Scale

FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2037)
PEAK HOUR TRAFFIC VOLUMES

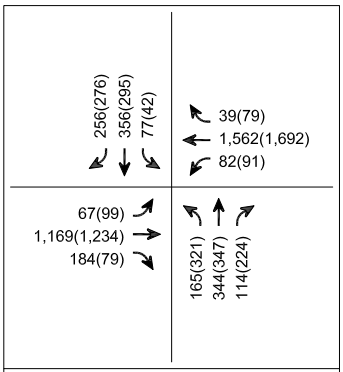
FIGURE 24 (CONT.)



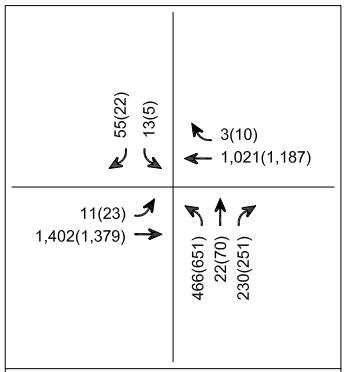
1. SR-170 SB Off-Ramp & Burbank Boulevard



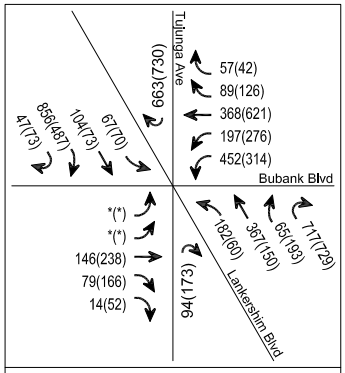
2. SR-170 NB On-Ramp & Burbank Boulevard



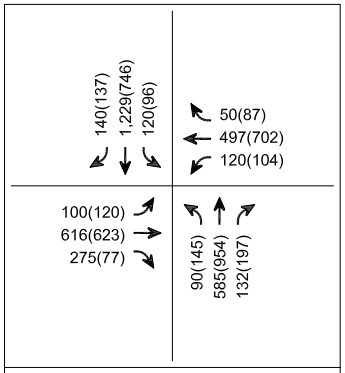
3. Colfax Avenue & Burbank Boulevard



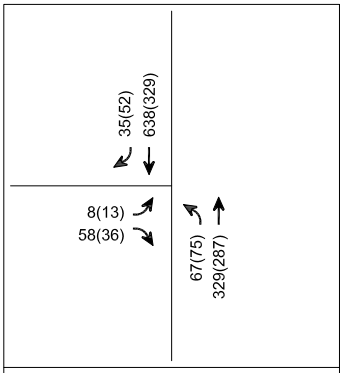
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



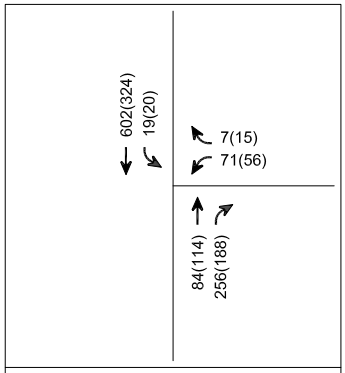
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



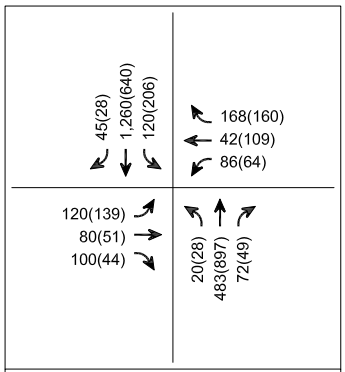
6. Vineland Avenue & Burbank Boulevard



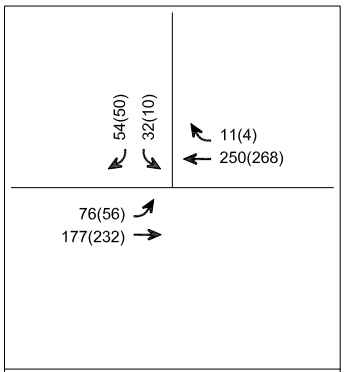
7. Tujunga Avenue & Cumpston Street (West)



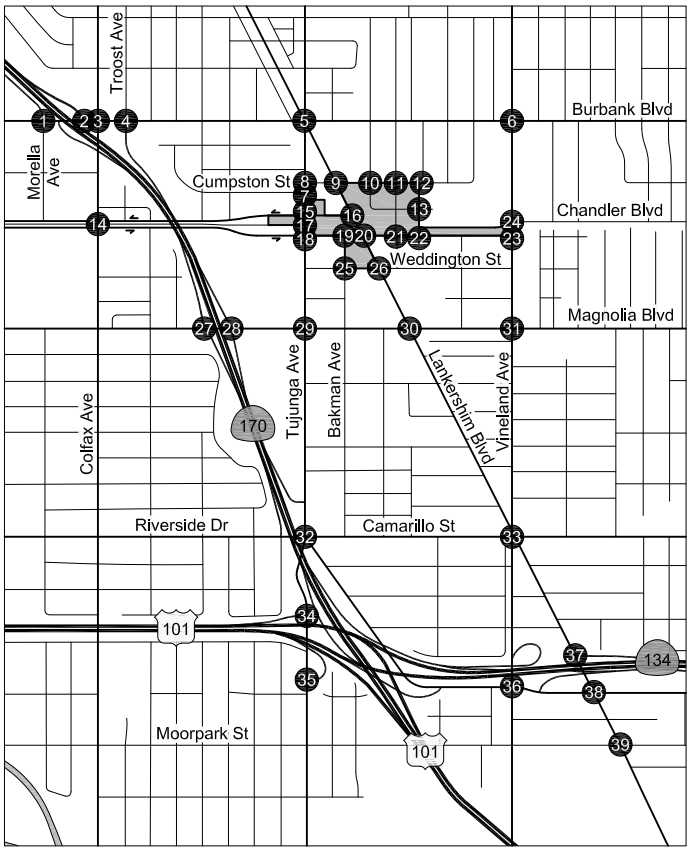
8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street



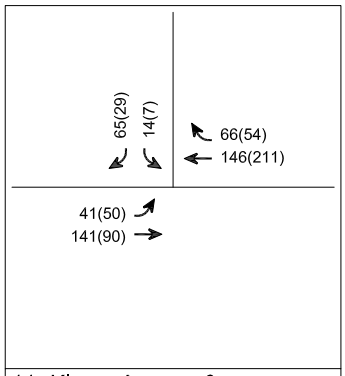
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

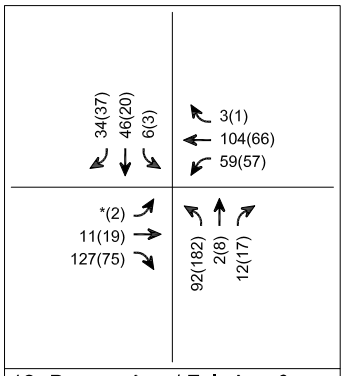
N
Not to Scale

FUTURE WITH PHASE 1 CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

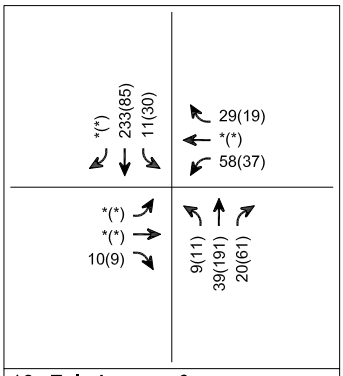
FIGURE 25



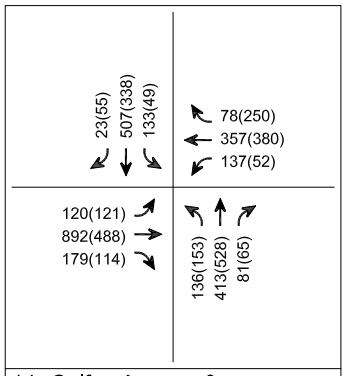
11. Klump Avenue & Cumpston Street



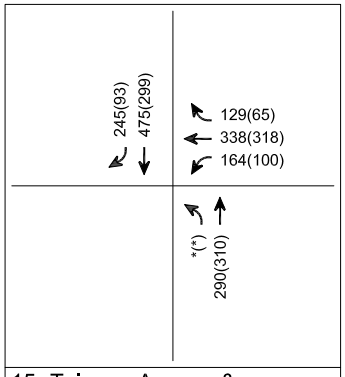
12. Bonner Ave / Fair Ave & Cumpston Street



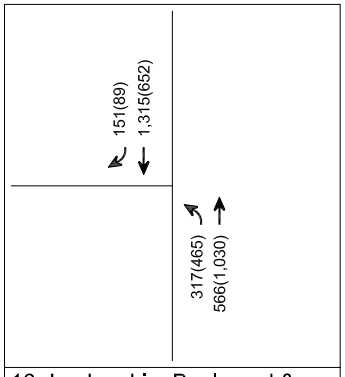
13. Fair Avenue & District Way



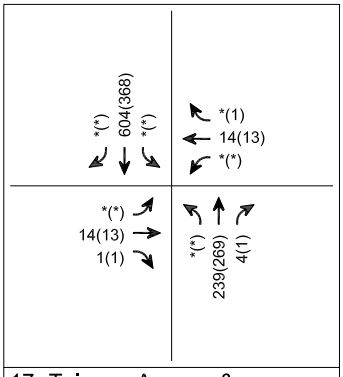
14. Colfax Avenue & Chandler Boulevard



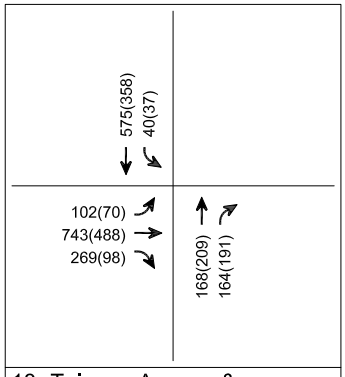
15. Tujunga Avenue & Chandler Boulevard WB



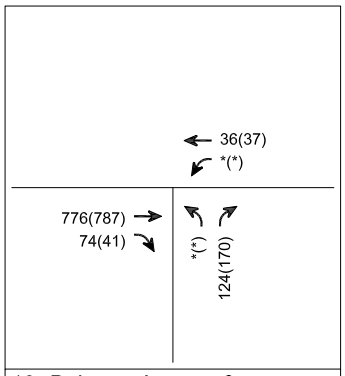
16. Lankershim Boulevard & Chandler Boulevard WB



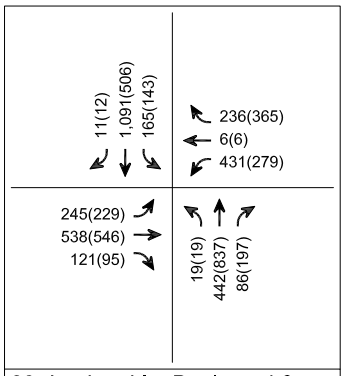
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard

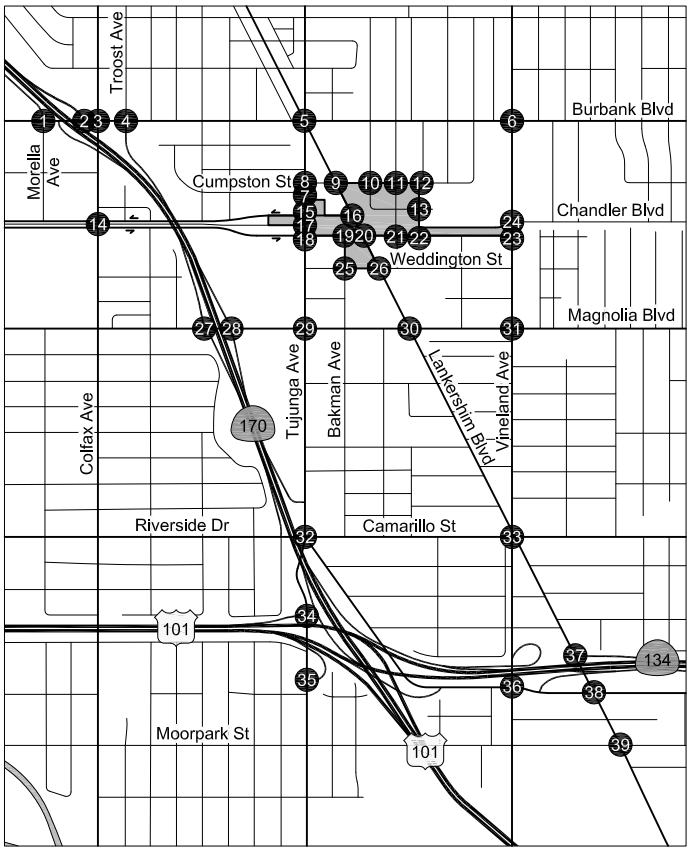


20. Lankershim Boulevard & Chandler Boulevard

LEGEND

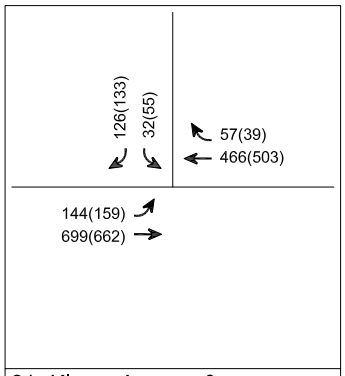
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

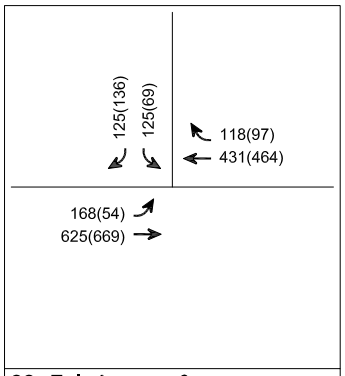


FUTURE WITH PHASE 1 CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

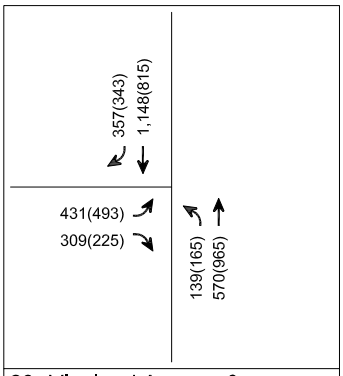
FIGURE 25 (CONT.)



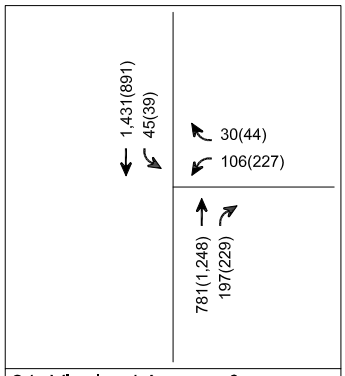
21. Klump Avenue & Chandler Boulevard



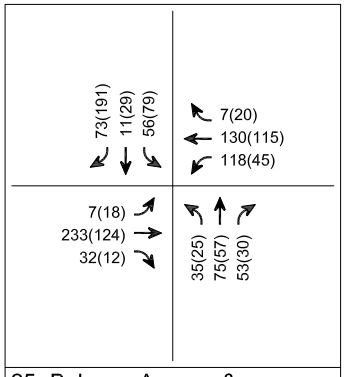
22. Fair Avenue & Chandler Boulevard



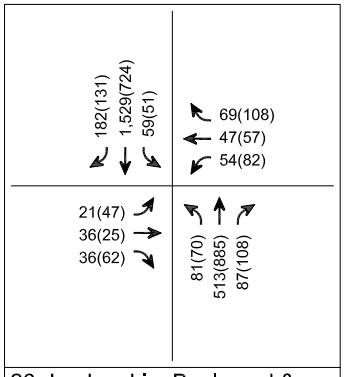
23. Vineland Avenue & Chandler Boulevard (West)



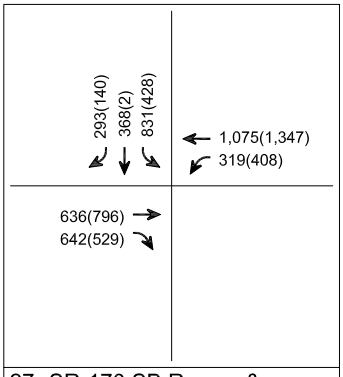
24. Vineland Avenue & Chandler Boulevard (East)



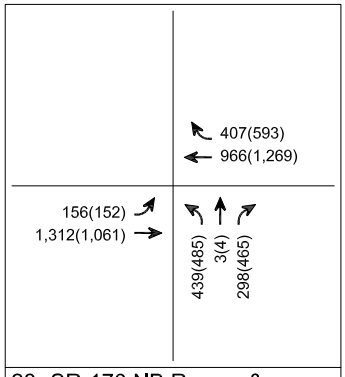
25. Bakman Avenue & Weddington Street



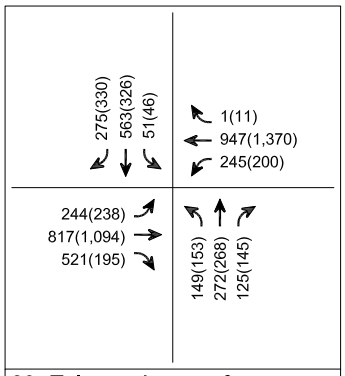
26. Lankershim Boulevard & Weddington Street



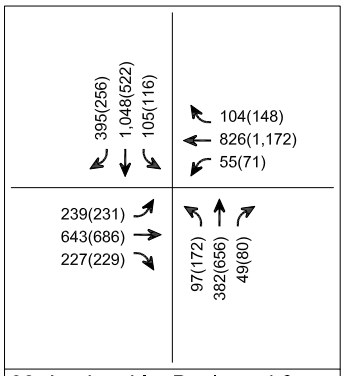
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard

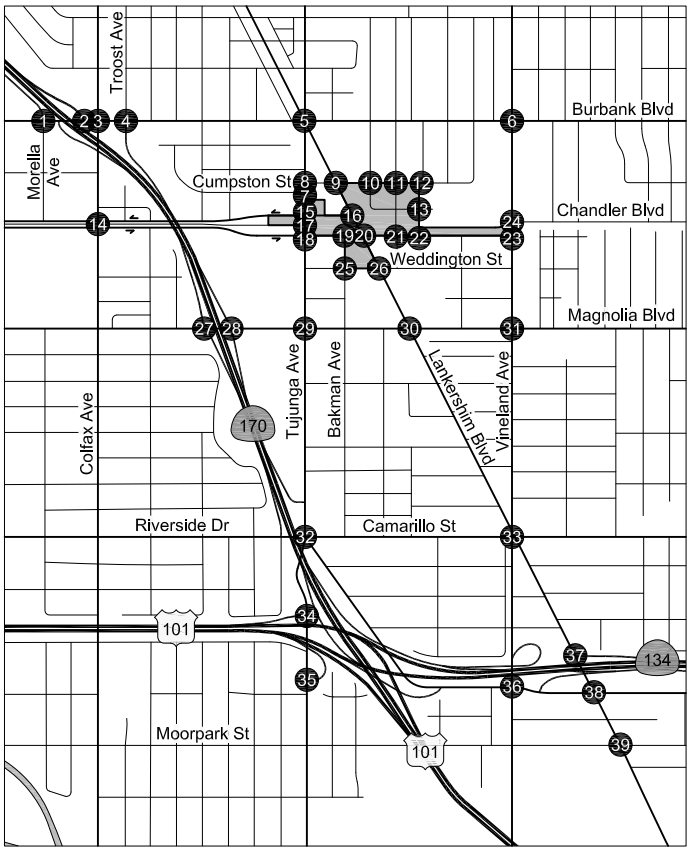


30. Lankershim Boulevard & Magnolia Boulevard

LEGEND

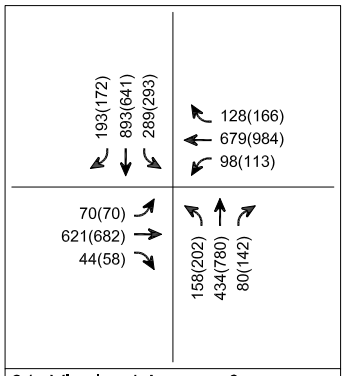
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

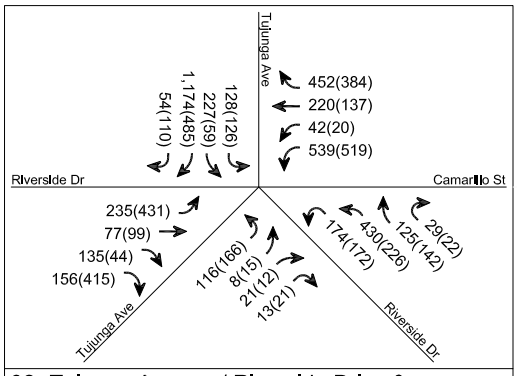


FUTURE WITH PHASE 1 CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

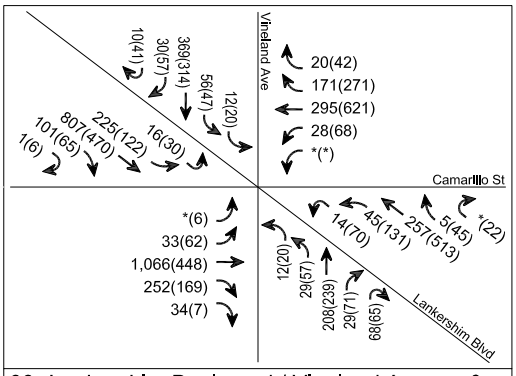
FIGURE 25 (CONT.)



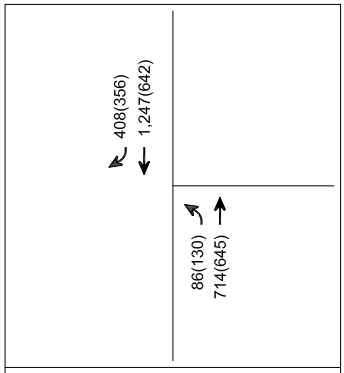
31. Vineland Avenue & Magnolia Boulevard



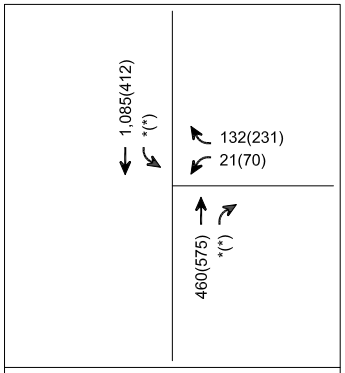
32. Tujunga Avenue / Riverside Drive & Camarillo Street



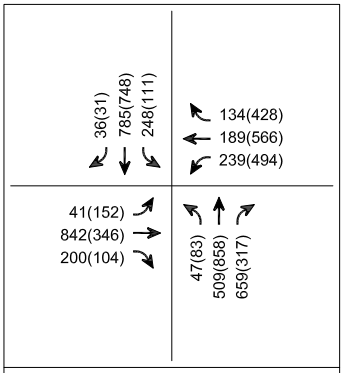
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



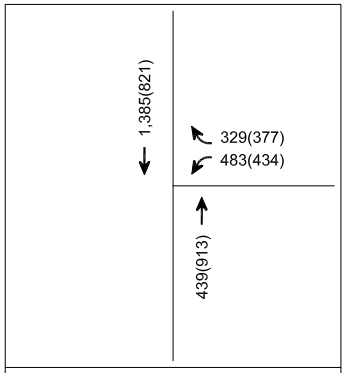
34. Tujunga Avenue & US 101 WB On-Ramp



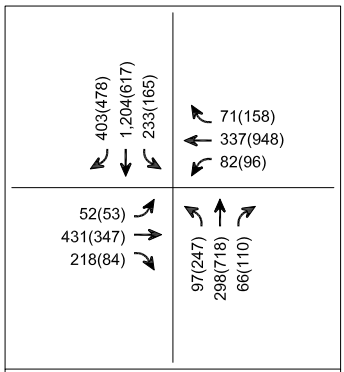
35. Tujunga Avenue & US 101 EB Off-Ramp



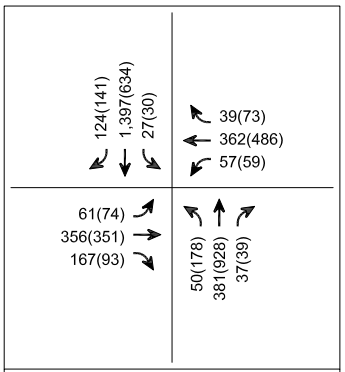
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive

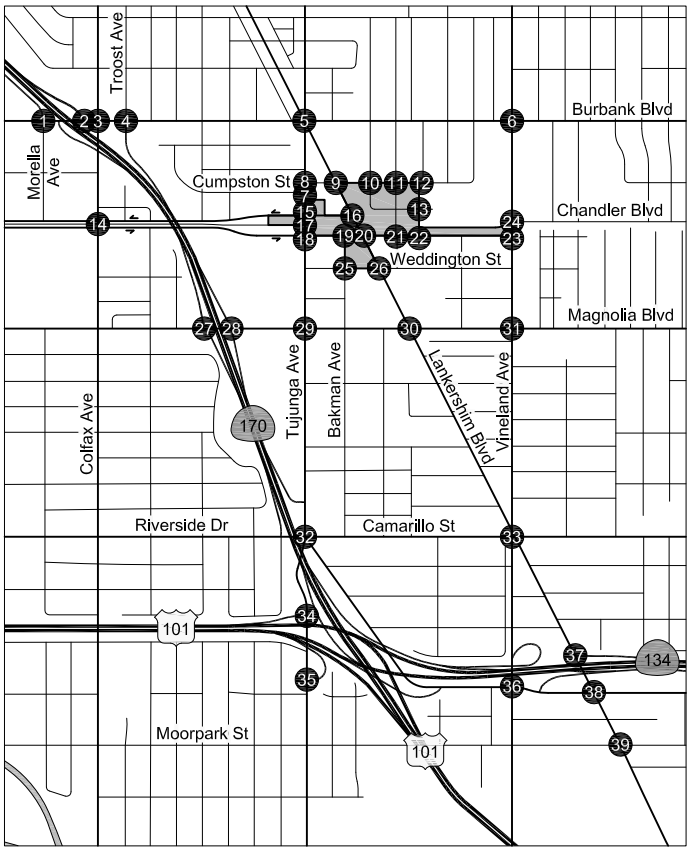


39. Lankershim Boulevard & Moorpark Street

LEGEND

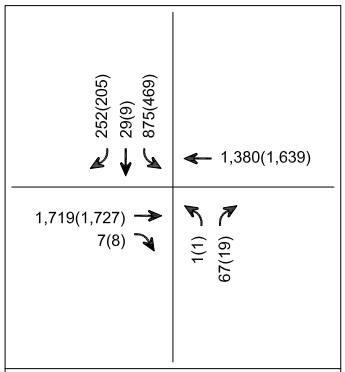
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

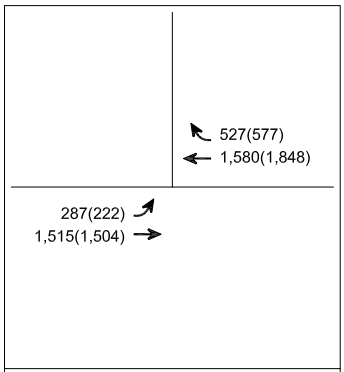


FUTURE WITH PHASE 1 CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

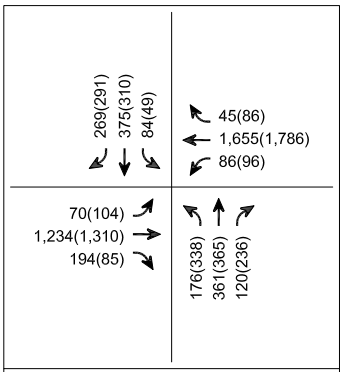
FIGURE 25 (CONT.)



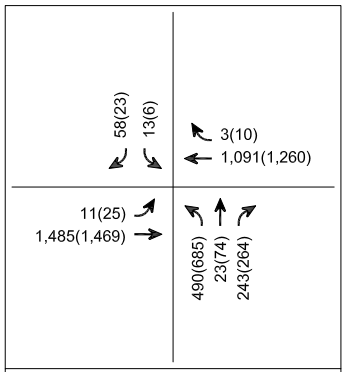
1. SR-170 SB Off-Ramp & Burbank Boulevard



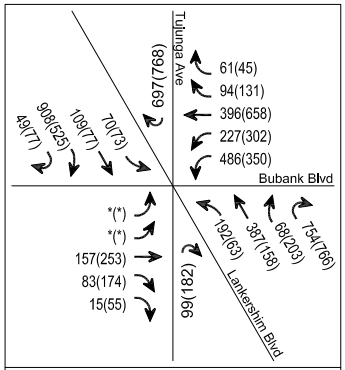
2. SR-170 NB On-Ramp & Burbank Boulevard



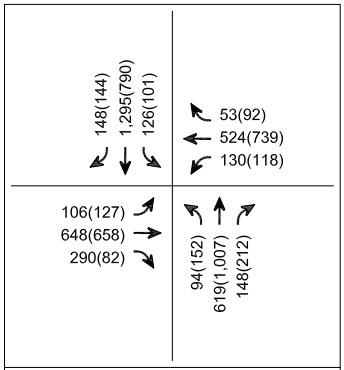
3. Colfax Avenue & Burbank Boulevard



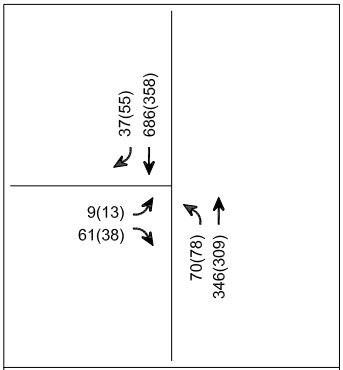
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



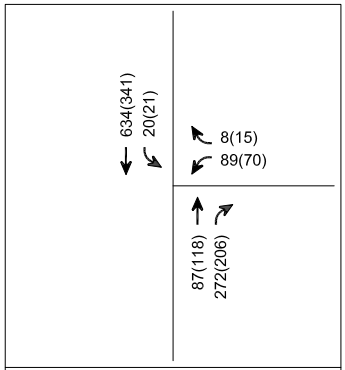
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



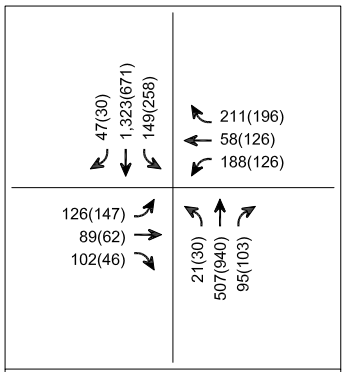
6. Vineland Avenue & Burbank Boulevard



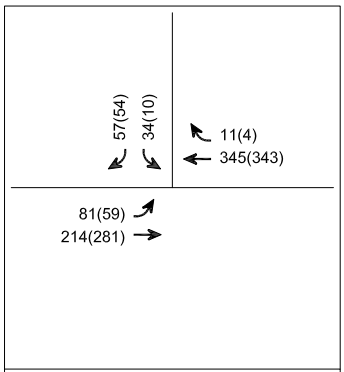
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street

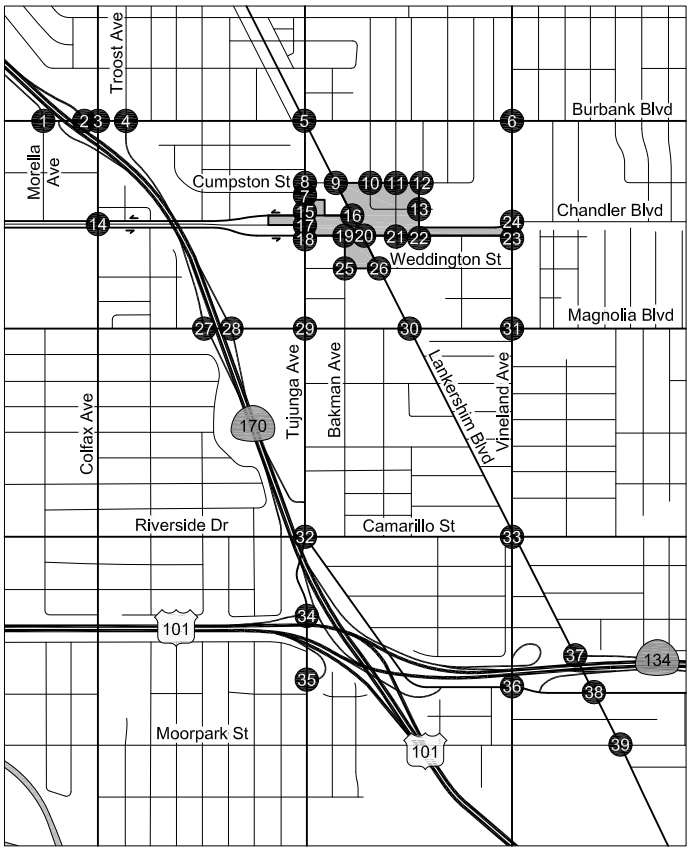


10. Elmer Avenue & Cumpston Street

LEGEND

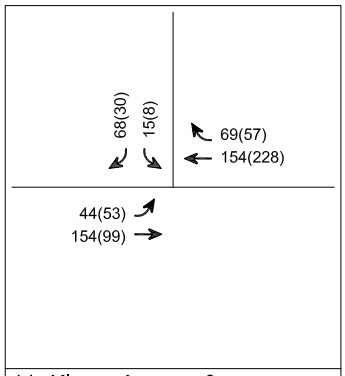
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

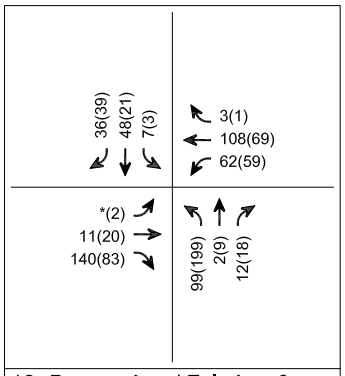


FUTURE WITH FULL BUILDOUT CONDITIONS (YEAR 2037)
PEAK HOUR TRAFFIC VOLUMES

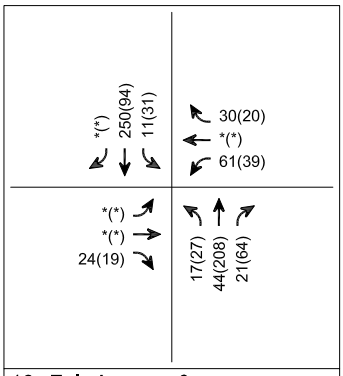
FIGURE 26



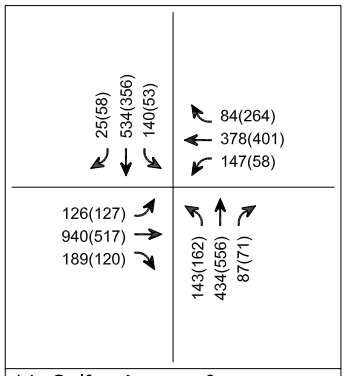
11. Klump Avenue & Cumpston Street



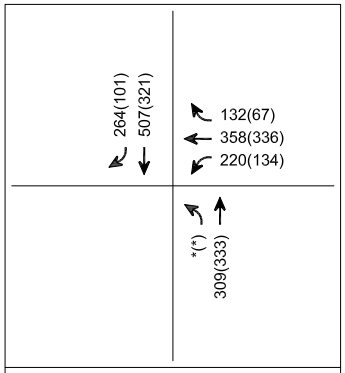
12. Bonner Ave / Fair Ave & Cumpston Street



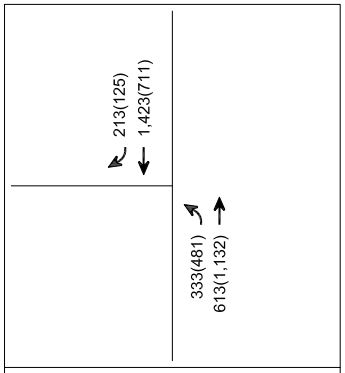
13. Fair Avenue & District Way



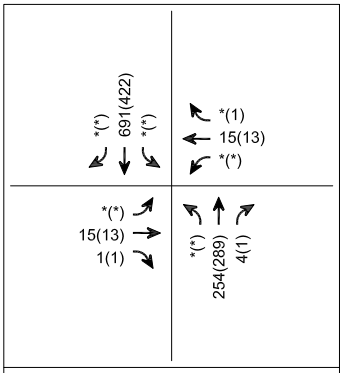
14. Colfax Avenue & Chandler Boulevard



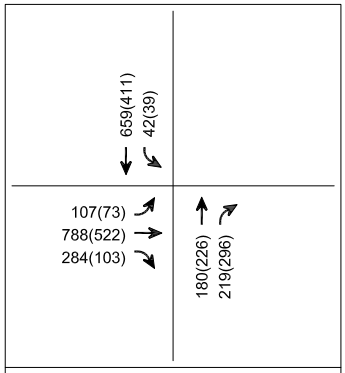
15. Tujunga Avenue & Chandler Boulevard WB



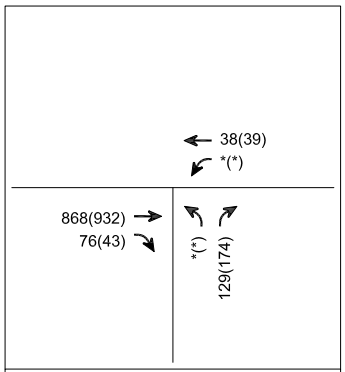
16. Lankershim Boulevard & Chandler Boulevard WB



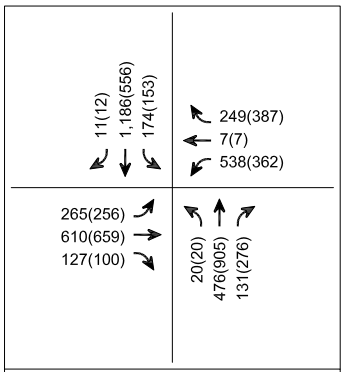
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard

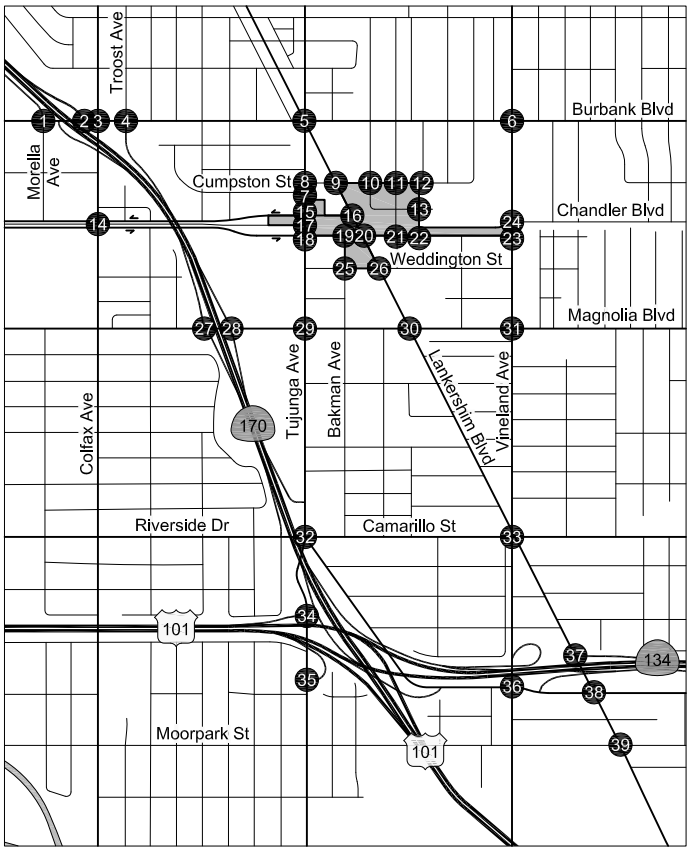


20. Lankershim Boulevard & Chandler Boulevard

LEGEND

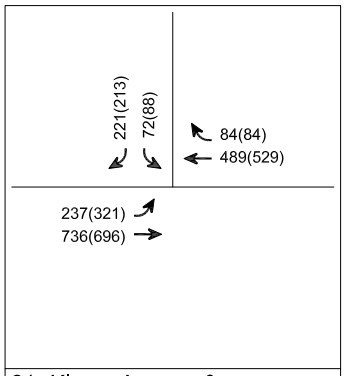
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

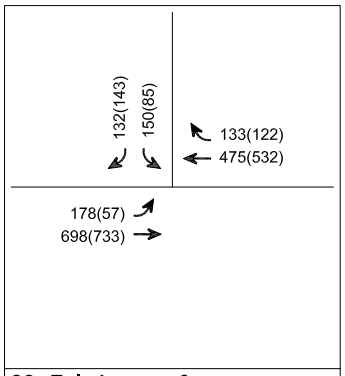


FUTURE WITH FULL BUILDOUT CONDITIONS (YEAR 2037)
PEAK HOUR TRAFFIC VOLUMES

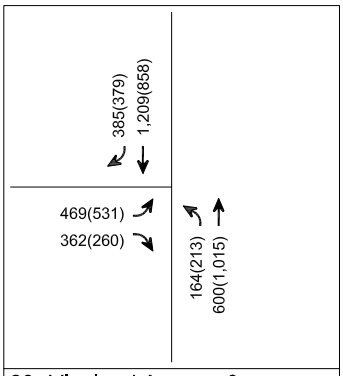
FIGURE 26 (CONT.)



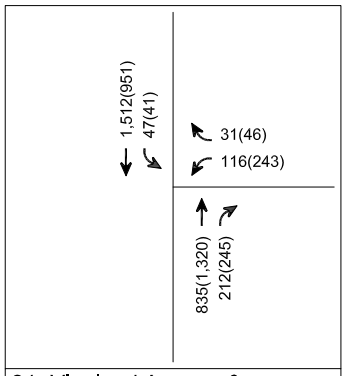
21. Klump Avenue & Chandler Boulevard



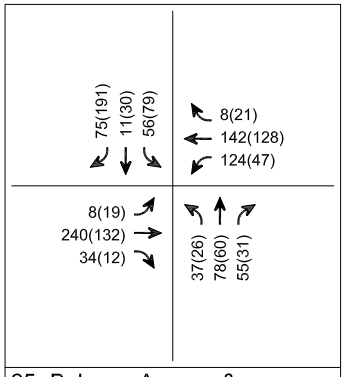
22. Fair Avenue & Chandler Boulevard



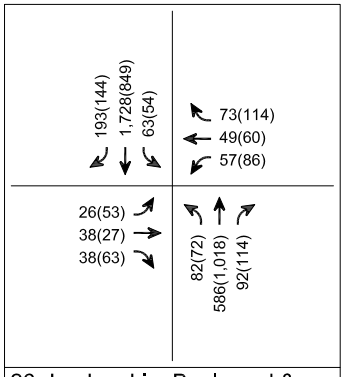
23. Vineland Avenue & Chandler Boulevard (West)



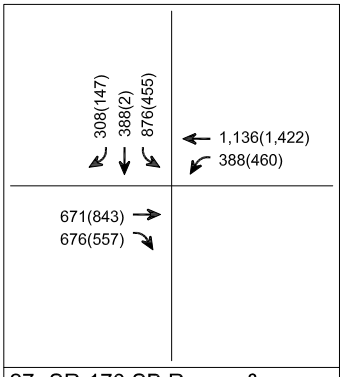
24. Vineland Avenue & Chandler Boulevard (East)



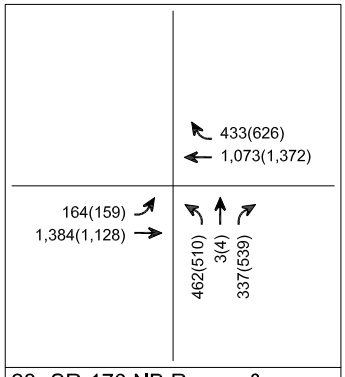
25. Bakman Avenue & Weddington Street



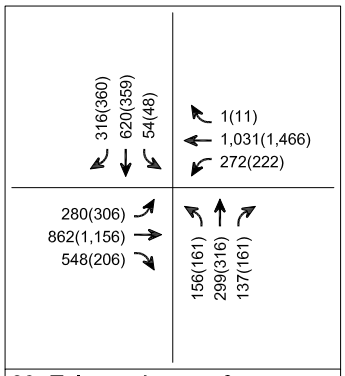
26. Lankershim Boulevard & Weddington Street



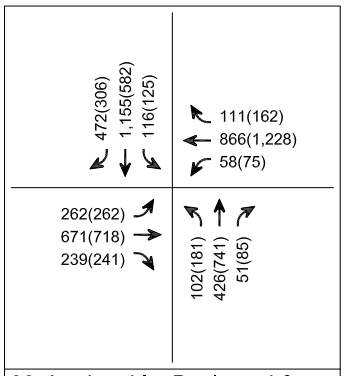
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard

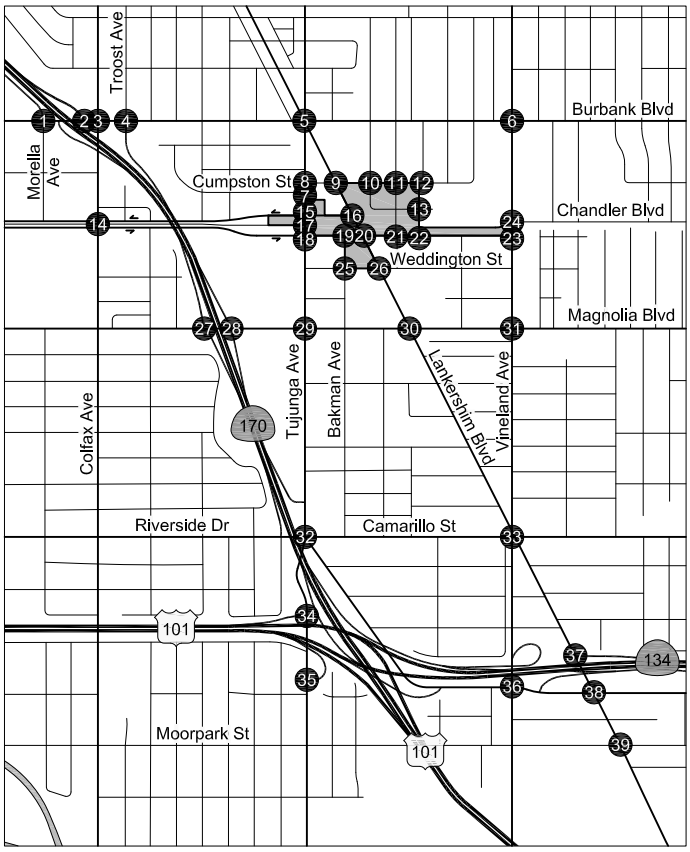


30. Lankershim Boulevard & Magnolia Boulevard

LEGEND

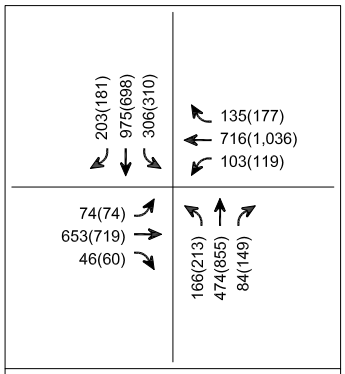
- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes
- * Negligible Volume

N
Not to Scale

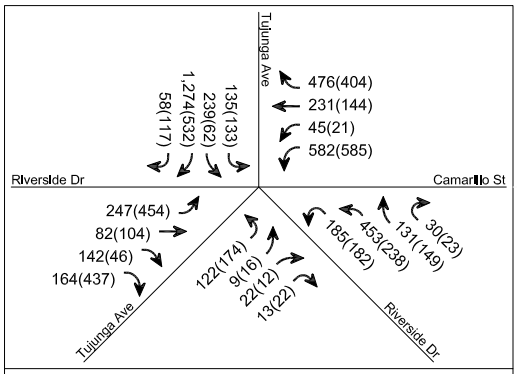


FUTURE WITH FULL BUILDOUT CONDITIONS (YEAR 2037)
PEAK HOUR TRAFFIC VOLUMES

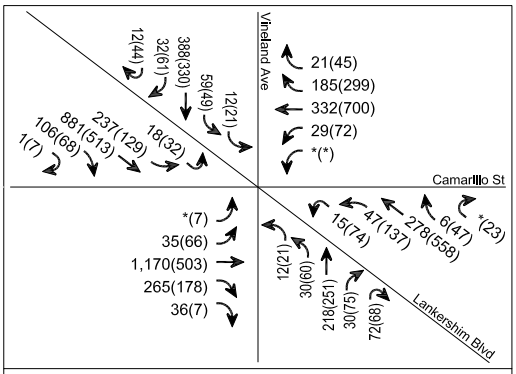
FIGURE 26 (CONT.)



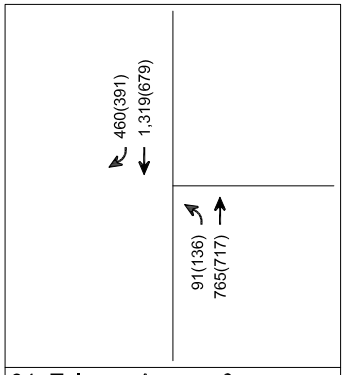
31. Vineland Avenue & Magnolia Boulevard



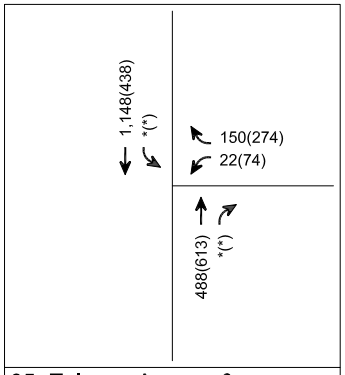
32. Tujunga Avenue / Riverside Drive & Camarillo Street



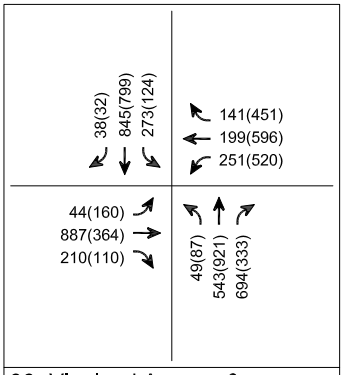
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



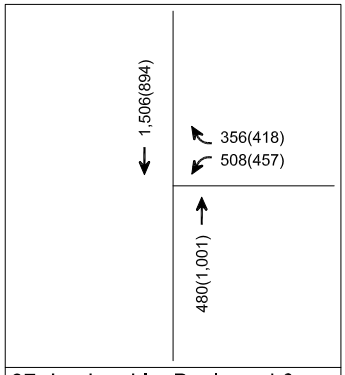
34. Tujunga Avenue & US 101 WB On-Ramp



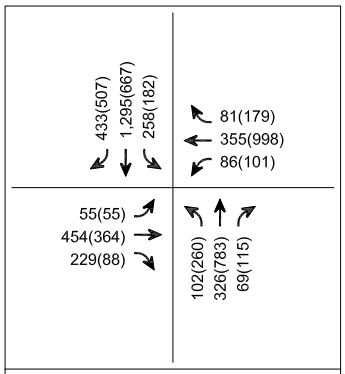
35. Tujunga Avenue & US 101 EB Off-Ramp



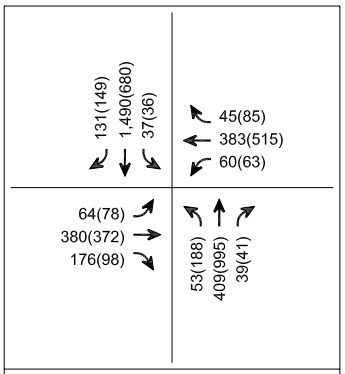
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

LEGEND

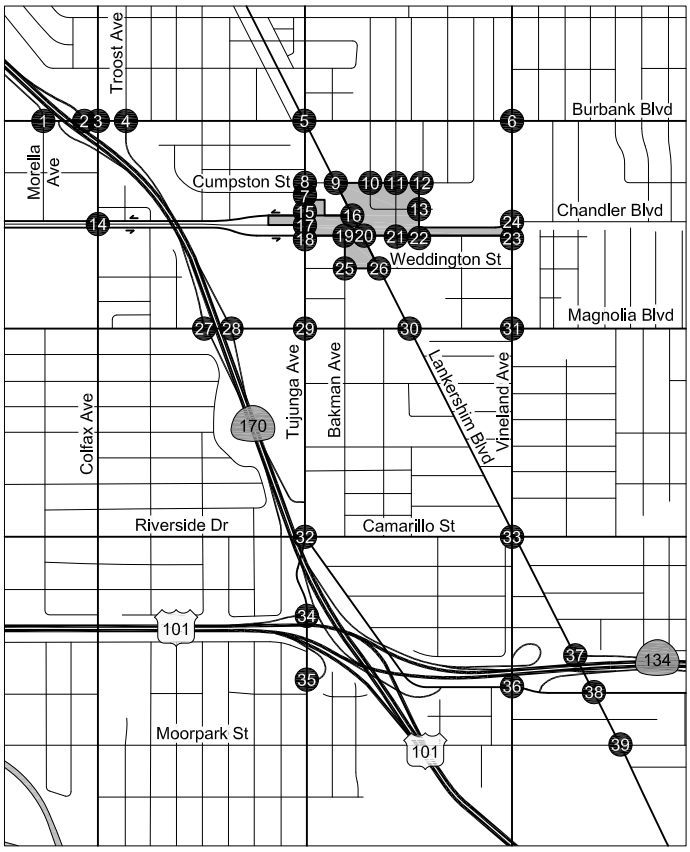
Project Site

Analyzed Intersection

#(#) AM(PM) Peak Hour Traffic Volumes

* Negligible Volume

N
Not to Scale



FUTURE WITH FULL BUILDOUT CONDITIONS (YEAR 2037)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 26 (CONT.)

TABLE 20
PROJECT TRIP GENERATION RATES

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Affordable Family Housing	[a]	per du	37%	63%	0.49	56%	44%	0.35
Multi-Family Housing (Mid-Rise) [b]	221	per du	26%	74%	0.34	61%	39%	0.43
Multi-Family Housing (High-Rise) [c]	222	per du	24%	76%	0.29	61%	39%	0.35
Office [d]	710	per 1,000 sf	86%	14%	0.99	16%	84%	1.04
Shopping Center	820	per 1,000 sf	62%	38%	0.94	48%	52%	3.81
High-Turnover (Sit-Down) Restaurant	932	per 1,000 sf	55%	45%	9.94	62%	38%	9.77

Notes:

du = dwelling unit; sf = square feet.

Trip generation rates are from *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, 2017), except as noted below.

[a] Affordable family housing trip generation rates from Table 3.3-2 of LADOT's Transportation Assessment Guidelines for projects within a Transit Priority Area.

[b] Multi-family housing (Mid-Rise) trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 194 apartment units on Block 4.

Daily: $T = 5.45(X) - 1.75$ T = Average Vehicle Trips X = 1,000 sf

Morning Peak Hour: $Ln(T) = 0.98\ Ln(X) - 0.98$

Afternoon Peak Hour: $Ln(T) = 0.96\ Ln(X) - 0.63$

[c] Multi-family housing (High-Rise) morning and afternoon peak hour trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 1,022 apartment units between Blocks 1, 2, and 5:

Morning Peak Hour: $T = 0.28(X) + 12.86$ T = Average Vehicle Trips X = 1,000 sf

Daily trip generation rate is the average rate provided in *Trip Generation Manual, 10th Edition*.

[d] Office trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 580,374 sf of office between Blocks 0, 5, and 8:

Daily: $Ln(T) = 0.97\ Ln(X) + 2.50$ T = Average Vehicle Trips X = 1,000 sf

Morning Peak Hour: $T = 0.94\ (X) + 26.49$

Afternoon Peak Hour: $Ln(T) = 0.95\ Ln(X) + 0.36$

TABLE 21
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 0								
Office	710	709 sf	1	0	1	0	1	1
Transit/Walk Adjustment - 25%			*0*	*0*	*0*	*0*	*0*	*0*
Retail	820	1,643 sf	1	1	2	3	3	6
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*0*	*(1)*	*(1)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(1)*	*(1)*	*(2)*
Restaurant	932	6,497 sf	36	29	65	39	24	63
Internal Capture - 10%			*(4)*	*(3)*	*(7)*	*(4)*	*(2)*	*(6)*
Transit/Walk Adjustment - 25%			*(8)*	*(7)*	*(15)*	*(9)*	*(5)*	*(14)*
Pass-By Adjustment - 20%			*(5)*	*(4)*	*(9)*	*(6)*	*(3)*	*(9)*
Block 0 Subtotal			**19**	**16**	**35**	**22**	**15**	**37**
Block 1								
Multi-Family Housing (High-Rise)	222	313 du	22	69	91	67	43	110
Retail	820	10,507 sf	6	4	10	19	21	40
Internal Capture - 10%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Transit/Walk Adjustment - 25%			*(1)*	*(1)*	*(2)*	*(4)*	*(5)*	*(9)*
Pass-By Adjustment - 50%			*(2)*	*(2)*	*(4)*	*(7)*	*(7)*	*(14)*
Restaurant	932	7,985 sf	43	36	79	48	30	78
Internal Capture - 10%			*(4)*	*(4)*	*(8)*	*(5)*	*(3)*	*(8)*
Transit/Walk Adjustment - 25%			*(10)*	*(8)*	*(18)*	*(11)*	*(7)*	*(18)*
Pass-By Adjustment - 20%			*(6)*	*(5)*	*(11)*	*(6)*	*(4)*	*(10)*
Block 1 Subtotal			**47**	**89**	**136**	**99**	**66**	**165**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

TABLE 21 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 2								
Multi-Family Housing (High-Rise)	222	309 du	22	68	90	66	42	108
Retail	820	2,975 sf	2	1	3	5	6	11
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*(1)*	*(2)*	*(3)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Block 2 Subtotal			**22**	**69**	**91**	**68**	**43**	**111**
Block 3								
Affordable Family Housing	n/a	160 du	29	49	78	31	25	56
Block 3 Subtotal			**29**	**49**	**78**	**31**	**25**	**56**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

TABLE 21 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 4								
Multi-Family Housing (Mid-Rise)	221	194 du	17	49	66	51	32	83
Retail [a]	820	12,425 sf	7	5	12	23	24	47
Internal Capture - 10%			*(1)*	*0*	*(1)*	*(2)*	*(3)*	*(5)*
Transit/Walk Adjustment - 25%			*(2)*	*(1)*	*(3)*	*(5)*	*(6)*	*(11)*
Pass-By Adjustment - 50%			*(2)*	*(2)*	*(4)*	*(8)*	*(8)*	*(16)*
Restaurant	932	13,325 sf	73	59	132	81	49	130
Internal Capture - 10%			*(7)*	*(6)*	*(13)*	*(8)*	*(5)*	*(13)*
Transit/Walk Adjustment - 25%			*(17)*	*(13)*	*(30)*	*(18)*	*(11)*	*(29)*
Pass-By Adjustment - 20%			*(10)*	*(8)*	*(18)*	*(11)*	*(7)*	*(18)*
Block 4 Subtotal			**58**	**83**	**141**	**103**	**65**	**168**

Notes:

du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

[a] For future flexibility, 450 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 4.

TABLE 21 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 5								
Multi-Family Housing (High-Rise)	222	400 du	28	88	116	85	55	140
Office	710	91,345 sf	77	13	90	15	80	95
Transit/Walk Adjustment - 25%			*(20)*	*(3)*	*(23)*	*(4)*	*(20)*	*(24)*
Retail	820	2,575 sf	1	1	2	5	5	10
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*(1)*	*(1)*	*(2)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Restaurant	932	15,227 sf	83	68	151	92	57	149
Internal Capture - 10%			*(8)*	*(7)*	*(15)*	*(9)*	*(6)*	*(15)*
Transit/Walk Adjustment - 25%			*(19)*	*(15)*	*(34)*	*(21)*	*(13)*	*(34)*
Pass-By Adjustment - 20%			*(11)*	*(9)*	*(20)*	*(12)*	*(8)*	*(20)*
Block 5 Subtotal			**129**	**136**	**265**	**148**	**146**	**294**
Block 6								
Restaurant	932	13,024 sf	71	58	129	79	48	127
Internal Capture - 10%			*(7)*	*(6)*	*(13)*	*(8)*	*(5)*	*(13)*
Transit/Walk Adjustment - 25%			*(16)*	*(13)*	*(29)*	*(18)*	*(11)*	*(29)*
Pass-By Adjustment - 20%			*(9)*	*(8)*	*(17)*	*(11)*	*(6)*	*(17)*
Block 6 Subtotal			**39**	**31**	**70**	**42**	**26**	**68**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

TABLE 21 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 7								
Affordable Family Housing	n/a	151 du	27	47	74	30	23	53
Block 7 Subtotal			**27**	**47**	**74**	**30**	**23**	**53**
Block 8								
Office	710	488,320 sf	415	68	483	81	427	508
Transit/Walk Adjustment - 25%			*(104)*	*(17)*	*(121)*	*(20)*	*(107)*	*(127)*
Retail [a]	820	0 sf	0	0	0	0	0	0
Restaurant	932	18,942 sf	103	85	188	115	70	185
Internal Capture - 10%			*(10)*	*(9)*	*(19)*	*(12)*	*(7)*	*(19)*
Transit/Walk Adjustment - 25%			*(23)*	*(19)*	*(42)*	*(26)*	*(16)*	*(42)*
Pass-By Adjustment - 20%			*(14)*	*(11)*	*(25)*	*(16)*	*(9)*	*(25)*
Block 8 Subtotal			**367**	**97**	**464**	**122**	**358**	**480**
TOTAL - PROPOSED PROJECT			**737**	**617**	**1,354**	**665**	**767**	**1,432**

Notes:

du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

[a] For future flexibility, 10,284 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 8.

TABLE 22
PROJECT TRIP GENERATION SUMMARY

Block Number and Primary Land Use	Phase	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Block 0 *Transit Center*	1	19	16	35	22	15	37
Block 1 *Market-Rate Housing*	2	47	89	136	99	66	165
Block 2 *Market-Rate Housing*	2	22	69	91	68	43	111
Block 3 *Affordable Housing*	2	29	49	78	31	25	56
Block 4 *Market-Rate Housing*	2	58	83	141	103	65	168
Block 5 *Market-Rate Housing / Office*	1	129	136	265	148	146	294
Block 6 *Retail and Restaurant*	1	39	31	70	42	26	68
Block 7 *Affordable Housing*	1	27	47	74	30	23	53
Block 8 *Office*	1	367	97	464	122	358	480
Phase 1 Trip Generation		**581**	**327**	**908**	**364**	**568**	**932**
Full Buildout Trip Generation		**737**	**617**	**1,354**	**665**	**767**	**1,432**

Notes:
Trip generation estimates from Table 21.

TABLE 23
PROJECT TRIP GENERATION WITH LAND USE EXCHANGE

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Affordable Family Housing	220	311 du	56	96	152	61	48	109
Multi-Family Housing (Mid-Rise)	221	194 du	17	49	66	51	33	84
Multi-Family Housing (High-Rise)	222	1,022 du	72	227	299	217	139	356
Office	710	655,374 sf	553	90	643	109	570	679
Transit/Walk Adjustment - 25%			*(138)*	*(23)*	*(161)*	*(27)*	*(143)*	*(170)*
Retail	820	0 sf [a]	0	0	0	0	0	0
Restaurant	932	30,125 sf [a]	164	135	299	182	112	294
Internal Capture - 10%			*(17)*	*(13)*	*(30)*	*(18)*	*(11)*	*(29)*
Transit/Walk Adjustment - 25%			*(37)*	*(30)*	*(67)*	*(41)*	*(25)*	*(66)*
Pass-By Adjustment - 20%			*(22)*	*(18)*	*(40)*	*(25)*	*(15)*	*(40)*
TOTAL - PROPOSED PROJECT WITH LAND USE EXCHANGE			**648**	**513**	**1,161**	**509**	**708**	**1,217**

Notes:

du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

[a] With the land use exchange, all of the retail space was assumed to become office space.

TABLE 24
INTERSECTIONS PROPOSED FOR ANALYSIS

No.	N/S Street	E/W Street	Type
1	SR 170 Southbound Off-ramp	Burbank Boulevard	Signalized
2	SR 170 Northbound On-ramp	Burbank Boulevard	Unsignalized
3	Colfax Avenue	Burbank Boulevard	Signalized
4	Troost Avenue / SR 170 Northbound Off-ramp	Burbank Boulevard	Signalized
5	Lankershim Boulevard / Tujunga Avenue	Burbank Boulevard	Signalized
6	Vineland Avenue	Burbank Boulevard	Signalized
7	Tujunga Avenue	Cumpston Street (West)	2-way Stop
8	Tujunga Avenue	Cumpston Street (East)	2-way Stop
9	Lankershim Boulevard	Cumpston Street	Signalized
10 [a]	Elmer Avenue	Cumpston Street	All-way Stop
11 [a]	Klump Avenue	Cumpston Street	All-way Stop
12	Bonner Avenue / Fair Avenue	Cumpston Street	2-way Stop
13 [a]	Fair Avenue	District Way	All-way Stop
14	Colfax Avenue	Chandler Boulevard	Signalized
15	Tujunga Avenue	Chandler Boulevard (North)	Signalized
16	Lankershim Boulevard	Chandler Boulevard (North)	Signalized
17	Tujunga Avenue	Metro G (Orange) Line Busway	Signalized
18	Tujunga Avenue	Chandler Boulevard (South)	Signalized
19	Bakman Avenue	Chandler Boulevard (South)	2-way Stop
20	Lankershim Boulevard	Chandler Boulevard	Signalized
21 [a]	Klump Avenue	Chandler Boulevard	2-way Stop
22	Fair Avenue	Chandler Boulevard	Signalized
23	Vineland Avenue	Chandler Boulevard (West Leg)	Signalized
24	Vineland Avenue	Chandler Boulevard (East Leg)	Signalized
25	Bakman Avenue	Weddington Street	All-way Stop
26	Lankershim Boulevard	Weddington Street	Signalized
27	SR 170 Southbound Ramps	Magnolia Boulevard	Signalized
28	SR 170 Northbound Ramps	Magnolia Boulevard	Signalized
29	Tujunga Avenue	Magnolia Boulevard	Signalized
30	Lankershim Boulevard	Magnolia Boulevard	Signalized
31	Vineland Avenue	Magnolia Boulevard	Signalized
32	Tujunga Avenue / Riverside Drive	Camarillo Street	Signalized
33	Lankershim Boulevard / Vineland Avenue	Camarillo Street	Signalized
34	Tujunga Avenue	US 101 Westbound On-ramp	Unsignalized
35	Tujunga Avenue	US 101 Eastbound Off-ramp	2-way Stop
36	Vineland Avenue	Riverside Drive	Signalized
37	Lankershim Boulevard	SR 134 Westbound Off-ramp	Signalized
38	Lankershim Boulevard	Riverside Drive	Signalized
39	Lankershim Boulevard	Moorpark Street	Signalized

Notes:

[a] Project would add a new leg to existing intersection or create a new intersection.

TABLE 25
INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Seconds of Delay	
		Signalized Intersections	Unsignalized Intersections
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.	≤ 10	≤ 10
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	> 10 and ≤ 20	> 10 and ≤ 15
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	> 20 and ≤ 35	> 15 and ≤ 25
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	> 35 and ≤ 55	> 25 and ≤ 35
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	> 55 and ≤ 80	> 35 and ≤ 50
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 80	> 50

Notes:
Source: *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

TABLE 26
EXISTING CONDITIONS (YEAR 2020)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions	
			Delay	LOS
1.	SR 170 Southbound Off-ramp & Burbank Boulevard	A.M. P.M.	42.5 20.5	D C
2. [a]	SR 170 Northbound On-ramp & Burbank Boulevard	A.M. P.M.	0.0 0.0	A A
3.	Colfax Avenue & Burbank Boulevard	A.M. P.M.	14.6 14.8	B B
4.	Troost Avenue / SR 170 Northbound Off-ramp & Burbank Boulevard	A.M. P.M.	20.4 39.3	C D
5.	Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard	A.M. P.M.	63.2 101.1	E F
6.	Vineland Avenue & Burbank Boulevard	A.M. P.M.	25.2 23.8	C C
7. [b]	Tujunga Avenue & Cumpston Street (West)	A.M. P.M.	11.6 10.9	B B
8. [b]	Tujunga Avenue & Cumpston Street (East)	A.M. P.M.	11.5 11.3	B B
9.	Lankershim Boulevard & Cumpston Street	A.M. P.M.	16.8 25.4	B C
10. [c]	Elmer Avenue & Cumpston Street	A.M. P.M.	10.8 10.9	B B
11. [c]	Klump Avenue & Cumpston Street	A.M. P.M.	8.1 8.2	A A
12. [b]	Bonner Avenue / Fair Avenue & Cumpston Street	A.M. P.M.	11.9 12.0	B B
13. [c,d]	Fair Avenue & District Way	A.M. P.M.	10.7 10.6	B B

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Future intersection to be constructed by the Project.

TABLE 26 (CONTINUED)
EXISTING CONDITIONS (YEAR 2020)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions	
			Delay	LOS
14.	Colfax Avenue & Chandler Boulevard	A.M. P.M.	44.6 38.0	D D
15.	Tujunga Avenue & Chandler Boulevard (North)	A.M. P.M.	11.1 9.8	B A
16.	Lankershim Boulevard & Chandler Boulevard (North)	A.M. P.M.	2.2 1.4	A A
17.	Tujunga Avenue & Metro G (Orange) Line Busway	A.M. P.M.	3.4 3.7	A A
18.	Tujunga Avenue & Chandler Boulevard (South)	A.M. P.M.	45.8 44.4	D D
19. [b]	Bakman Avenue & Chandler Boulevard (South)	A.M. P.M.	14.6 13.9	B B
20.	Lankershim Boulevard & Chandler Boulevard	A.M. P.M.	29.3 28.4	C C
21. [b,d]	Klump Avenue & Chandler Boulevard	A.M. P.M.	11.2 13.4	B B
22.	Fair Avenue & Chandler Boulevard	A.M. P.M.	13.1 12.0	B B
23.	Vineland Avenue & Chandler Boulevard (West Leg)	A.M. P.M.	15.2 16.4	B B
24.	Vineland Avenue & Chandler Boulevard (East Leg)	A.M. P.M.	7.7 9.0	A A
25. [c]	Bakman Avenue & Weddington Street	A.M. P.M.	9.4 9.0	A A
26.	Lankershim Boulevard & Weddington Street	A.M. P.M.	8.4 10.9	A B

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Future intersection to be constructed by the Project.

TABLE 26 (CONTINUED)
EXISTING CONDITIONS (YEAR 2020)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions	
			Delay	LOS
27.	SR 170 Southbound Ramps & Magnolia Boulevard	A.M. P.M.	58.9 17.1	E B
28.	SR 170 Northbound Ramps & Magnolia Boulevard	A.M. P.M.	15.6 22.7	B C
29.	Tujunga Avenue & Magnolia Boulevard	A.M. P.M.	35.6 19.6	D B
30.	Lankershim Boulevard & Magnolia Boulevard	A.M. P.M.	33.6 32.6	C C
31.	Vineland Avenue & Magnolia Boulevard	A.M. P.M.	32.1 37.0	C D
32.	Tujunga Avenue / Riverside Drive & Camarillo Street	A.M. P.M.	85.8 57.7	F E
33.	Lankershim Boulevard / Vineland Avenue & Camarillo Street	A.M. P.M.	82.6 69.6	F E
34. [a]	Tujunga Avenue & US 101 Westbound On-ramp	A.M. P.M.	0.0 0.0	A A
35. [b]	Tujunga Avenue & US 101 Eastbound Off-ramp	A.M. P.M.	12.4 15.5	B C
36.	Vineland Avenue & Riverside Drive	A.M. P.M.	71.1 41.0	E D
37.	Lankershim Boulevard & SR 134 Westbound Off-ramp	A.M. P.M.	13.5 12.9	B B
38.	Lankershim Boulevard & Riverside Drive	A.M. P.M.	24.6 34.8	C C
39.	Lankershim Boulevard & Moorpark Street	A.M. P.M.	21.1 16.4	C B

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Future intersection to be constructed by the Project.

TABLE 27
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Phase 1 Conditions		
			Delay	LOS	Delay	LOS	∆ Delay
1.	SR 170 Southbound Off-ramp & Burbank Boulevard	A.M. P.M.	53.7 26.3	D C	60.3 27.6	E C	6.6 1.3
2. [a]	SR 170 Northbound On-ramp & Burbank Boulevard	A.M. P.M.	0.0 0.0	A A	0.0 0.0	A A	0.0 0.0
3.	Colfax Avenue & Burbank Boulevard	A.M. P.M.	16.0 17.5	B B	16.2 30.5	B C	0.2 13.0
4.	Troost Avenue / SR 170 Northbound Off-ramp & Burbank Boulevard	A.M. P.M.	23.5 50.3	C D	24.2 49.4	C D	0.7 -0.9
5.	Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard	A.M. P.M.	81.4 125.1	F F	90.7 122.1	F F	9.3 -3.0
6.	Vineland Avenue & Burbank Boulevard	A.M. P.M.	29.4 27.1	C C	34.0 27.3	C C	4.6 0.2
7. [b]	Tujunga Avenue & Cumpston Street (West)	A.M. P.M.	12.2 11.5	B B	15.4 11.6	C B	3.2 0.1
8. [b]	Tujunga Avenue & Cumpston Street (East)	A.M. P.M.	12.0 11.6	B B	15.3 12.0	C B	3.3 0.4
9.	Lankershim Boulevard & Cumpston Street	A.M. P.M.	18.8 28.5	B C	19.6 18.8	B B	0.8 -9.7
10. [c]	Elmer Avenue & Cumpston Street	A.M. P.M.	11.3 12.0	B B	10.0 10.3	A B	-1.3 -1.7
11. [c]	Klump Avenue & Cumpston Street	A.M. P.M.	8.5 8.5	A A	9.4 9.8	A A	0.9 1.3
12. [b]	Bonner Avenue / Fair Avenue & Cumpston Street	A.M. P.M.	13.1 13.3	B B	13.2 14.4	B B	0.1 1.1
13. [c,d]	Fair Avenue & District Way	A.M. P.M.	10.6 10.7	B B	9.3 9.2	A A	-1.3 -1.5

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Intersection configuration modified, or intersection constructed, by the Project.

TABLE 27 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Phase 1 Conditions		
			Delay	LOS	Delay	LOS	∆ Delay
14.	Colfax Avenue &	A.M.	49.6	D	50.6	D	1.0
	Chandler Boulevard	P.M.	40.0	D	40.1	D	0.1
15.	Tujunga Avenue &	A.M.	20.8	C	25.9	C	5.1
[d]	Chandler Boulevard (North)	P.M.	18.0	B	20.3	C	2.3
16.	Lankershim Boulevard &	A.M.	4.7	A	44.2	D	39.5
[d]	Chandler Boulevard (North)	P.M.	14.1	B	22.5	C	8.4
17.	Tujunga Avenue &	A.M.	3.7	A	2.8	A	-0.9
	Metro G (Orange) Line Busway	P.M.	4.2	A	3.5	A	-0.7
18.	Tujunga Avenue &	A.M.	47.7	D	30.3	C	-17.4
[d]	Chandler Boulevard (South)	P.M.	44.3	D	26.5	C	-17.8
19.	Bakman Avenue &	A.M.	15.1	B	15.5	B	0.4
[b,d]	Chandler Boulevard (South)	P.M.	14.8	B	17.0	B	2.2
20.	Lankershim Boulevard &	A.M.	30.2	C	31.5	C	1.3
[d]	Chandler Boulevard	P.M.	30.2	C	32.4	C	2.2
21.	Klump Avenue &	A.M.	11.6	B	27.6	D	16.0
[b,d]	Chandler Boulevard	P.M.	14.1	B	70.3	F	56.2
22.	Fair Avenue &	A.M.	13.5	B	14.3	B	0.8
	Chandler Boulevard	P.M.	12.5	B	13.0	B	0.5
23.	Vineland Avenue &	A.M.	16.2	B	18.0	B	1.8
	Chandler Boulevard (West Leg)	P.M.	16.6	B	17.9	B	1.3
24.	Vineland Avenue &	A.M.	7.4	A	7.7	A	0.3
	Chandler Boulevard (East Leg)	P.M.	11.7	B	12.4	B	0.7
25.	Bakman Avenue &	A.M.	9.7	A	11.6	B	1.9
[c]	Weddington Street	P.M.	8.1	A	10.6	B	2.5
26.	Lankershim Boulevard &	A.M.	8.5	A	10.5	B	2.0
	Weddington Street	P.M.	11.0	B	12.7	B	1.7

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Intersection configuration modified, or intersection constructed, by the Project.

TABLE 27 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Phase 1 Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
27.	SR 170 Southbound Ramps & Magnolia Boulevard	A.M. P.M.	106.3 42.3	F D	133.7 73.2	F E	27.4 30.9
28.	SR 170 Northbound Ramps & Magnolia Boulevard	A.M. P.M.	18.4 36.9	B D	20.4 43.3	C D	2.0 6.4
29.	Tujunga Avenue & Magnolia Boulevard	A.M. P.M.	61.1 21.2	E C	66.7 27.9	E C	5.6 6.7
30.	Lankershim Boulevard & Magnolia Boulevard	A.M. P.M.	41.5 40.4	D D	53.8 53.0	D D	12.3 12.6
31.	Vineland Avenue & Magnolia Boulevard	A.M. P.M.	39.7 52.3	D D	43.8 55.4	D E	4.1 3.1
32.	Tujunga Avenue / Riverside Drive & Camarillo Street	A.M. P.M.	104.9 63.8	F E	119.8 67.9	F E	14.9 4.1
33.	Lankershim Boulevard / Vineland Avenue & Camarillo Street	A.M. P.M.	96.7 67.6	F E	107.6 68.3	F E	10.9 0.7
34. [a]	Tujunga Avenue & US 101 Westbound On-ramp	A.M. P.M.	0.0 0.0	A A	0.0 0.0	A A	0.0 0.0
35. [b]	Tujunga Avenue & US 101 Eastbound Off-ramp	A.M. P.M.	12.9 16.9	B C	13.7 19.1	B C	0.8 2.2
36.	Vineland Avenue & Riverside Drive	A.M. P.M.	81.9 44.0	F D	82.1 44.2	F D	0.2 0.2
37.	Lankershim Boulevard & SR 134 Westbound Off-ramp	A.M. P.M.	14.4 13.6	B B	14.8 14.0	B B	0.4 0.4
38.	Lankershim Boulevard & Riverside Drive	A.M. P.M.	25.7 42.7	C D	25.8 45.4	C D	0.1 2.7
39.	Lankershim Boulevard & Moorpark Street	A.M. P.M.	33.8 18.0	C B	36.7 18.3	D B	2.9 0.3

Notes:
Intersections are signalized except as otherwise noted.
[a] Intersection is uncontrolled.
[b] Intersection is 2-way stop-controlled
[c] Intersection is all-way stop-controlled.
[d] Intersection configuration modified, or intersection constructed, by the Project.

TABLE 28
FUTURE CONDITIONS (YEAR 2037)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Full Buildout Conditions		
			Delay	LOS	Delay	LOS	∆ Delay
1.	SR 170 Southbound Off-ramp & Burbank Boulevard	A.M. P.M.	65.0 31.9	E C	73.3 35.8	E D	8.3 3.9
2. [a]	SR 170 Northbound On-ramp & Burbank Boulevard	A.M. P.M.	0.0 0.0	A A	0.0 0.0	A A	0.0 0.0
3.	Colfax Avenue & Burbank Boulevard	A.M. P.M.	17.5 22.0	B C	18.3 49.8	B D	0.8 27.8
4.	Troost Avenue / SR 170 Northbound Off-ramp & Burbank Boulevard	A.M. P.M.	27.2 58.4	C E	29.6 62.4	C E	2.4 4.0
5.	Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard	A.M. P.M.	99.6 145.9	F F	111.8 143.6	F F	12.2 -2.3
6.	Vineland Avenue & Burbank Boulevard	A.M. P.M.	43.2 31.7	D C	51.9 33.2	D C	8.7 1.5
7. [b]	Tujunga Avenue & Cumpston Street (West)	A.M. P.M.	12.5 11.6	B B	16.5 12.0	C B	4.0 0.4
8. [b]	Tujunga Avenue & Cumpston Street (East)	A.M. P.M.	12.2 11.8	B B	16.6 12.5	C B	4.4 0.7
9.	Lankershim Boulevard & Cumpston Street	A.M. P.M.	19.8 31.9	B C	22.5 35.5	C D	2.7 3.6
10. [c]	Elmer Avenue & Cumpston Street	A.M. P.M.	11.8 12.5	B B	12.0 12.2	B B	0.2 -0.3
11. [c]	Klump Avenue & Cumpston Street	A.M. P.M.	8.6 8.6	A A	10.6 10.8	B B	2.0 2.2
12. [b]	Bonner Avenue / Fair Avenue & Cumpston Street	A.M. P.M.	13.5 13.7	B B	13.6 15.1	B C	0.1 1.4
13. [c,d]	Fair Avenue & District Way	A.M. P.M.	10.7 10.9	B B	9.5 9.4	A A	-1.2 -1.5

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Intersection configuration modified, or intersection constructed, by the Project.

TABLE 28 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Full Buildout Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
14.	Colfax Avenue &	A.M.	53.4	D	55.2	E	1.8
	Chandler Boulevard	P.M.	41.0	D	41.4	D	0.4
15.	Tujunga Avenue &	A.M.	20.6	C	30.9	C	10.3
[d]	Chandler Boulevard (North)	P.M.	18.0	B	20.8	C	2.8
16.	Lankershim Boulevard &	A.M.	5.0	A	65.0	E	60.0
[d]	Chandler Boulevard (North)	P.M.	13.0	B	23.3	C	10.3
17.	Tujunga Avenue &	A.M.	3.7	A	2.5	A	-1.2
	Metro G (Orange) Line Busway	P.M.	4.0	A	3.2	A	-0.8
18.	Tujunga Avenue &	A.M.	48.3	D	30.8	C	-17.5
[d]	Chandler Boulevard (South)	P.M.	44.9	D	26.0	C	-18.9
19.	Bakman Avenue &	A.M.	15.9	B	16.8	B	0.9
[b,d]	Chandler Boulevard (South)	P.M.	15.4	B	19.9	B	4.5
20.	Lankershim Boulevard &	A.M.	31.0	C	36.9	D	5.9
[d]	Chandler Boulevard	P.M.	30.9	C	32.9	C	2.0
21.	Klump Avenue &	A.M.	11.8	B	361.6	F	349.8
[b,d]	Chandler Boulevard	P.M.	14.6	B	985.8	F	971.2
22.	Fair Avenue &	A.M.	13.8	B	15.3	B	1.5
	Chandler Boulevard	P.M.	12.7	B	13.9	B	1.2
23.	Vineland Avenue &	A.M.	16.3	B	20.2	C	3.9
	Chandler Boulevard (West Leg)	P.M.	16.8	B	20.7	C	3.9
24.	Vineland Avenue &	A.M.	7.5	A	8.0	A	0.5
	Chandler Boulevard (East Leg)	P.M.	12.3	B	13.8	B	1.5
25.	Bakman Avenue &	A.M.	10.0	A	12.2	B	2.2
[c]	Weddington Street	P.M.	8.2	A	10.9	B	2.7
26.	Lankershim Boulevard &	A.M.	8.7	A	11.6	B	2.9
	Weddington Street	P.M.	11.4	B	13.4	B	2.0

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Intersection configuration modified, or intersection constructed, by the Project.

TABLE 28 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Full Buildout Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
27.	SR 170 Southbound Ramps & Magnolia Boulevard	A.M. P.M.	127.4 54.0	F D	195.6 112.0	F F	68.2 58.0
28.	SR 170 Northbound Ramps & Magnolia Boulevard	A.M. P.M.	19.2 42.6	B D	24.2 57.4	C E	5.0 14.8
29.	Tujunga Avenue & Magnolia Boulevard	A.M. P.M.	82.0 23.1	F C	110.0 53.9	F D	28.0 30.8
30.	Lankershim Boulevard & Magnolia Boulevard	A.M. P.M.	53.5 48.7	D D	74.0 66.8	E E	20.5 18.1
31.	Vineland Avenue & Magnolia Boulevard	A.M. P.M.	52.3 60.1	D E	59.5 66.2	E E	7.2 6.1
32.	Tujunga Avenue / Riverside Drive & Camarillo Street	A.M. P.M.	119.5 72.4	F E	139.6 81.5	F F	20.1 9.1
33.	Lankershim Boulevard / Vineland Avenue & Camarillo Street	A.M. P.M.	111.1 69.8	F E	130.3 74.5	F E	19.2 4.7
34. [a]	Tujunga Avenue & US 101 Westbound On-ramp	A.M. P.M.	0.0 0.0	A A	0.0 0.0	A A	0.0 0.0
35. [b]	Tujunga Avenue & US 101 Eastbound Off-ramp	A.M. P.M.	13.3 18.1	B C	14.6 24.1	B C	1.3 6.0
36.	Vineland Avenue & Riverside Drive	A.M. P.M.	92.8 49.8	F D	94.0 50.7	F D	1.2 0.9
37.	Lankershim Boulevard & SR 134 Westbound Off-ramp	A.M. P.M.	15.2 14.2	B B	16.3 15.2	B B	1.1 1.0
38.	Lankershim Boulevard & Riverside Drive	A.M. P.M.	27.1 49.5	C D	30.0 55.0	C D	2.9 5.5
39.	Lankershim Boulevard & Moorpark Street	A.M. P.M.	54.3 19.5	D B	62.4 20.3	E C	8.1 0.8

Notes:
Intersections are signalized except as otherwise noted.
[a] Intersection is uncontrolled.
[b] Intersection is 2-way stop-controlled
[c] Intersection is all-way stop-controlled.
[d] Intersection configuration modified, or intersection constructed, by the Project.

TABLE 29
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Phase 1 Conditions	Project Contribution to Queue Length
Intersection #1, SR 170 Southbound Off-ramp & Burbank Boulevard					
Southbound Left-Turn *from SR 170 Southbound to Burbank Boulevard*	330	A.M.	553	635	82
		P.M.	275	280	5
Intersection #3, Colfax Avenue & Burbank Boulevard					
Northbound Left-Turn *from Colfax Avenue to Burbank Boulevard*	65	A.M.	218	220	2
		P.M.	298	733	435
Intersection #5, Lankershim Boulevard & Burbank Boulevard					
Eastbound Right-Turn *from Burbank Boulevard to Lankershim Boulevard*	250 [a]	A.M.	628	878	250
		P.M.	358	650	292
Northbound Left-Turn *from Lankershim Boulevard to Burbank Boulevard*	160	A.M.	260	358	98
		P.M.	343	315	-28
Intersection #6, Vineland Avenue & Burbank Boulevard					
Westbound Left-Turn *from Burbank Boulevard to Vineland Avenue*	140	A.M.	163	218	55
		P.M.	115	133	18
Intersection #16, Lankershim Boulevard & Chandler Boulevard (North)					
Northbound Left-Turn *from Lankershim Boulevard to Chandler Boulevard (North)*	50	A.M.	200	398	198
		P.M.	308	400	92

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[a] The eastbound travel lane ends in a right-turn pocket, and therefore the queue does not block through traffic.

TABLE 29 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Phase 1 Conditions	Project Contribution to Queue Length
Intersection #18, Tujunga Avenue & Chandler Boulevard (South)					
Eastbound Right-Turn *from Tujunga Avene to Chandler Boulevard (South)*	75	A.M.	430	618	188
		P.M.	168	268	100
Intersection #20, Lankershim Boulevard & Chandler Boulevard (South)					
Westbound Right-Turn *from Chandler Boulevard to Lankershim Boulevard*	340	A.M.	240	260	20
		P.M.	338	475	137
Intersection #26, Lankershim Boulevard & Weddington Street					
Westbound Left-Turn *from Weddington Street to Lankershim Boulevard*	60	A.M.	10	80	70
		P.M.	18	38	20
Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard					
Westbound Left-Turn *from Magnolia Boulevard to SR 170 Southbound*	430	A.M.	1,020	1,353	333
		P.M.	893	1,450	557
Southbound Left-Turn *from SR 170 Southbound to Magnolia Boulevard*	675 [b]	A.M.	1,200	1,273	73
		P.M.	248	250	2

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[b] The off-ramp extends an additional 500 feet beyond the point where the left-turn and right-turn lanes diverge.

TABLE 29 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Phase 1 Conditions	Project Contribution to Queue Length
Intersection #28, SR 170 Northbound Ramps & Magnolia Boulevard					
Northbound Left-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	293	338	45
		P.M.	473	560	87
Northbound Right-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	383	430	47
		P.M.	628	723	95
Intersection #30, Lankershim Boulevard & Magnolia Boulevard					
Eastbound Left-Turn *from Magnoila Boulevard to Lankershim Boulevard*	140	A.M.	328	485	157
		P.M.	365	438	73
Northbound Left-Turn *from Lankershim Boulevard to Magnoila Boulevard*	205	A.M.	183	295	112
		P.M.	255	263	8
Intersection #31, Vineland Avenue & Magnolia Boulevard					
Southbound Left-Turn *from Vineland Avenue to Magnolia Boulevard*	150	A.M.	405	463	58
		P.M.	653	660	7
Intersection #38, Lankershim Boulevard & Riverside Drive					
Southbound Right-Turn *from Lankershim Boulevard to Riverside Drive*	100	A.M.	210	213	3
		P.M.	443	510	67

Notes:
All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

TABLE 30
FUTURE CONDITIONS (YEAR 2037)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #1, SR 170 Southbound Off-ramp & Burbank Boulevard					
Southbound Left-Turn *from SR 170 Southbound to Burbank Boulevard*	330	A.M.	640	740	100
		P.M.	285	298	13
Intersection #3, Colfax Avenue & Burbank Boulevard					
Eastbound Left-Turn *from Burbank Boulevard to Colfax Avenue*	125	A.M.	53	55	2
		P.M.	123	323	200
Northbound Left-Turn *from Colfax Avenue to Burbank Boulevard*	65	A.M.	215	233	18
		P.M.	330	730	400
Intersection #5, Lankershim Boulevard & Burbank Boulevard					
Eastbound Right-Turn *from Burbank Boulevard to Lankershim Boulevard*	250 [a]	A.M.	630	1,058	428
		P.M.	260	298	38
Northbound Left-Turn *from Lankershim Boulevard to Burbank Boulevard*	160	A.M.	263	445	182
		P.M.	490	423	-67
Intersection #6, Vineland Avenue & Burbank Boulevard					
Westbound Left-Turn *from Burbank Boulevard to Vineland Avenue*	140	A.M.	150	213	63
		P.M.	143	185	42

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[a] The eastbound travel lane ends in a right-turn pocket, and therefore the queue does not block through traffic.

TABLE 30 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #9, Lankershim Boulevard & Cumpston Street					
Southbound Left-Turn *from Lankershim Boulevard to Cumpston Street*	150	A.M.	223	118	-105
		P.M.	313	568	255
Intersection #14, Colfax Avenue & Chandler Boulevard					
Westbound Right-Turn *from Chandler Boulevard to Colfax Avenue*	95	A.M.	85	93	8
		P.M.	58	293	235
Intersection #16, Lankershim Boulevard & Chandler Boulevard (North)					
Northbound Left-Turn *from Lankershim Boulevard to Chandler Boulevard (North)*	50	A.M.	210	443	233
		P.M.	288	395	107
Intersection #18, Tujunga Avenue & Chandler Boulevard (South)					
Eastbound Right-Turn *from Chandler Boulevard to Tujunga Avenue*	75	A.M.	453	650	197
		P.M.	178	275	97
Intersection #20, Lankershim Boulevard & Chandler Boulevard (South)					
Westbound Right-Turn *from Chandler Boulevard to Lankershim Boulevard*	340	A.M.	253	280	27
		P.M.	360	530	170
Intersection #23, Vineland Avenue & Chandler Boulevard (West Leg)					
Northbound Left-Turn *from Vineland Avenue to Burbank Boulevard*	215	A.M.	160	250	90
		P.M.	135	253	118

Notes:
All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

TABLE 30 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard					
Westbound Left-Turn *from Magnolia Boulevard to SR 170 Southbound*	430	A.M.	1,125	1,818	693
		P.M.	1,085	1,883	798
Southbound Left-Turn *from SR 170 Southbound to Magnolia Boulevard*	675 [b]	A.M.	1,395	1,480	85
		P.M.	255	260	5
Intersection #28, SR 170 Northbound Ramps & Magnolia Boulevard					
Eastbound Left-Turn *from Magnolia Boulevard to SR 170 Northbound*	170	A.M.	120	170	50
		P.M.	403	473	70
Northbound Left-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	308	375	67
		P.M.	523	670	147
Northbound Right-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	408	493	85
		P.M.	708	1,025	317
Intesection #29, Tujunga Avenue & Magnolia Boulevard					
Westbound Left-Turn *from Magnolia Boulevard to Tujunga Avenue*	140	A.M.	358	478	120
		P.M.	103	238	135

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[b] The off-ramp extends an additional 500 feet beyond the point where the left-turn and right-turn lanes diverge.

TABLE 30 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #30, Lankershim Boulevard & Magnolia Boulevard					
Eastbound Left-Turn *from Magnoila Boulevard to Lankershim Boulevard*	140	A.M.	518	618	100
		P.M.	473	625	152
Northbound Left-Turn *from Lankershim Boulevard to Magnoila Boulevard*	205	A.M.	195	408	213
		P.M.	250	315	65
Intesection #36, Vineland Avenue & Riverside Drive					
Southbound Left-Turn *from Vineland Avenue to Riverside Drive*	225	A.M.	205	273	68
		P.M.	90	125	35
Intersection #38, Lankershim Boulevard & Riverside Drive					
Southbound Right-Turn *from Lankershim Boulevard to Riverside Drive*	100	A.M.	225	240	15
		P.M.	500	595	95

Notes:
All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

Chapter 10

Non-CEQA Analysis: Project Construction Assessment

This chapter describes the temporary effects of Project construction on the surrounding sidewalks and streets and how construction activities would affect pedestrian, bicycle, transit, and vehicular circulation.

EVALUATION CRITERIA

The TAG requires that the Project construction period be reviewed to determine the extent and the duration to which Project construction would interfere with pedestrian, bicycle, transit, or vehicular circulation and accessibility in the surrounding vicinity. Specifically, it calls for three types of review:

- Temporary Transportation Constraints: This relates to the closure of streets or travel lanes. The review considers the duration of closure, the classification of the street, existing congestion levels, whether the street directly leads to a freeway ramp, and the closure's potential effect on safety and emergency services.

- Temporary Loss of Access: This relates to the closure of any bicycle or pedestrian facilities or the loss of access to any nearby parcels. The review considers the duration of closure or loss of access, the availability of alternative facilities or access, and the extent to which this condition would result in safety, convenience, or economic issues.

- Temporary Loss of Bus Stops or Rerouting of Bus Lines: This relates to the effects of Project construction on public transit operations. The review considers the duration that an existing bus stop would be unavailable and the potential to temporarily relocate the stop, the duration that existing service routes would be interrupted and the availability of alternative routes, and whether interruptions would occur on weekdays, weekends, or holidays.

Additionally, this chapter reviews the effect of Project construction on parking and compares the level of construction-related traffic to that generated by the Project once operational.

PROJECT SETTING

The physical context of the Project was discussed in detail in Chapter 2. The Mobility Plan 2035 classifications of the roadways adjacent to the Project Site are shown in Figure 7 and include Boulevard IIs (Lankershim Boulevard, Vineland Avenue, and Chandler Boulevard, including Chandler Boulevard [North] and Chandler Boulevard [South]), an Avenue II (Tujunga Avenue), a Collector Street (Cumpston Street). The remaining streets, including Weddington Street, Bakman Avenue, and Fair Avenue, are Local Streets.

The Project Site includes an existing bus plaza on Parcel 1, the Metro G (Orange) Line eastern terminus at Block 0 West, and the Metro B (Red) Line subway portal. Additionally, there are on-street bus stops on Lankershim Boulevard north of Chandler Boulevard. Buses travel on Lankershim Boulevard, Chandler Boulevard, including Chandler Boulevard (North) and Chandler Boulevard (South), Vineland Avenue, and, to access the existing bus plaza, Fair Avenue. The existing transit lines in the area are shown in Figure 11 and summarized in Table 7. Transit stops are listed in Table 6.

The City provides public parking on streets adjacent to the Project Site as follows:

- 17 metered spaces on Cumpston Street adjacent to Parcel 1 (Blocks 1, 2, and 3)
- 10 metered spaces on Chandler Boulevard adjacent to Parcel 1 (Blocks 4 and 5/6)
- Eight metered spaces on Chandler Boulevard (South) adjacent to Block 0 West
- Approximately five unmetered spaces on Tujunga Avenue adjacent to Block 7
- Seven metered spaces on Bakman Avenue adjacent to Block 8
- Eight metered spaces on Weddington Street adjacent to Block 8
- Six metered spaces on Lankershim Boulevard adjacent to Block 8
- 17 metered and approximately 10 unmetered spaces on Chandler Boulevard adjacent to the East Lot

Surrounding the Project Site are a mix of residential, commercial, and institutional uses. Residential buildings are predominant along the north side of Cumpston Street, the east side of Fair Avenue, and the south side of Chandler Boulevard. There are also residential buildings on

the north side of Block 0 West, the west side of Tujunga Avenue, and the north side of the alley adjacent to Block 7. South of Block 0 West there is a fire station and a post office. South of Block 8 are commercial uses and the northern edge of Lankershim Elementary School. There are also commercial developments on the southeast corner of Lankershim Boulevard & Chandler Boulevard and the northeast corner of Lankershim Boulevard & Cumpston Street.

PROJECT CONSTRUCTION DETAILS

The construction information used in this section was provided by the Applicant.

Construction Schedule

On-site construction activity would occur between 7:00 AM and 9:00 PM on weekdays and between 8:00 AM and 6:00 PM on Saturdays, consistent with the City's construction hour restrictions. There may be additional restrictions on construction activity or hauling during commuter peak periods, to be determined during the construction permitting process. Additionally, any construction within the public ROW would be subject to additional time restrictions. Construction would not occur on Sundays or federal holidays, though construction-related street or sidewalk closures may remain in place even on days construction does not occur.

The Applicant developed a detailed projection of the anticipated timeline for Project construction. It is important to note that the construction schedule is a long-range forecast that is inherently subject to change based on market conditions and the availability of financing. The schedule described below represents a reasonable projection for Project construction for use in this assessment. However, in practice, it could be compressed (resulting in more intensive construction activity over a shorter duration), extended (resulting in less intensive construction activity over a longer duration), or staggered (resulting in similar intensity as in the forecast schedule but with periods of inactivity between construction of Blocks).

The Project is anticipated to be constructed in two primary phases, as described in Chapter 1 and analyzed in other sections of this report. Within each Phase, the Applicant forecast schedules for construction of each of the various Blocks, as shown in Table 31. Phase 1, lasting approximately

54 months, would begin with development of the East Lot and West Lot, followed by construction of Block 0 (the Consolidated Transit Center). Prior to completion of Block 0, construction would commence on Blocks 7 and 8. After completion of Block 0, construction would commence on Block 5/6. Phase 2, lasting up to nine years, would consist of sequential development of Blocks 4 through 1 on Parcel 1.

Construction of each Block would consist of four primary subphases of activity: demolition (generally one to two months), grading and excavation (between four and 10 months, depending on the size of the structure and depth of excavation required), building structure (between eight and 12 months, depending on the size and height of the structure), and finishes (approximately 10 months on each structure).

Accommodations for Public Transit

Prior to commencement of any construction on Parcel 1, which would displace transit rider parking, alternative parking locations for transit riders would be provided. Project construction is anticipated to begin with the East Lot and West Lot, in which case, upon completion, transit riders would begin parking at those structures.

Construction of the Consolidated Transit Center would be phased to allow continuous operation of the Metro G (Orange) Line busway with minimal disruptions. During the initial phase of Consolidated Transit Center construction, Metro G (Orange) Line operations would be unaffected. Approximately three months into Consolidated Transit Center construction, the Metro G (Orange) Line would be rerouted to circumnavigate Block 0 West in the clockwise direction for approximately three more months while a new bus turnaround area is constructed within the Consolidated Transit Center. Upon completion of the Consolidated Transit Center (which would take up to 18 months), the buses using the existing bus plaza on Parcel 1 would be rerouted to stop at the Consolidated Transit Center.

Construction Traffic

Project construction would result in truck traffic (haul trucks, delivery trucks, cement trucks) and worker traffic to and from the Project Site on a daily basis. Detailed information about the numbers of trucks and workers that would be required during each phase of Project construction is provided in Appendix K.

Trucks. Haul trucks carry dirt or debris away from the Project Site. Haul truck activity is heaviest during grading and excavation of a particular Block. The peak haul truck activity is anticipated to occur during Phase 1 when excavation of Blocks 7 and 8 could occur simultaneously, resulting in a maximum of approximately 210 haul trucks per day over approximately four months. Haul trucks would travel on Burbank Boulevard and Lankershim Boulevard between SR 170 and the Project Site (for dump sites to the north) and on Lankershim Boulevard, Vineland Avenue, and Chandler Boulevard between the Project Site and SR 134 (for dump sites to the east). The haul route is subject to LADOT review and approval during the construction permitting process.

Concrete truck trips to the Project Site are concentrated on concrete pour days, such as when pouring building foundations or when a new level of a high-rise building is poured. These trucks often arrive over the first half of the day so the remainder of the day can be devoted to leveling and smoothing the concrete and to allow ample time to set before it can be worked on the following day, though when exceptionally large concrete pours are required, the hours could be extended. The number of concrete trucks per day would vary depending on the size of a particular pour. For large concrete pours, a Worksite Traffic Control Plan could be required by LADOT.

Delivery truck traffic is highest during building construction and finishing and, therefore, does not generally overlap with peak haul truck traffic. Each Block (with the exceptions of Block 0 West and Block 0 East) would have an average of approximately 15 to 20 daily deliveries over periods of approximately 18 to 22 months.

Workers. The number of workers at the Project Site is highest during building construction and finishing. Based on the overlap in Block construction schedules from Table 31 and the detailed data in Appendix K, there could be as many as 555 workers overall at the Project Site during finishing of Block 8 and structural work on Block 5/6.

Construction Closures

This transportation assessment analyzes the effects of Project construction for each Block on surrounding sidewalks and streets. Construction activities would be primarily contained within the Project Site boundaries, but temporary sidewalk and lane closures would be necessary to accommodate deliveries, haul trucks, cement trucks, and other equipment and to ensure the safety of roadway users during construction. All temporary traffic control plans and sidewalk or lane closures would be individually reviewed and approved by LADOT during the construction permitting process.

Figure 27 provides an overview of the sidewalk and lane closures and durations anticipated during construction of each Block. As shown, partial or full sidewalk closures would be required for various lengths of time all around the perimeter of the Project Site, including the East Lot and West Lot. Partial sidewalk closures would result in a reduction in sidewalk width due to construction barriers just outside of the property line. Full sidewalk closures would either eliminate the sidewalk temporarily or would result in a temporary ADA-compliant pedestrian pathway under a protective overhead barrier, as shown in the diagrams in Figure 27.

At a number of locations west of Lankershim Boulevard, Project construction would also necessitate temporary closure of one travel lane adjacent to the Project Site, including on Chandler Boulevard (North and South), Tujunga Avenue, Bakman Avenue, and the west side of Lankershim Boulevard adjacent to Block 0 West. Additionally, on-street parking would be temporarily closed on the east side of Lankershim Boulevard[38] and the south side of Cumpston Street adjacent to Parcel 1.

It is important to note that the sidewalk and lane closures shown in Figure 27 would not all occur simultaneously. Rather, they would occur during a portion or all of construction of each individual Block based on the schedule shown in Table 31. Project construction would not prevent pedestrian or vehicular access to any neighboring properties, though it could require pedestrian detours that may make pedestrian access temporarily less convenient.

[38] The Applicant would work with LADOT to identify a suitable location to temporarily relocate the taxi waiting area on the east side of Lankershim Boulevard during construction. The Project proposes to convert the taxi area to a passenger loading area upon reopening, if approved by LADOT.

EFFECTS OF PROJECT CONSTRUCTION

The severity of the Project's effects on circulation, access, transit, and parking during construction was assessed. The measures proposed below to minimize the negative effects of Project construction would be incorporated into a Construction Management Plan, summarized at the end of this chapter.

Temporary Transportation Constraints

Figure 27 shows locations and durations where there would be parking lane or travel lane closures adjacent to the Project Site during construction. As shown, these include:

- 3-month travel lane closure on Chandler Boulevard (North) adjacent to Block 0 West
- 3-month travel and parking lane closure on Chandler Boulevard (South) adjacent to Block 0 West
- 5-month travel lane closure on Lankershim Boulevard adjacent to Block 0 West
- 22-month parking lane closures on Lankershim Boulevard and Cumpston Street adjacent to Block 1
- 17-month parking lane closure on Cumpston Street adjacent to Block 2
- 12-month parking lane closure on Chandler Boulevard (North) adjacent to Block 7
- 12-month travel and parking lane closure on Tujunga Avenue adjacent to Block 7
- 24-month travel lane closure on Bakman Avenue adjacent to Block 8
- 6-month travel lane closure on Chandler Boulevard (North) adjacent to the West Lot
- 6-month partial travel lane closure on the Metro G (Orange) Line busway adjacent to the West Lot

It is important to note that travel lane closures noted above refer to the closure of some or all of the physical space that the travel lane currently occupies but may not result in an actual reduction in road capacity. At many locations, it would be feasible to temporarily narrow and/or shift lanes during construction in order to maintain a lane that would otherwise be removed, such as on Bakman Avenue (where there is only one lane) and Lankershim Boulevard adjacent to Block 0

West (to maintain two southbound through lanes). At each location, at least one travel lane would remain open in each direction at all times.

Based on the HCM analysis of Future without Project (Year 2026) conditions, which represents a conservative approximation of traffic conditions several years after the start of Project construction, all of the intersections that may be affected by any of the travel lane closures would operate at LOS D or better prior to closure. Further, the closures identified in Figure 27 would not all occur simultaneously and, therefore, the effect of roadway closures would be locally isolated depending on which Block is under construction. With a measure in the Construction Management Plan that seeks to maintain existing roadway capacity through narrowed or shifted lanes, vehicular circulation is not expected to be excessively burdened by Project construction.

Temporary Loss of Access

Figure 27 shows locations and durations where there would be partial or full sidewalk closures adjacent to the Project Site during construction. As shown, there would be temporary partial or full sidewalk closures adjacent to all public rights-of-way at the Project Site borders. As with lane closures, the sidewalk closures would only occur at each Block during the construction of that Block and, therefore, the majority of the sidewalks adjacent to the Project Site would be open at all times. The Construction Management Plan would require the construction manager to minimize, to the extent feasible, the temporary loss of pedestrian facilities.

Additionally, at no time would Project construction prevent pedestrian or bicycle access to transit or nearby residences or businesses, nor would it impede ADA accessibility. Where and when necessary, the construction manager would provide safe and well-marked detour routes to ensure key pedestrian and bicycle corridors are maintained. As previously noted, overhead protection of pedestrian routes would be provided where necessary.

A fire station is located on the southeast corner of Tujunga Avenue & Chandler Boulevard (South) with fire truck access on Tujunga Avenue. There are two proposed lane closures on potential emergency routes leading away from the station. Tujunga Avenue north of Chandler Boulevard (North) is a relatively lightly traveled section of roadway and there is substantial width for a fire truck to maneuver around stopped vehicles. Chandler Boulevard (North) west of Tujunga Avenue

is not highly traveled but would provide less maneuvering space with one lane closed during West Lot construction. It may be necessary, during that six-month period, to prohibit on-street parking on the north side of Chandler Boulevard (North) in order to ensure adequate emergency response times.

Temporary Loss of Bus Stops or Rerouting of Bus Lines

Project construction would result in numerous modifications to existing transit stops. A key component of the Project construction schedule is the rapid and early construction of the Consolidated Transit Center so that permanent transit operations may commence as soon as possible. During construction of the Consolidated Transit Center, alternative bus stop locations would be provided when necessary for up to 18 months to ensure uninterrupted service for each of the bus routes stopping at or adjacent to the Project Site. The Metro G (Orange) Line would be temporarily rerouted around the perimeter of Block 0 West for approximately three months during construction of the Consolidated Transit Center. Buses that currently stop at the bus plaza in Parcel 1 would be minimally disrupted by Project construction. Those buses would continue to use the bus plaza until completion of the Consolidated Transit Center, at which time they would be permanently rerouted to stop around the perimeter of Block 0 West and/or along Lankershim Boulevard relatively early in Project construction. Therefore, the later construction of Blocks 1 through 6 on Parcel 1 would have a minimal effect on transit service. Buses that stop on Lankershim Boulevard would have their stops temporarily relocated south of Chandler Boulevard during construction of the Consolidated Transit Center and during construction of Block 5/6. All transit routes would continue service without interruption throughout Project construction.

Temporary Loss of On-Street Parking

Some of the on-street parking spaces adjacent to the Project Site would be temporarily or permanently removed with Project construction. At Parcel 1, the 27 total metered parking spaces located on Cumpston Street and Chandler Boulevard would eventually be fully replaced by 34 on-street spaces[39] along with 14 diagonal off-street spaces in a surface lot between Klump Avenue

[39] 13 of these on-street spaces would be on publicly accessible private streets within Parcel 1. Those on public streets may be metered or unmetered at LADOT discretion.

and Fair Avenue. The spaces adjacent to Block 0 West would be permanently removed upon commencement of construction of the Consolidated Transit Center to allow for the installation of bus loading bays along the perimeter of the Consolidated Transit Center. The implementation of the Class IV bicycle lane on Chandler Boulevard (North) between Lankershim Boulevard and Tujunga Avenue, which is not part of the Project but would be implemented during Project construction unless already implemented by LADOT, would require the permanent removal of approximately four on-street spaces between Block 0 West and Block 7. On-street parking adjacent to Block 8 would be temporarily removed during construction but would be replaced following completion. On-street parking may be temporarily disrupted on Chandler Boulevard adjacent to the East Lot but may be replaced following construction, pending agreement between the City and Metro regarding the design of the Chandler Bikeway Project through this corridor.

The on-street spaces would not all be closed at the same time. While those spaces on Chandler Boulevard (South) adjacent to the Consolidated Transit Center would be permanently closed near the start of construction, and the spaces adjacent to Blocks 7 and 8 would be closed soon thereafter, most of the spaces around Parcel 1 would not be closed until well into Phase 2 of Project construction. Further, upon completion of the East Lot and West Lot early in the Project construction period, there would be a surplus of Metro transit rider parking. Therefore, the temporary loss of on-street parking would have a temporary and minimal effect on the surrounding community.

Construction Traffic

Project construction would result in varying levels of truck and worker traffic to and from the Project Site on a daily basis. However, the total numbers of daily and peak hour trucks and workers on any given day would be substantially less than the Project traffic estimates upon operation, detailed in Table 22.

Construction workers often arrive to and depart from the Project Site outside of the morning and afternoon peak hours. Many workers would drive their own vehicles to and from the Project Site, but some would carpool with coworkers and some would ride public transit. The Construction Management Plan would include a measure requiring contractors to provide information to construction workers regarding the availability of transit to and from the Project Site. For those

workers who drive, parking would be provided on-site whenever feasible[40], or in off-site parking areas to be identified by the construction manager as part of the Construction Management Plan.

CONSTRUCTION MANAGEMENT PLAN

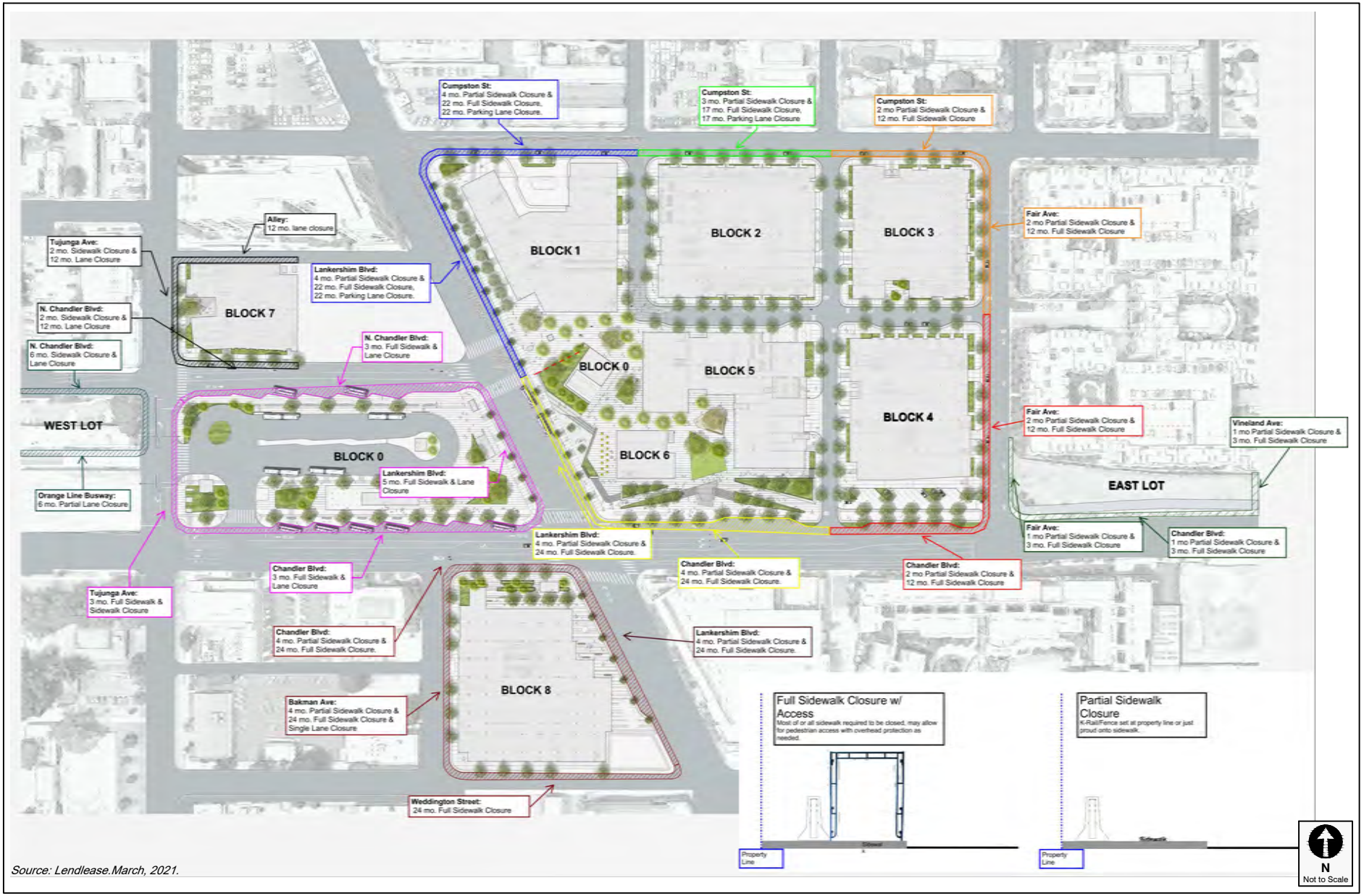
A detailed Construction Management Plan, including street closure information, a detour plan, haul routes, and a staging plan would be prepared and submitted to the City for review and approval during the construction permitting process. The Construction Management Plan would formalize how construction would be carried out and include a Worksite Traffic Control Plan, which would facilitate traffic and pedestrian movement and minimize the potential conflicts between construction activities, street traffic, bicyclists, and pedestrians.

The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Project Site, and shall include, but not be limited to, the following elements, as appropriate:

- Preparation of an existing conditions map showing commercial and passenger loading, parking spaces and meters, and curb cuts with dimensions adjacent to the Project Site.
- Preparation of a vicinity map identifying construction access locations, haul truck staging locations, a haul truck route map, and detour plans, when applicable, for grading and excavation of each Block.
- Scheduling workdays to begin and end prior to or after the morning and afternoon peak hours, respectively, to the extent feasible so as to minimize worker trips during those peak hours.
- Scheduling of construction-related deliveries and haul trips to occur outside the commuter peak hours (i.e., from 9:00 AM to 4:00 PM) to reduce the effect on traffic flow on surrounding streets.
- Scheduling of construction-related deliveries so as not to coincide with major concrete pour days, to the extent feasible.
- Coordinating simultaneous construction between multiple Blocks to avoid scheduling high-traffic activities (i.e., major concrete pour days) at multiple Blocks on the same day.

[40] For example, following completion of the East Lot and West Lot, there would be a surplus of Metro transit rider parking on Parcel 1, which would only gradually be reduced as the various Blocks on Parcel 1 are developed. A portion of this parking could be used for construction workers.

- Provision of worker parking on-site or in designated off-street parking areas.
- Prohibition of construction-related vehicle parking on surrounding public streets, other than the streets adjacent to the Project Site.
- Requirement for contractors to provide public transit information to workers.
- Temporary traffic control (e.g., flag persons) during all construction activities adjacent to public rights-of-way to improve traffic flow on public roadways and to maintain access for land uses in the vicinity of the Project Site.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers as appropriate, especially as it pertains to maintaining SRTS and maintaining pedestrian access between the neighborhood and public transit at the Project Site.
- Planning and scheduling of construction activities so as to minimize the duration of sidewalk and lane closures and public transit detours.
- Coordination with Metro and other affected transit agencies to provide temporary detour routes and relocated bus stops as necessary to provide uninterrupted transit service.
- Coordination with emergency service providers to ensure that Project construction does not impede emergency response.
- Provision of regular construction updates for adjacent businesses and residents through a website or social media.

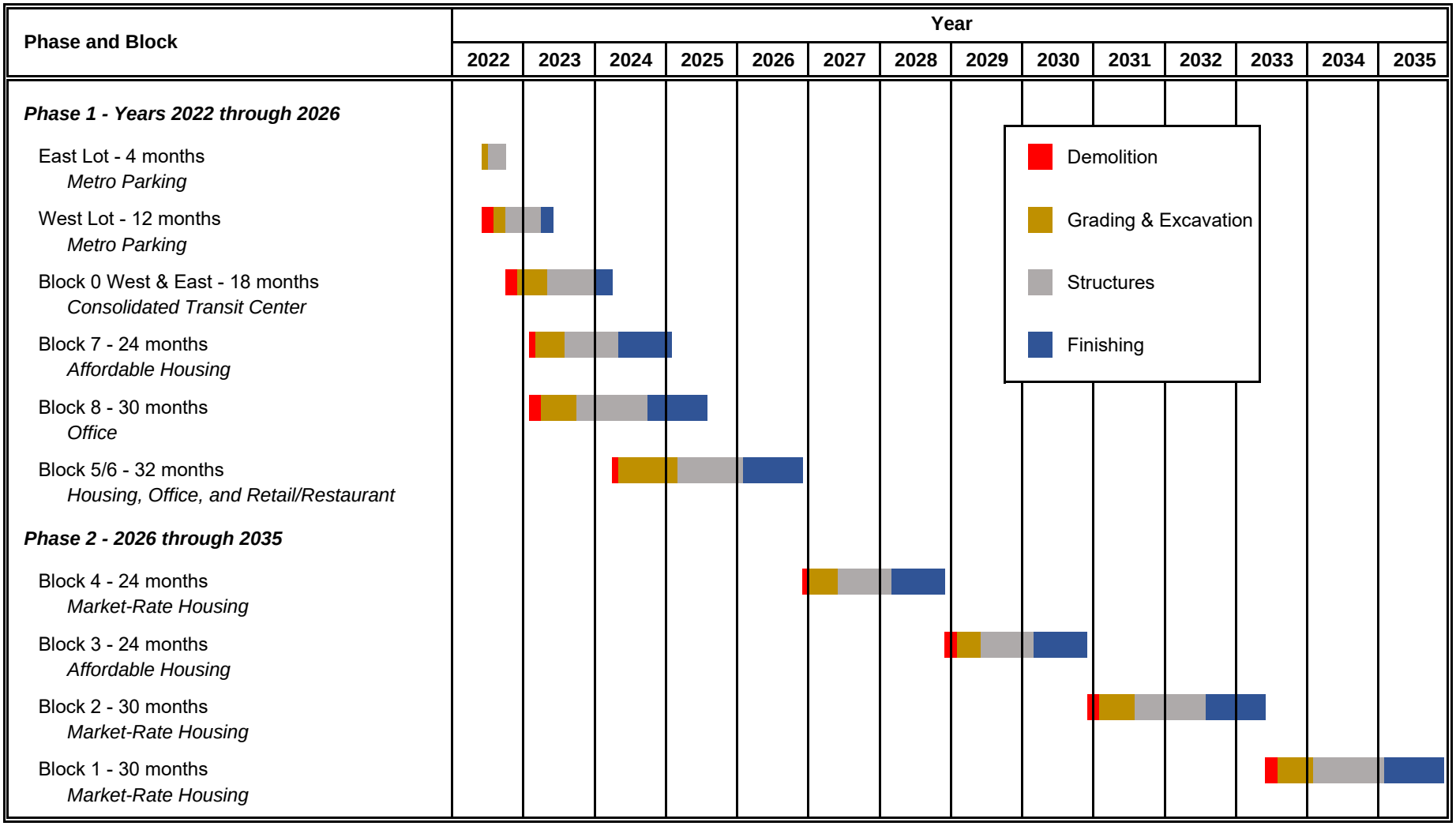


Source: Lendlease.March, 2021.

ANTICIPATED SIDEWALK AND LANE CLOSURES

FIGURE 27

TABLE 31
PROJECT CONSTRUCTION SCHEDULE



Notes:

Information provided by the Applicant, dated July 14, 2020. Projected construction schedule is provided for assessment purposes only and is subject to change.

Chapter 11

Non-CEQA Analysis: Residential Street Cut-Through Analysis

This chapter presents an analysis of the Project's potential to add or divert traffic to residential streets as a cut-through route to avoid congested arterial streets. The analysis was conducted in accordance with the methodology provided in TAG Section 3.5.

RESIDENTIAL STREET SEGMENT SELECTION

As described in the TAG, an increase in average daily traffic (ADT) volumes on a local residential street can adversely affect the character and function of those streets. The objective of the residential street segment analysis is to determine a project's potential to add cut-through traffic to a residential street. Cut-through trips are defined as vehicles that bypass a congested arterial or intersection and instead opt to travel along a residential street. Per page 3-19 of the TAG, analysis is required for residential street segments if all of the following conditions are met:

- *The Project is located along a currently congested Boulevard or Avenue and adds trips that may lead to trip diversion to parallel routes along residential local streets. The congestion level of the Boulevard or Avenue can be determined based on the estimated peak hour LOS under project conditions of the study intersection. LOS E and F are considered to represent congested conditions.*

- *The project is projected to add a significant amount of automobile traffic to the congested Boulevard(s), Avenue(s), or Collector(s) that could potentially cause a shift to alternative route(s); and,*

- *Nearby local residential street(s) (defined as Local Streets as designated in the City's General Plan passing through a residential neighborhood) provide motorists with a viable alternative route. A viable alternative route is defined as one which is parallel and reasonably adjacent to the primary route as to make it attractive as an alternative to the primary route.*

There are residential uses in all directions from the Project Site excepting south and west of Block 8. Many of the residential streets provide connectivity to major streets in the vicinity, including direct connections from Cumpston Street to Burbank Boulevard via Elmer Avenue, Klump Avenue, Bonner Avenue, Fulcher Avenue, and Case Avenue north of Parcel 1 (though the latter three have physical barriers preventing northbound vehicular access from Cumpston Street). Additionally, the neighborhood west of Tujunga Avenue and north of Chandler Boulevard (North) provides two connections to Burbank Boulevard (Beck Avenue and Camellia Avenue) via direct connections to Chandler Boulevard (North) as well as from Tujunga Avenue via Albers Street and Cumpston Street. None of these connections are signalized at either end, but all provide potential alternatives to Tujunga Avenue, Lankershim Boulevard, or Chandler Boulevard (North) for traveling between the Project Site and Burbank Boulevard. Several streets southeast of the Project Site also provide access to Vineland Avenue or Magnolia Boulevard.

A total of 12 residential street segments were selected for detailed analysis. They are shown in Figure 28 and include all nearby residential street segments classified as Local Streets (and one Collector Street) where Project traffic could travel because it provides a viable alternative to a major street. Other streets farther from the Project Site do not meet the selection criteria. The selected segments are located in three distinct neighborhoods, as indicated in Figure 28:

- **Northwest Neighborhood:** The Northwest Neighborhood to the north and west of the Project Site provides connections to Burbank Boulevard from Chandler Boulevard (North) and from Tujunga Avenue and vice versa. Four street segments were selected in the Northwest Neighborhood, including north-south streets Beck Avenue and Camellia Avenue and east-west streets Albers Street and Cumpston Street.

- **Northeast Neighborhood:** The Northeast Neighborhood to the north and east of the Project Site provides connections between Burbank Boulevard from Cumpston Street via five different streets, four of which are Local Streets. These north-south streets are, in order from west to east, Elmer Avenue, Klump Avenue, Bonner Avenue, Fulcher Avenue, and Case Avenue. Klump Avenue is classified as a Collector Street by Mobility Plan 2035 and, therefore, does not fit the TAG criteria. However, it was included in this analysis for informational purposes because it is likely to carry Project traffic since much of the Parcel 1 vehicular access is on the extension of Klump Avenue.

- **Southeast Neighborhood:** The Southeast Neighborhood to the south and east of the Project Site provides connections between Chandler Boulevard and Vineland Avenue and Magnolia Boulevard. Three segments were selected in the Southeast Neighborhood, including north-south street Blakeslee Avenue and east-west streets Weddington Street and McCormick Street.

ANALYSIS METHODOLOGY

A residential Local Street would be considered to be excessively burdened by Project traffic based on an increase in the projected ADT on the street as follows:

Projected ADT with Project (Final ADT)	Project-Related Increase in ADT
1 to 999	120 or more
1,000 to 1,999	12% or more of final ADT
2,000 to 2,999	10% or more of final ADT
3,000 or more	8% or more of final ADT

The Project's daily vehicle trips are to be determined using the VMT Calculator or by estimates using the Trip Generation Manual. Should an adverse effect be identified, traffic calming measures would be proposed to reduce the amount or effects of cut-through traffic.

Due to the COVID-19 pandemic and resulting shelter-in-place orders throughout the state during preparation of this report, existing ADT counts on the 12 analyzed streets could not be collected for inclusion herein. These counts will be collected after traffic conditions return to a more typical level (prior to completion of any portion of the Project) both to establish the daily trip thresholds for each segment and to serve as a reference baseline on which to measure the actual effects of Project traffic. In the interim, this analysis identified excessive Project traffic burdens on each street segment based on the lowest threshold (i.e., 120 or more Project ADT) despite the fact that most of the street segments likely carry more than 999 daily trips.

RESIDENTIAL STREET CUT-THROUGH ANALYSIS

Detailed and conservative estimates of potential cut-through traffic were prepared for each of the three neighborhoods, and further for each of the individual street segments. For each neighborhood and street, a multi-step process was followed:

1. Identify the Blocks that could generate trips through the neighborhood and the origin directions of those trips.
2. Calculate the total number of daily trips generated by those Blocks to and from the origin directions based on the Project trip generation estimates and distribution patterns identified in Chapter 9.
3. Estimate the percentage of that traffic that could divert through the neighborhood to and from each Block.
4. Calculate the total number of daily trips that could divert through the neighborhood.
5. Estimate the percentage of neighborhood cut-through traffic that could use each individual street.

The estimates were based on the directness of the cut-through route, the intersection LOS or turn lane queuing on the primary route (as analyzed in Chapter 9), and engineering judgment. While it is not possible to predict with a high degree of confidence the amount of cut-through traffic on any individual street, the estimates described below are conservatively high so as not to understate the potential effects of Project traffic.

Northwest Neighborhood

The Northwest Neighborhood could potentially attract cut-through traffic traveling between Burbank Boulevard to the west or SR 170 to the north and Blocks 7 and 8. Additionally, it could attract traffic to and from the West Lot, which can only be accessed from Chandler Boulevard (North), a one-way street. It is unlikely that traffic to or from any Block east of Lankershim Boulevard would travel through the Northwest Neighborhood because it does not provide a viable alternative to using Lankershim Boulevard.

The estimated cut-through traffic through the Northwest Neighborhood and on each street segment within it considers the following:

- As shown in Tables 29 and 30, queues at Intersection #5, Lankershim Boulevard & Burbank Boulevard, are forecast to exceed the turn pocket lengths on both the eastbound right-turn lane and northbound left-turn lane during both peak hours in all future traffic conditions. Also, that intersection would operate at LOS E or F during both peak hours. The primary route between the Northwest Neighborhood and routes to the northwest passes through that intersection and increased queues and delays would encourage cut-through traffic through the Northwest Neighborhood. Further, a driver leaving Block 7 or Block 8 and traveling through that intersection would have to first turn left onto Lankershim Boulevard from Cumpston Street, Chandler Boulevard (South), or Weddington Street, which itself could deter drivers from using that route.

- Queues at Intersection #3, Colfax Avenue & Burbank Boulevard, are also forecast to exceed the turn pocket length on the northbound left-turn lane during both peak hours in the future conditions. This is a secondary route for vehicles departing the Project Site to head toward the northwest, and long queues would encourage cut-through traffic through the Northwest Neighborhood.

- Vehicles departing the West Lot must travel west on Chandler Boulevard (North). Vehicles heading in a northwesterly direction may cut through the Northwest Neighborhood as an alternative to traveling north on Colfax Avenue. Vehicles heading in a northeasterly direction would be more likely to cut through to return to Burbank Boulevard in order to avoid as much out-of-direction travel as possible. Vehicles heading in a southeasterly direction could cut through in limited numbers (alternatively, they would travel south on Colfax Avenue). A higher proportion of vehicles cutting through the Northwest Neighborhood from Chandler Boulevard (North) would likely use Camellia Avenue, rather than Beck Avenue, because it is the first street drivers reach.

- Neither Beck Avenue nor Camellia Avenue are signalized where they meet Burbank Boulevard. While drivers can easily turn right from Burbank Boulevard onto these Local Streets (i.e., when traveling toward the Project Site), it would be more difficult to turn left from those streets onto Burbank Boulevard. This reduces the potential for outbound cut-through traffic toward the northwest.

- In the future condition, left turns from northbound Tujunga Avenue to Chandler Boulevard (North) would be prohibited if the Metro G (Orange) Line Improvements Project installs gates on Tujunga Avenue, as is conservatively assumed in this study. Metro's elimination of the left-turn movement would substantially increase ambient traffic through the northwest neighborhood, particularly on Cumpston Street and Camellia Avenue. It would also shift Project traffic leaving Block 8 to the same streets. A higher amount of Project traffic from Block 8 would then use Camellia Avenue, rather than Beck Avenue, to reach Burbank Boulevard or Chandler Boulevard (North). If the Metro G (Orange) Line Improvements Project does not install gates on Tujunga Avenue, instead retaining the left-turn movement to Chandler Boulevard (North), both ambient traffic and Project traffic through the Northwest Neighborhood would be substantially reduced.

In consideration of the above, Table 32 summarizes the estimates and calculations of trips passing through the Northwest Neighborhood. As shown, upon completion of Block 7, Block 8, and the West Lot, all of which would be expected to be constructed as part of Phase 1 of the Project, a total of approximately 522 daily trips are estimated to pass through the Northwest Neighborhood. Of those 522 trips, 131 are expected on Beck Avenue, 392 on Camellia Avenue, 58 on Albers Street, and 178 on Cumpston Street.

As shown in Table 32, the TAG minimum 120-trip threshold for an excessive burden would be reached on three of the street segments within the Northwest Neighborhood. As it is likely that some or all of these streets currently have traffic volumes in excess of 999 daily trips, the actual trip thresholds for each street may be higher. As previously noted, these thresholds will be identified upon collection of traffic count data on each street.

Northeast Neighborhood

The Northeast Neighborhood could potentially attract cut-through traffic traveling between Burbank Boulevard and Parcel 1. While it primarily would connect Parcel 1 to the northeast direction, traffic to and from the northwest could also use the Northeast Neighborhood streets to avoid turning at the intersection of Lankershim Boulevard & Burbank Boulevard.

The estimated cut-through traffic through the Northeast Neighborhood and on each street segment within it consider the following:

- The Northeast Neighborhood provides a more direct route to and from Parcel 1 from the northeast direction than primary routes using Burbank Boulevard and Lankershim Boulevard or Vineland Avenue and Chandler Boulevard. This would encourage cut-through traffic through the Northeast Neighborhood.

- Publicly accessible private extensions of Elmer Avenue and Klump Avenue provide direct access to Parcel 1. Block 1 access is primarily on Elmer Avenue and access for Blocks 2 through 6 is primarily on Klump Avenue. Therefore, those two streets provide direct access to Burbank Boulevard.

- As shown in Table 30, the westbound left-turn queue at Intersection #7, Vineland Avenue & Burbank Boulevard, is forecast to exceed the turn pocket length during both peak hours in the future Year 2037 conditions[41]. This could encourage drivers to continue westbound on Burbank Boulevard and cut through the Northeast Neighborhood to travel to Parcel 1.

- Queues at Intersection #5, Lankershim Boulevard & Burbank Boulevard, are forecast to exceed the turn pocket lengths on both the eastbound right-turn lane and northbound left-turn lane during both peak hours in all future traffic conditions. Also, that intersection would operate at LOS E or F during both peak hours. The primary route between Parcel 1 and routes to the northwest passes through those two movements of that intersection, and long queues and delays would encourage cut-through traffic through the Northeast Neighborhood so drivers can travel through Intersection #5 on Burbank Boulevard without having to turn.

- Bonner Avenue, Fulcher Avenue, and Case Avenue have physical barriers preventing traffic from traveling north from Cumpston Street. Therefore, these streets could only serve inbound traffic to Parcel 1. Nonetheless, there is little reason a driver would choose any of these three streets as a cut-through route over Elmer Avenue and Klump Avenue other than potential congestion on the latter two.

[41] It is also forecast to exceed the turn pocket length in Year 2026 during the morning peak hour, with and without the Project, but this is not indicated in Table 29 because the Project would not add at least 50 feet to the queue length.

- None of the streets in the Northeast Neighborhood are signalized where they meet Burbank Boulevard. While drivers can easily turn right from Burbank Boulevard onto these Local Streets and fairly easily turn left (i.e., when traveling toward the Project Site), it would be more difficult to turn left from those streets onto Burbank Boulevard. This reduces the potential for outbound cut-through traffic toward the northwest.

In consideration of the above, Table 33 summarizes the estimates and calculations of trips passing through the Northeast Neighborhood. As shown, upon completion of Blocks 1 through 6, a total of approximately 332 daily trips are estimated to pass through the Northeast Neighborhood. Of those 332 trips, 74 are expected on Elmer Avenue (below the 120-trip threshold), 249 on Klump Avenue, and eight on Bonner Avenue. No cut-through trips are anticipated on Fulcher Avenue or Case Avenue.

As shown in Table 33, the TAG minimum 120-trip threshold for an excessive burden would be reached on Klump Avenue. This level of cut-through traffic would only be gradually approached as Parcel 1 is built over time as part of the second phase of Project development. As previously noted, the actual trip threshold for an excessive burden will be identified upon collection of traffic count data on each street. However, as Klump Avenue is a Collector Street and, therefore, does not meet the TAG criteria for cut-through burdens, this is provided for informational purposes only.

Southeast Neighborhood

The Southeast Neighborhood could potentially attract cut-through traffic traveling to and from Parcel 1 and Block 8 from the southeast direction. While it primarily would connect Parcel 1 to the southeast direction, traffic to and from Block 8 could also travel through the Southeast Neighborhood via Weddington Street to avoid driving on Lankershim Boulevard.

The estimated cut-through traffic through the Southeast Neighborhood and on each street segment within it consider the following:

- Queues on the northbound left-turn lane at Intersection #23, Vineland Avenue & Chandler Boulevard (West Leg), could encourage drivers to cut through Weddington Street and Blakeslee Avenue to reach Parcel 1. However, these queues only reach or modestly

exceed the turn pocket length under Future with Full Buildout conditions (Year 2037) and, therefore, the effect of this queue on cut-through traffic would be limited and would not occur until the Project was substantially completed.

- Queues on the southbound left-turn at Intersection #31, Vineland Avenue & Magnolia Boulevard, are forecast to exceed the turn pocket length during both peak hours in all future conditions. Additionally, this intersection is projected to operate at LOS E or F by Year 2037. The long queues and delays at this intersection would encourage cut-through traffic through the Southeast Neighborhood to and from Parcel 1. Specifically, Blakeslee Avenue meets Magnolia Boulevard in a signalized intersection and could provide a viable alternative for left turns onto eastbound Magnolia Boulevard.

- Block 8 has inbound access on Weddington Street and outbound access on Bakman Avenue. Traffic to and from the southeast could avoid using Lankershim Boulevard by cutting through the Southeast Neighborhood on Weddington Street.

- McCormick Street does not connect to Lankershim Boulevard to the west and only allows right turns to and from Vineland Avenue to the east. Therefore, its utility as a cut-through route is limited compared to Weddington Street and Blakeslee Avenue.

In consideration of the above, Table 34 summarizes the estimates and calculations of trips passing through the Southeast Neighborhood. As shown, upon completion of the Project, a total of approximately 649 daily trips are estimated to pass through the Southeast Neighborhood. Of those 649 trips, 534 are expected on Blakeslee Avenue, 527 on Weddington Street, and 93 on McCormick Street.

As shown in Table 34, the TAG minimum 120-trip threshold for an excessive burden would be reached on Blakeslee Avenue and Weddington Street. On Blakeslee Avenue, this level of cut-through traffic would only be gradually approached as Parcel 1 is built over time as part of the second phase of Project development. Weddington Street could carry over 120 trips from Block 8 development alone, part of Phase 1 development. As previously noted, the actual trip thresholds will be identified upon collection of traffic count data on each street.

RECOMMENDED ACTIONS

As described above, it is anticipated that the Project will add more than 120 daily trips to Local Streets in two neighborhoods. In the Northwest Neighborhood, three streets would be affected:

- Beck Avenue (131 daily trips with development of Phase 1)
- Camellia Avenue (392 daily trips with development of Phase 1)
- Cumpston Street west of Tujunga Avenue (178 daily trips with development of Phase 1)

In the Southeast Neighborhood, two streets would be affected:

- Blakeslee Avenue (534 daily trips upon Full Buildout of the Project)
- Weddington Street (over 160 daily trips with development of Phase 1 and 527 daily trips upon Full Buildout of the Project

Additionally, Klump Avenue, a Collector Street in the Northeast Neighborhood, would carry approximately 249 daily trips upon Full Buildout of the Project. As noted previously, the 120-trip threshold is the City's minimum threshold for identification of an excessive burden assuming total daily traffic of 999 or fewer trips on a given street segment. Upon the collection of actual traffic counts on the 12 streets listed above following the COVID-19 pandemic, the actual thresholds for each street will be established.

While these trip calculations represent a reasonable and conservative estimate of the potential for Project traffic to cut through residential streets surrounding the Project Site, it is not possible to predict with any certainty the magnitude of the burden as perceived by the affected residents. Therefore, it is also not possible at this time to identify what traffic calming measures would be both effective and acceptable to the local community.

NTMP Process

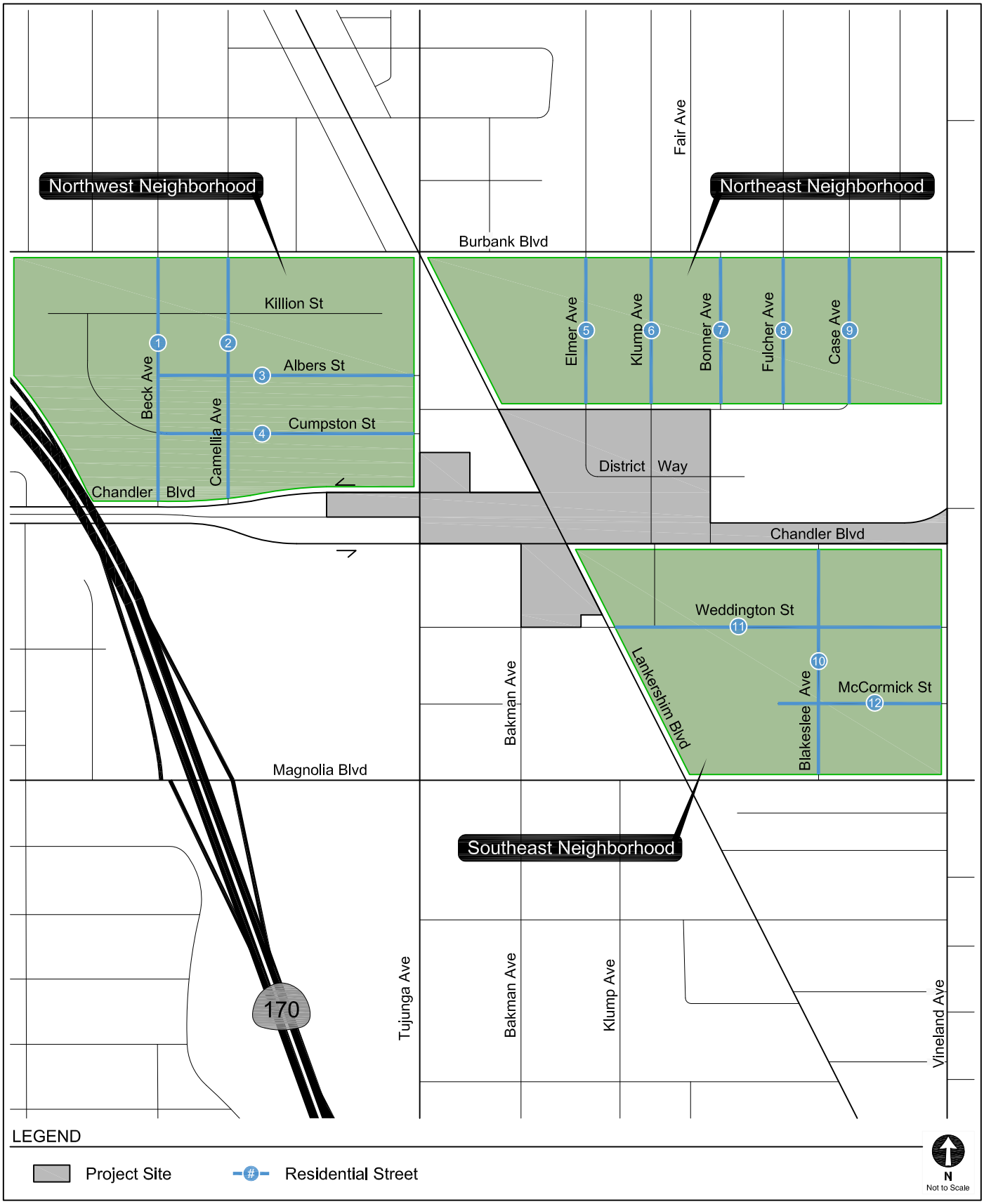
LADOT has, therefore, developed an iterative process, to commence after completion of the Project, through which affected neighborhoods are included in the process to assess what traffic calming options are preferred as part of a NTMP. In some cases, the community may decide to

implement traffic calming measures and, in others, the measures themselves may be considered to be undesirable and no improvements are implemented. The NTMP process includes collection of new traffic data after Project development (or after completion of a portion of Project construction, such as Phase 1) to assess the actual effects of Project traffic, multiple community workshops, development of a draft NTMP, and ultimately the approval or rejection of the NTMP (or components thereof) by affected members of the communities. In the event that the traffic volume data for any street indicates that the Project did not have an effect on cut-through traffic volumes exceeding the City's thresholds for an excessive burden, that street would be excluded from the NTMP process. Similarly, if a street not identified above were found to experience an excessive burden from Project traffic, that street would be included in the NTMP process.

There is a range of traffic calming measures that can be implemented that have been shown to reduce neighborhood cut-through traffic. Those measures can include non-restrictive traffic control measures such as traffic circles, speed humps, roadway narrowing (e.g., raised medians and traffic chokers), landscaping features, roadway striping changes (e.g., bicycle lanes or parking striping to reduce the perceived width of the roadway), stop signs, new sidewalks, and new pedestrian amenities. Traffic calming measures can also include more restrictive physical/operational improvements such as turn restrictions, cul-de-sacs, traffic diverters, and street blockers (such as those preventing traffic from Cumpston Street turning onto Bonner Avenue, Fulcher Avenue, and Case Avenue); however, those more restrictive measures themselves have the potential to divert traffic to another residential street.

NTMP Budget

Accordingly, the Applicant or its successors would fund and coordinate implementation of the NTMP process for the Project for each of the two neighborhoods identified above. The budget for improvements identified through the NTMP would be $200,000 (up to $100,000 per affected neighborhood). Consultant time to administer the process and develop the NTMPs for each neighborhood would be separately funded by the Applicant and would not count against the improvement budget.



RESIDENTIAL NEIGHBORHOODS AND STREET SEGMENTS

FIGURE 28

TABLE 32
RESIDENTIAL STREET CUT-THROUGH TRAFFIC ESTIMATES
NORTHWEST NEIGHBORHOOD

Location	Total Trips [a]	Percent Through Neighborhood [b]	Trips Through Neighborhood	Percent on Individual Streets [c]				Estimated Trips on Individual Streets [d]			
				Beck Avenue	Camellia Avenue	Albers Street	Cumpston Street	Beck Avenue	Camellia Avenue	Albers Street	Cumpston Street
Block 7											
to/from the northwest direction [e]											
Inbound	36	30%	11	25%	75%	25%	75%	3	8	3	8
Outbound	36	50%	18	25%	75%	10%	25%	5	14	2	5
Block 8											
to/from the northwest direction [e]											
Inbound	262	30%	79	25%	75%	25%	75%	20	59	20	59
Outbound	262	30%	79	25%	75%	20%	70%	20	59	16	55
West Lot											
to/from the northwest direction [e]											
Inbound	226	30%	68	25%	75%	25%	75%	17	51	17	51
Outbound	226	50%	113	25%	75%	0%	0%	28	85	0	0
to/from the northeast direction [f]											
Outbound	190	70%	133	25%	75%	0%	0%	33	100	0	0
to/from the southeast direction [g]											
Outbound	107	20%	21	25%	75%	0%	0%	5	16	0	0
Total Through Neighborhood			**522**	**Total on Individual Streets**				**131**	**392**	**58**	**178**

Notes:

[a] Total daily trips between the identified Block(s) and the identified direction of travel based on Project trip generation estimates and distribution patterns from Chapter 9.

[b] A conservatively estimated percentage of Total Trips that could cut through the neighborhood.

[c] An estimate of the percentage of Trips Through Neighborhood that would travel on each street within the neighborhood. In some cases, the same trip would travel on multiple streets.

[d] The total estimated daily cut-through trips on each street based on the Trips Through Neighborhood and Percent on Individual Streets.

[e] Generally, trips entering/leaving the Study Area via Burbank Boulevard to the west or SR 170 to the north, as measured at the intersection of Colfax Avenue & Burbank Boulevard.

[f] Generally, trips entering/leaving the Study Area via Burbank Boulevard to the east or Vineland Avenue to the north, as measured at the intersection of Vineland Avenue & Burbank Boulevard.

[g] Generally, trips entering/leaving the Study Area to the east via Magnolia Boulevard or any route further south or via Lankershim Boulevard or Vineland Avenue to the south, as measured at the intersections of Vineland Avenue & Magnolia Boulevard and on Lankershim Boulevard & Magnolia Boulevard.

TABLE 33
RESIDENTIAL STREET CUT-THROUGH TRAFFIC ESTIMATES
NORTHEAST NEIGHBORHOOD

Location	Total Trips [a]	Percent Through Neighborhood [b]	Trips Through Neighborhood	Percent on Individual Streets [c]					Estimated Trips on Individual Streets [d]				
				Elmer Avenue	Klump Avenue [e]	Bonner Avenue	Fulcher Avenue	Case Avenue	Elmer Avenue	Klump Avenue [e]	Bonner Avenue	Fulcher Avenue	Case Avenue
Parcel 1 (Blocks 1 through 6)													
to/from Vineland Avenue north of Burbank Boulevard [f]													
Inbound	111	20%	22	20%	70%	10%	0%	0%	4	15	2	0	0
Outbound	111	40%	44	20%	80%	0%	0%	0%	9	35	0	0	0
Parcel 1 (Blocks 1 through 6)													
to/from Burbank Boulevard east of Vineland Avenue [g]													
Inbound	189	30%	57	20%	70%	10%	0%	0%	11	40	6	0	0
Outbound	189	50%	95	20%	80%	0%	0%	0%	19	76	0	0	0
Parcel 1 (Blocks 1 through 6)													
to/from Burbank Boulevard west of Lankershim Boulevard [h]													
Inbound	191	40%	76	30%	70%	0%	0%	0%	23	53	0	0	0
Outbound	191	20%	38	20%	80%	0%	0%	0%	8	30	0	0	0
Total Through Neighborhood			**332**	**Total on Individual Streets**					**74**	**249**	**8**	**0**	**0**

Notes:
[a] Total daily trips between the identified Block(s) and the identified direction of travel based on Project trip generation estimates and distribution patterns from Chapter 9.
[b] A conservatively estimated percentage of Total Trips that could cut through the neighborhood.
[c] An estimate of the percentage of Trips Through Neighborhood that would travel on each street within the neighborhood. In some cases, the same trip would travel on multiple streets.
[d] The total estimated daily cut-through trips on each street based on the Trips Through Neighborhood and Percent on Individual Streets.
[e] Klump Avenue is a Collector Street, and therefore does not meet the TAG criteria for analysis. It is included for completeness.
[f] Trips entering/leaving the Study Area via Vineland Avenue north of Burbank Boulevard, as measured at the intersection of Vineland Avenue & Burbank Boulevard.
[g] Trips entering/leaving the Study Area via Burbank Boulevard east of Vineland Avenue, as measured at the intersection of Vineland Avenue & Burbank Boulevard.
[g] Trips turning from eastbound Burbank Boulevard to southbound Lankershim Boulevard and vice versa.

TABLE 34
RESIDENTIAL STREET CUT-THROUGH TRAFFIC ESTIMATES
SOUTHEAST NEIGHBORHOOD

Location	Total Trips [a]	Percent Through Neighborhood [b]	Trips Through Neighborhood	Percent on Individual Streets [c]			Estimated Trips on Individual Streets [d]		
				Blakeslee Avenue	Weddington Street	McCormick Street	Blakeslee Avenue	Weddington Street	McCormick Street
Parcel 1 (Blocks 1 through 6)									
to/from the southeast direction [e]									
Inbound	1,628	10%	163	100%	75%	0%	163	122	0
Outbound	1,628	20%	326	100%	75%	25%	326	245	82
Block 8									
to/from the southeast direction [e]									
Inbound	533	10%	53	25%	100%	0%	13	53	0
Outbound	533	20%	107	30%	100%	10%	32	107	11
Total Through Neighborhood			**649**	**Total on Individual Streets**			**534**	**527**	**93**

Notes:

[a] Total daily trips between the identified Block(s) and the identified direction of travel based on Project trip generation estimates and distribution patterns from Chapter 9

[b] A conservatively estimated percentage of Total Trips that could cut through the neighborhood.

[c] An estimate of the percentage of Trips Through Neighborhood that would travel on each street within the neighborhood. In some cases, the same trip would travel on multiple streets.

[d] The total estimated daily cut-through trips on each street based on the Trips Through Neighborhood and Percent on Individual Streets.

[e] Generally, trips entering/leaving the Study Area to the east via Magnolia Boulevard or any route further south or via Lankershim Boulevard or Vineland Avenue to the south, as measured at the intersections of Vineland Avenue & Magnolia Boulevard and on Lankershim Boulevard & Magnolia Boulevard.

References

2010 Bicycle Plan, A Component of the City of Los Angeles Transportation Element, Los Angeles Department of City Planning, adopted March 1, 2011.

2012 Developer Fee Justification Study, Los Angeles Unified School District, 2012.

City of Los Angeles VMT Calculator Documentation, Los Angeles Department of Transportation and Los Angeles Department of City Planning, May 2020.

Citywide Design Guidelines, Los Angeles City Planning Urban Design Studio, October 2019.

Connect SoCal – The 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy, Southern California Association of Governments, Adopted September 2020.

Highway Capacity Manual, 6th Edition, Transportation Research Board, 2016.

Highway Capacity Manual, Special Report 209, Transportation Research Board, 2000.

Interim Guidance for Freeway Safety Analysis, Los Angeles Department of Transportation, May 2020.

Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance, California Department of Transportation, July 2020.

Local Roadway Safety: A Manual for California's Local Road Owners, Caltrans, April 2020.

Managing High-Demand Curbside Passenger Loading Zones, San Francisco Municipal Transportation Agency, December 2017.

Mobility Plan 2035, An Element of the General Plan, Los Angeles Department of City Planning, September 2016.

Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan, Los Angeles Department of City Planning, March 2015.

Quantifying Greenhouse Gas Mitigation Measures, California Air Pollution Control Officers Association, August 2010.

State of California Senate Bill No. 743, Steinberg, 2013.

Technical Advisory on Evaluating Transportation Impacts in CEQA, California Governor's Office of Planning and Research, December 2018.

Transportation Assessment Guidelines, Los Angeles Department of Transportation, July 2020.

References, cont.

Trip Generation Manual, 9th Edition, Institute of Transportation Engineers, 2012.

Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, 2017.

Vision Zero Los Angeles: 2018 Action Plan + Progress Report, City of Los Angeles, 2018.

Appendix A

VMT Calculator Output

Phase 1

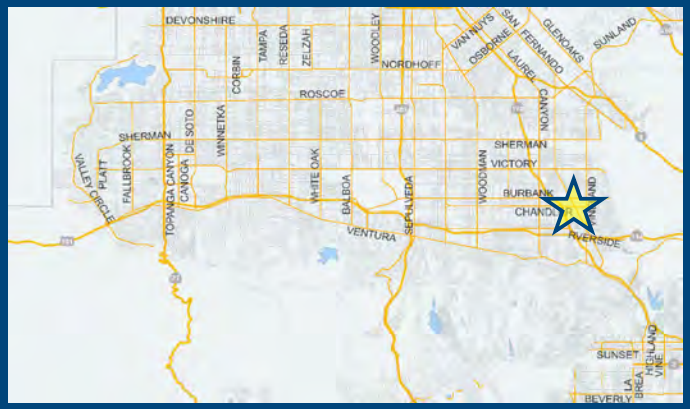
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Phase 1

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	400	DU
Retail | General Retail	4.218	ksf
Retail | High-Turnover Sit-Down Restaurant	53.69	ksf
Office | General Office	580.374	ksf
Housing | Affordable Housing - Family	151	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
☐ Proposed Prj ☑ Mitigation
- 2458 city code parking provision for the project site
- 1979 actual parking provision for the project site

Unbundle Parking
☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

Parking Cash-Out
☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking
☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits
☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
8,988 Daily Vehicle Trips	**7,674** Daily Vehicle Trips
79,534 Daily VMT	**67,913** Daily VMT
4.8 Household VMT per Capita	**4.1** Household VMT per Capita
10.4 Work VMT per Employee	**8.9** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	400	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	Family	151	DU
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	4.218	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	53.690	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	580.374	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 2,545
Total Population: 1,375

Proposed Project		*With Mitigation*	
8,988	**Daily Vehicle Trips**	**7,674**	**Daily Vehicle Trips**
79,534	**Daily VMT**	**67,913**	**Daily VMT**
4.8	**Household VMT per Capita**	**4.1**	**Household VMT per Capita**
10.4	**Work VMT per Employee**	**8.9**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	*0*	2458
		Actual parking provision (spaces)	*0*	1979
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	Employees and residents participating (%)	*0%*	50%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	Implement/Improve on-street bicycle facility	Provide bicycle facility along site (Yes/No)	*0*	Yes
	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	*0*	Yes
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	Traffic calming improvements	Streets with traffic calming improvements (%)	*0%*	25%
		Intersections with traffic calming improvements (%)	*0%*	25%
	Pedestrian network improvements	Included (within project and connecting off-site/within project only)	*0*	within project and connecting off-site

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	10%	0%	10%	0%	10%	0%	10%	0%	10%	0%	10%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	2%	0%	2%	0%	2%	0%	2%	0%	2%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*13%*
MAX. TDM EFFECT	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	486	-39.9%	292	8.7	4,228	2,540
Home Based Other Production	1,346	-42.1%	779	5.3	7,134	4,129
Non-Home Based Other Production	2,254	-4.8%	2,146	8.5	19,159	18,241
Home-Based Work Attraction	2,951	-26.4%	2,172	12.2	36,002	26,498
Home-Based Other Attraction	4,199	-54.4%	1,915	7.3	30,653	13,980
Non-Home Based Other Attraction	1,778	-5.3%	1,684	8.4	14,935	14,146

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	292	2,540	-14.6%	249	2,169
Home Based Other Production	0.0%	779	4,129	-14.6%	665	3,526
Non-Home Based Other Production	0.0%	2,146	18,241	-14.6%	1,832	15,576
Home-Based Work Attraction	0.0%	2,172	26,498	-14.6%	1,855	22,626
Home-Based Other Attraction	0.0%	1,915	13,980	-14.6%	1,635	11,937
Non-Home Based Other Attraction	0.0%	1,684	14,146	-14.6%	1,438	12,079

MXD VMT Methodology Per Capita & Per Employee

Total Population: 1,375
Total Employees: 2,545
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**6,669**	**5,695**
Total Home Based Work Attraction VMT	**26,498**	**22,626**
Total Home Based VMT Per Capita	**4.8**	**4.1**
Total Work Based VMT Per Employee	**10.4**	**8.9**

Full Buildout

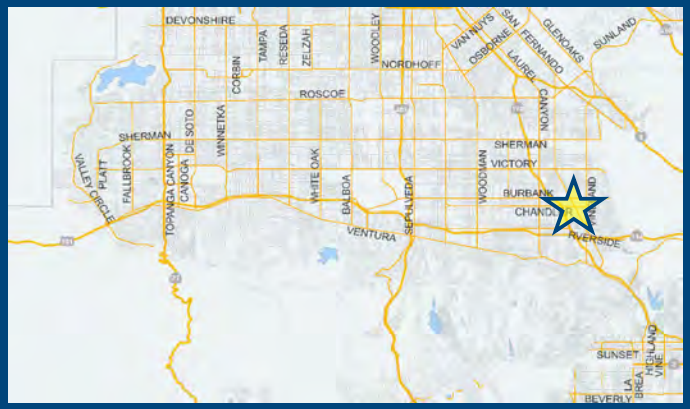
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Full Buildout

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	1216	DU
Retail | General Retail	30.125	ksf
Retail | High-Turnover Sit-Down Restaurant	75	ksf
Office | General Office	580.374	ksf
Housing | Affordable Housing - Family	311	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
☐ Proposed Prj ☑ Mitigation
- 4291 city code parking provision for the project site
- 3313 actual parking provision for the project site

Unbundle Parking
☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

Parking Cash-Out
☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking
☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits
☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
14,823 Daily Vehicle Trips	**12,425** Daily Vehicle Trips
123,802 Daily VMT	**103,775** Daily VMT
5.3 Household VMT per Capita	**4.5** Household VMT per Capita
10.4 Work VMT per Employee	**8.7** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	1,216	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	Family	311	DU
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	30.125	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	75.000	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	580.374	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 2,682
Total Population: 3,717

Proposed Project		*With Mitigation*	
14,823	**Daily Vehicle Trips**	**12,425**	**Daily Vehicle Trips**
123,802	**Daily VMT**	**103,775**	**Daily VMT**
5.3	**Household VMT per Capita**	**4.5**	**Household VMT per Capita**
10.4	**Work VMT per Employee**	**8.7**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	*0*	4291
		Actual parking provision (spaces)	*0*	3313
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	Employees and residents participating (%)	*0%*	50%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	Implement/Improve on-street bicycle facility	Provide bicycle facility along site (Yes/No)	*0*	Yes
	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	*0*	Yes
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	Traffic calming improvements	Streets with traffic calming improvements (%)	*0%*	25%
		Intersections with traffic calming improvements (%)	*0%*	25%
	Pedestrian network improvements	Included (within project and connecting off-site/within project only)	*0*	within project and connecting off-site

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	11%	0%	11%	0%	11%	0%	11%	0%	11%	0%	11%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	2%	0%	2%	0%	2%	0%	2%	0%	2%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*14%*
MAX. TDM EFFECT	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE	*urban*	*75%*
TYPE	compact infill	*40%*
MAX:	*suburban center*	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	1,353	-29.5%	954	8.7	11,771	8,300
Home Based Other Production	3,747	-42.2%	2,167	5.3	19,859	11,485
Non-Home Based Other Production	4,010	-4.7%	3,821	8.5	34,085	32,479
Home-Based Work Attraction	3,149	-27.3%	2,290	12.2	38,418	27,938
Home-Based Other Attraction	6,799	-55.0%	3,058	7.3	49,633	22,323
Non-Home Based Other Attraction	2,684	-5.6%	2,533	8.4	22,546	21,277

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	954	8,300	-16.2%	800	6,957
Home Based Other Production	0.0%	2,167	11,485	-16.2%	1,816	9,627
Non-Home Based Other Production	0.0%	3,821	32,479	-16.2%	3,203	27,225
Home-Based Work Attraction	0.0%	2,290	27,938	-16.2%	1,920	23,419
Home-Based Other Attraction	0.0%	3,058	22,323	-16.2%	2,563	18,712
Non-Home Based Other Attraction	0.0%	2,533	21,277	-16.2%	2,123	17,835

MXD VMT Methodology Per Capita & Per Employee

Total Population: 3,717
Total Employees: 2,682
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**19,785**	**16,584**
Total Home Based Work Attraction VMT	**27,938**	**23,419**
Total Home Based VMT Per Capita	**5.3**	**4.5**
Total Work Based VMT Per Employee	**10.4**	**8.7**

Individual Land Use Analysis

Phase 1 without Affordable Housing

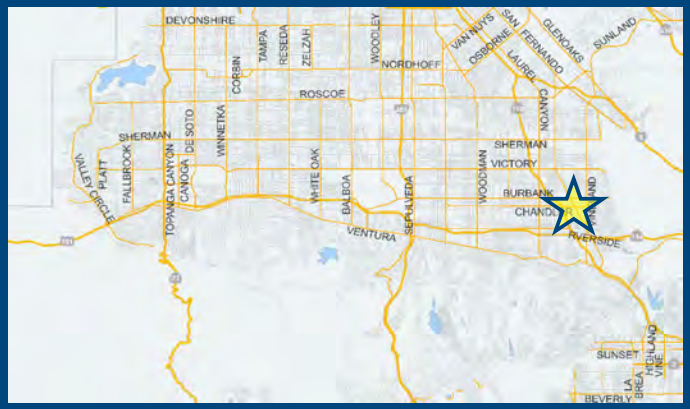
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Phase 1 without Affordable Housing

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	400	DU
Retail | General Retail	4.218	ksf
Retail | High-Turnover Sit-Down Restaurant	53.69	ksf
Office | General Office	580.374	ksf

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
☐ Proposed Prj ☐ Mitigation
- 2458 city code parking provision for the project site
- 1979 actual parking provision for the project site

Unbundle Parking
☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

Parking Cash-Out
☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking
☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits
☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
8,455 Daily Vehicle Trips	**8,455** Daily Vehicle Trips
75,714 Daily VMT	**75,714** Daily VMT
5.2 Household VMT per Capita	**5.2** Household VMT per Capita
10.5 Work VMT per Employee	**10.5** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1 without Affordable Housing
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	400	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	4.218	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	53.690	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	580.374	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 2,545
Total Population: 901

Proposed Project		*With Mitigation*	
8,455	**Daily Vehicle Trips**	**8,455**	**Daily Vehicle Trips**
75,714	**Daily VMT**	**75,714**	**Daily VMT**
5.2	**Household VMT per Capita**	**5.2**	**Household VMT per Capita**
10.5	**Work VMT per Employee**	**10.5**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	*Meets City Bike Parking Code (Yes/No)*	*0*	*0*
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
MAX. TDM EFFECT	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1 without Affordable Housing
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	359	-46.8%	191	8.7	3,123	1,662
Home Based Other Production	993	-41.8%	578	5.3	5,263	3,063
Non-Home Based Other Production	2,090	-4.8%	1,989	8.5	17,765	16,907
Home-Based Work Attraction	2,951	-26.1%	2,180	12.2	36,002	26,596
Home-Based Other Attraction	4,030	-53.6%	1,870	7.3	29,419	13,651
Non-Home Based Other Attraction	1,738	-5.2%	1,647	8.4	14,599	13,835

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	191	1,662	0.0%	191	1,662
Home Based Other Production	0.0%	578	3,063	0.0%	578	3,063
Non-Home Based Other Production	0.0%	1,989	16,907	0.0%	1,989	16,907
Home-Based Work Attraction	0.0%	2,180	26,596	0.0%	2,180	26,596
Home-Based Other Attraction	0.0%	1,870	13,651	0.0%	1,870	13,651
Non-Home Based Other Attraction	0.0%	1,647	13,835	0.0%	1,647	13,835

MXD VMT Methodology Per Capita & Per Employee

Total Population: 901
Total Employees: 2,545
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**4,725**	**4,725**
Total Home Based Work Attraction VMT	**26,596**	**26,596**
Total Home Based VMT Per Capita	**5.2**	**5.2**
Total Work Based VMT Per Employee	**10.5**	**10.5**

Individual Land Use Analysis

Phase 1 without Market-Rate Housing

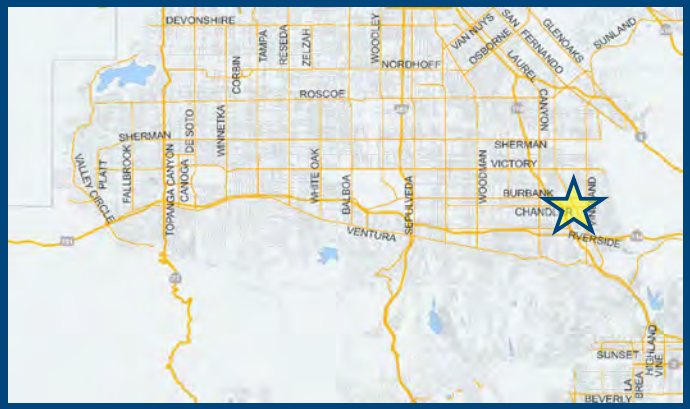
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Phase 1 without Multi-Family Housing

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Retail | General Retail	4.218	ksf
Retail | High-Turnover Sit-Down Restaurant	53.69	ksf
Office | General Office	580.374	ksf
Housing | Affordable Housing - Family	151	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
- 2458 city code parking provision for the project site
- 1979 actual parking provision for the project site
- ☐ Proposed Prj ☐ Mitigation

Unbundle Parking
- 175 monthly parking cost (dollar) for the project site
- ☐ Proposed Prj ☐ Mitigation

Parking Cash-Out
- 50 percent of employees eligible
- ☐ Proposed Prj ☐ Mitigation

Price Workplace Parking
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking
- ☐ Proposed Prj ☐ Mitigation

Residential Area Parking Permits
- 200 cost (dollar) of annual permit
- ☐ Proposed Prj ☐ Mitigation

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
7,329 Daily Vehicle Trips	**7,329** Daily Vehicle Trips
67,587 Daily VMT	**67,587** Daily VMT
2.5 Household VMT per Capita	**2.5** Household VMT per Capita
10.4 Work VMT per Employee	**10.4** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	*0*	*DU*
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	Family	151	DU
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	4.218	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	53.690	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	580.374	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 2,545
Total Population: 474

Proposed Project		*With Mitigation*	
7,329	**Daily Vehicle Trips**	**7,329**	**Daily Vehicle Trips**
67,587	**Daily VMT**	**67,587**	**Daily VMT**
2.5	**Household VMT per Capita**	**2.5**	**Household VMT per Capita**
10.4	**Work VMT per Employee**	**10.4**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	*Meets City Bike Parking Code (Yes/No)*	*0*	*0*
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
MAX. TDM EFFECT	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1 without Multi-Family Housing
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	128	-83.6%	21	8.7	1,114	183
Home Based Other Production	353	-46.2%	190	5.3	1,871	1,007
Non-Home Based Other Production	1,791	-4.8%	1,705	8.5	15,224	14,493
Home-Based Work Attraction	2,951	-26.4%	2,173	12.2	36,002	26,511
Home-Based Other Attraction	3,726	-55.5%	1,657	7.3	27,200	12,096
Non-Home Based Other Attraction	1,666	-5.0%	1,583	8.4	13,994	13,297

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	21	183	0.0%	21	183
Home Based Other Production	0.0%	190	1,007	0.0%	190	1,007
Non-Home Based Other Production	0.0%	1,705	14,493	0.0%	1,705	14,493
Home-Based Work Attraction	0.0%	2,173	26,511	0.0%	2,173	26,511
Home-Based Other Attraction	0.0%	1,657	12,096	0.0%	1,657	12,096
Non-Home Based Other Attraction	0.0%	1,583	13,297	0.0%	1,583	13,297

MXD VMT Methodology Per Capita & Per Employee

Total Population: 474
Total Employees: 2,545
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**1,190**	**1,190**
Total Home Based Work Attraction VMT	**26,511**	**26,511**
Total Home Based VMT Per Capita	**2.5**	**2.5**
Total Work Based VMT Per Employee	**10.4**	**10.4**

Individual Land Use Analysis

Phase 1 without Office

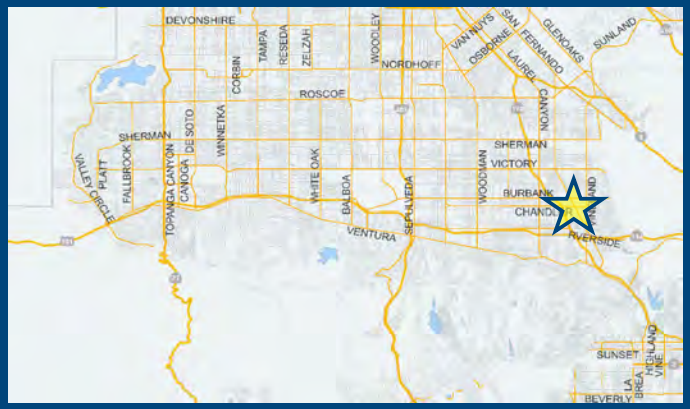
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Phase 1 without Office

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Retail | General Retail	4.218	ksf
Retail | High-Turnover Sit-Down Restaurant	53.69	ksf
Housing | Affordable Housing - Family	151	DU
Housing | Multi-Family	400	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
- 2458 city code parking provision for the project site
- 1979 actual parking provision for the project site
- ☐ Proposed Prj ☐ Mitigation

Unbundle Parking
- 175 monthly parking cost (dollar) for the project site
- ☐ Proposed Prj ☐ Mitigation

Parking Cash-Out
- 50 percent of employees eligible
- ☐ Proposed Prj ☐ Mitigation

Price Workplace Parking
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking
- ☐ Proposed Prj ☐ Mitigation

Residential Area Parking Permits
- 200 cost (dollar) of annual permit
- ☐ Proposed Prj ☐ Mitigation

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
5,548 Daily Vehicle Trips	**5,548** Daily Vehicle Trips
43,693 Daily VMT	**43,693** Daily VMT
5.4 Household VMT per Capita	**5.4** Household VMT per Capita
N/A Work VMT per Employee	**N/A** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: N/A Threshold = 11.6 15% Below APC	**Work: N/A** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1 without Office
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	400	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	Family	151	DU
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	4.218	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	53.690	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	*General Office*	*0.000*	*ksf*
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1 without Office
Project Address: 34.168819, -118.375779

Version 1.3

Analysis Results			
Total Employees: 223			
Total Population: 1,375			
Proposed Project		***With Mitigation***	
5,548	**Daily Vehicle Trips**	**5,548**	**Daily Vehicle Trips**
43,693	**Daily VMT**	**43,693**	**Daily VMT**
5.4	**Household VMT per Capita**	**5.4**	**Household VMT per Capita**
N/A	**Work VMT per Employee**	**N/A**	**Work VMT per Employee**

Significant VMT Impact?			
APC: South Valley			
Impact Threshold: 15% Below APC Average			
Household = 9.4			
Work = 11.6			
Proposed Project		***With Mitigation***	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	N/A	Work > 11.6	N/A

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	*Meets City Bike Parking Code (Yes/No)*	*0*	*0*
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
MAX. TDM EFFECT	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1 without Office
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	486	-24.3%	368	8.7	4,228	3,202
Home Based Other Production	1,346	-40.4%	802	5.3	7,134	4,251
Non-Home Based Other Production	1,662	-3.8%	1,599	8.5	14,127	13,592
Home-Based Work Attraction	324	-29.9%	227	12.2	3,953	2,769
Home-Based Other Attraction	3,014	-53.0%	1,416	7.3	22,002	10,337
Non-Home Based Other Attraction	1,186	-4.2%	1,136	8.4	9,962	9,542

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	368	3,202	0.0%	368	3,202
Home Based Other Production	0.0%	802	4,251	0.0%	802	4,251
Non-Home Based Other Production	0.0%	1,599	13,592	0.0%	1,599	13,592
Home-Based Work Attraction	0.0%	227	2,769	0.0%	227	2,769
Home-Based Other Attraction	0.0%	1,416	10,337	0.0%	1,416	10,337
Non-Home Based Other Attraction	0.0%	1,136	9,542	0.0%	1,136	9,542

MXD VMT Methodology Per Capita & Per Employee

Total Population: 1,375
Total Employees: 223
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**7,453**	**7,453**
Total Home Based Work Attraction VMT	**2,769**	**2,769**
Total Home Based VMT Per Capita	**5.4**	**5.4**
Total Work Based VMT Per Employee	**N/A**	**N/A**

Individual Land Use Analysis

Full Buildout without Affordable Housing

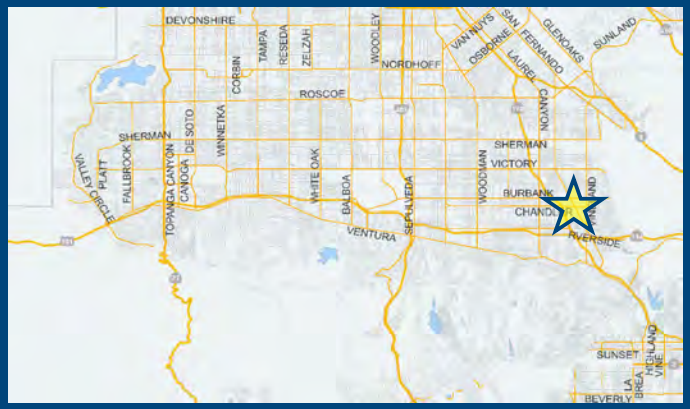
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Full Buildout without Affordable Housing

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	1216	DU
Office | General Office	580.374	ksf
Retail | General Retail	30.125	ksf
Retail | High-Turnover Sit-Down Restaurant	75	ksf

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
☐ Proposed Prj ☐ Mitigation
- 4291 city code parking provision for the project site
- 3313 actual parking provision for the project site

Unbundle Parking
☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

Parking Cash-Out
☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking
☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits
☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
13,722 Daily Vehicle Trips	**13,722** Daily Vehicle Trips
115,871 Daily VMT	**115,871** Daily VMT
5.8 Household VMT per Capita	**5.8** Household VMT per Capita
10.5 Work VMT per Employee	**10.5** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout without Affordable Housing
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	1,216	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	30.125	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	75.000	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	580.374	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 2,682
Total Population: 2,740

Proposed Project		*With Mitigation*	
13,722	**Daily Vehicle Trips**	**13,722**	**Daily Vehicle Trips**
115,871	**Daily VMT**	**115,871**	**Daily VMT**
5.8	**Household VMT per Capita**	**5.8**	**Household VMT per Capita**
10.5	**Work VMT per Employee**	**10.5**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	*Meets City Bike Parking Code (Yes/No)*	*0*	*0*
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
MAX. TDM EFFECT	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout without Affordable Housin
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	1,090	-31.2%	750	8.7	9,483	6,525
Home Based Other Production	3,019	-41.6%	1,764	5.3	16,001	9,349
Non-Home Based Other Production	3,670	-4.7%	3,496	8.5	31,195	29,716
Home-Based Work Attraction	3,149	-26.9%	2,302	12.2	38,418	28,084
Home-Based Other Attraction	6,452	-54.2%	2,952	7.3	47,100	21,550
Non-Home Based Other Attraction	2,602	-5.5%	2,458	8.4	21,857	20,647

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	750	6,525	0.0%	750	6,525
Home Based Other Production	0.0%	1,764	9,349	0.0%	1,764	9,349
Non-Home Based Other Production	0.0%	3,496	29,716	0.0%	3,496	29,716
Home-Based Work Attraction	0.0%	2,302	28,084	0.0%	2,302	28,084
Home-Based Other Attraction	0.0%	2,952	21,550	0.0%	2,952	21,550
Non-Home Based Other Attraction	0.0%	2,458	20,647	0.0%	2,458	20,647

MXD VMT Methodology Per Capita & Per Employee

Total Population: 2,740
Total Employees: 2,682
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**15,874**	**15,874**
Total Home Based Work Attraction VMT	**28,084**	**28,084**
Total Home Based VMT Per Capita	**5.8**	**5.8**
Total Work Based VMT Per Employee	**10.5**	**10.5**

Individual Land Use Analysis

Full Buildout without Market-Rate Housing

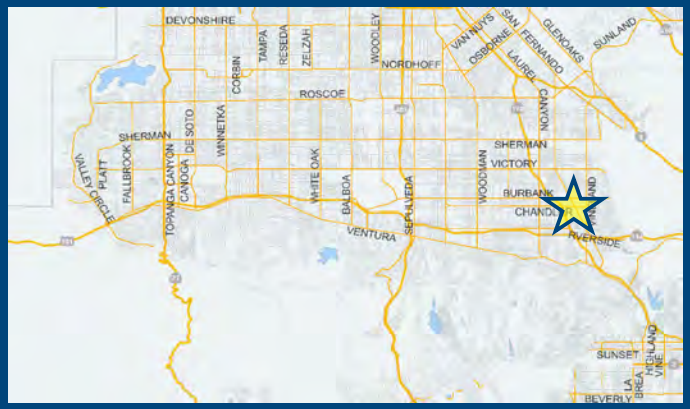
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Full Buildout without Multi-Family Housing

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Office | General Office	580.374	ksf
Retail | General Retail	30.125	ksf
Retail | High-Turnover Sit-Down Restaurant	75	ksf
Housing | Affordable Housing - Family	311	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
- 4291 city code parking provision for the project site
- 3313 actual parking provision for the project site
- ☐ Proposed Prj ☐ Mitigation

Unbundle Parking
- 175 monthly parking cost (dollar) for the project site
- ☐ Proposed Prj ☐ Mitigation

Parking Cash-Out
- 50 percent of employees eligible
- ☐ Proposed Prj ☐ Mitigation

Price Workplace Parking
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking
- ☐ Proposed Prj ☐ Mitigation

Residential Area Parking Permits
- 200 cost (dollar) of annual permit
- ☐ Proposed Prj ☐ Mitigation

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
9,906 Daily Vehicle Trips	**9,906** Daily Vehicle Trips
88,443 Daily VMT	**88,443** Daily VMT
3.2 Household VMT per Capita	**3.2** Household VMT per Capita
10.5 Work VMT per Employee	**10.5** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout without Multi-Family Housi
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	*0*	*DU*
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	Family	311	DU
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	30.125	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	75.000	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	580.374	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 2,682
Total Population: 977

Proposed Project		*With Mitigation*	
9,906	**Daily Vehicle Trips**	**9,906**	**Daily Vehicle Trips**
88,443	**Daily VMT**	**88,443**	**Daily VMT**
3.2	**Household VMT per Capita**	**3.2**	**Household VMT per Capita**
10.5	**Work VMT per Employee**	**10.5**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	*Meets City Bike Parking Code (Yes/No)*	*0*	*0*
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
MAX. TDM EFFECT	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout without Multi-Family Hous
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	263	-54.4%	120	8.7	2,288	1,044
Home Based Other Production	728	-45.1%	400	5.3	3,858	2,120
Non-Home Based Other Production	2,601	-4.8%	2,475	8.5	22,109	21,038
Home-Based Work Attraction	3,149	-26.5%	2,315	12.2	38,418	28,243
Home-Based Other Attraction	5,361	-55.8%	2,371	7.3	39,135	17,308
Non-Home Based Other Attraction	2,343	-5.0%	2,225	8.4	19,681	18,690

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	120	1,044	0.0%	120	1,044
Home Based Other Production	0.0%	400	2,120	0.0%	400	2,120
Non-Home Based Other Production	0.0%	2,475	21,038	0.0%	2,475	21,038
Home-Based Work Attraction	0.0%	2,315	28,243	0.0%	2,315	28,243
Home-Based Other Attraction	0.0%	2,371	17,308	0.0%	2,371	17,308
Non-Home Based Other Attraction	0.0%	2,225	18,690	0.0%	2,225	18,690

MXD VMT Methodology Per Capita & Per Employee

Total Population: 977
Total Employees: 2,682
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**3,164**	**3,164**
Total Home Based Work Attraction VMT	**28,243**	**28,243**
Total Home Based VMT Per Capita	**3.2**	**3.2**
Total Work Based VMT Per Employee	**10.5**	**10.5**

Individual Land Use Analysis

Full Buildout without Office

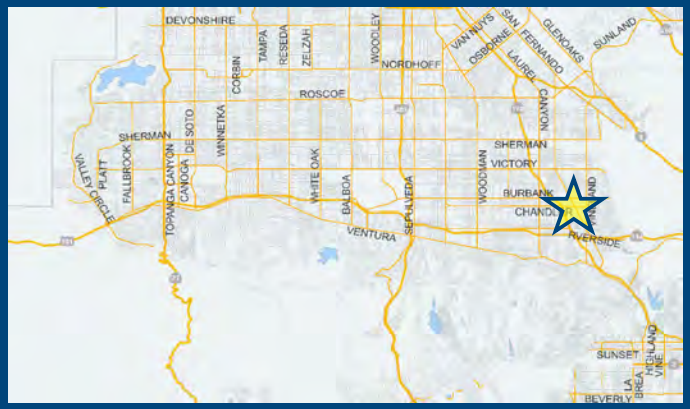
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Full Buildout without Office

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Retail | General Retail	30.125	ksf
Retail | High-Turnover Sit-Down Restaurant	75	ksf
Housing | Affordable Housing - Family	311	DU
Housing | Multi-Family	1216	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
- 4291 city code parking provision for the project site
- 3313 actual parking provision for the project site
- ☐ Proposed Prj ☐ Mitigation

Unbundle Parking
- 175 monthly parking cost (dollar) for the project site
- ☐ Proposed Prj ☐ Mitigation

Parking Cash-Out
- 50 percent of employees eligible
- ☐ Proposed Prj ☐ Mitigation

Price Workplace Parking
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking
- ☐ Proposed Prj ☐ Mitigation

Residential Area Parking Permits
- 200 cost (dollar) of annual permit
- ☐ Proposed Prj ☐ Mitigation

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
11,488 Daily Vehicle Trips	**11,488** Daily Vehicle Trips
88,699 Daily VMT	**88,699** Daily VMT
5.6 Household VMT per Capita	**5.6** Household VMT per Capita
N/A Work VMT per Employee	**N/A** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: N/A Threshold = 11.6 15% Below APC	**Work: N/A** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout without Office
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	1,216	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	Family	311	DU
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	30.125	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	75.000	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	*General Office*	*0.000*	*ksf*
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 360
Total Population: 3,717

Proposed Project		*With Mitigation*	
11,488	**Daily Vehicle Trips**	**11,488**	**Daily Vehicle Trips**
88,699	**Daily VMT**	**88,699**	**Daily VMT**
5.6	**Household VMT per Capita**	**5.6**	**Household VMT per Capita**
N/A	**Work VMT per Employee**	**N/A**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	N/A	Work > 11.6	N/A

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	*Reduce parking supply*	*City code parking provision (spaces)*	*0*	*0*
		Actual parking provision (spaces)	*0*	*0*
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	*Employees and residents participating (%)*	*0%*	*0%*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	*Meets City Bike Parking Code (Yes/No)*	*0*	*0*
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	*Traffic calming improvements*	*Streets with traffic calming improvements (%)*	*0%*	*0%*
		Intersections with traffic calming improvements (%)	*0%*	*0%*
	Pedestrian network improvements	*Included (within project and connecting off-site/within project only)*	*0*	*0*

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*
MAX. TDM EFFECT	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,...). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout without Office
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	1,353	-23.7%	1,033	8.7	11,771	8,987
Home Based Other Production	3,747	-40.6%	2,224	5.3	19,859	11,787
Non-Home Based Other Production	3,417	-3.8%	3,286	8.5	29,045	27,931
Home-Based Work Attraction	522	-33.5%	347	12.2	6,368	4,233
Home-Based Other Attraction	5,614	-53.7%	2,602	7.3	40,982	18,995
Non-Home Based Other Attraction	2,092	-4.6%	1,996	8.4	17,573	16,766

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	1,033	8,987	0.0%	1,033	8,987
Home Based Other Production	0.0%	2,224	11,787	0.0%	2,224	11,787
Non-Home Based Other Production	0.0%	3,286	27,931	0.0%	3,286	27,931
Home-Based Work Attraction	0.0%	347	4,233	0.0%	347	4,233
Home-Based Other Attraction	0.0%	2,602	18,995	0.0%	2,602	18,995
Non-Home Based Other Attraction	0.0%	1,996	16,766	0.0%	1,996	16,766

MXD VMT Methodology Per Capita & Per Employee

Total Population: 3,717
Total Employees: 360
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**20,774**	**20,774**
Total Home Based Work Attraction VMT	**4,233**	**4,233**
Total Home Based VMT Per Capita	**5.6**	**5.6**
Total Work Based VMT Per Employee	**N/A**	**N/A**

Appendix B

CEQA Threshold T-1 Tables

TABLE B-1
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Chapter 1 – Safety First	
Policy 1.1, Roadway User Vulnerability Design, plan, and operate streets to prioritize the safety of the most vulnerable roadway user.	**Consistent.** The Project is conceived as a pedestrian precinct that addresses the need for vehicles but prioritizes the pedestrian experience. A network with sidewalks with a minimum width of 12 feet are organized around a system of small blocks, connecting publicly accessible open spaces with activated ground-floor street frontages to create a high-quality pedestrian experience.
Policy 1.2 Complete Streets Implement a balanced transportation system on all streets, tunnels, and bridges using complete streets principles to ensure the safety and mobility of all users.	**Consistent.** The Project provides pedestrian- and bicycle-friendly streets with simple visual cues such as decorative pavement for drivers and pedestrians alike to have a clear understanding of pedestrian and vehicular zones. With the exception of one vehicular access point for Block 1 off Cumpston Street, all service and parking within Parcel 1 are accessed from the north-south streets (Elmer Avenue, Klump Avenue, and Fair Avenue), leaving the east-west streets free from all parking and service access and allowing uninterrupted pedestrian and bicycle circulation to ensure the safety and mobility of all users. Streets around Block 0 are designed to provide for high-volume and high-quality transit bus service.
Policy 1.3 Safe Routes to Schools Prioritize the safety of school children on all streets regardless of highway classifications.	**Consistent.** Lankershim Elementary School is located on the southeast corner of Bakman Avenue & Weddington Street, across Weddington Street from Block 8. The Safe Routes to School map for Lankershim Elementary School indicates that the school stations crossing guards at three intersections: Lankershim Boulevard & Chandler Boulevard (North), Bakman Avenue & Weddington Street, and Bakman Avenue & Magnolia Boulevard. It also identifies most of the striped crosswalks throughout the Study Area as "recommended crossing" locations. Block 8 access was designed to maximize safety for pedestrians in that it has an inbound-only driveway on Weddington Street and an outbound-only driveway on Bakman Avenue. With only one-direction flow at each location, pedestrians need only watch for vehicles in one direction while crossing the driveways. Further, the exit driveway on Bakman Avenue would be equipped with passive safety devices such as convex mirrors to ensure adequate visibility for pedestrians and drivers alike.
Policy 1.4 Design Safe Speeds Design streets to Targeted Operating Speeds as defined in the Complete Streets Design Guide.	**Consistent.** The extensions of Elmer Avenue and Klump Avenue, along with the development of District Way, would incorporate neighborhood-friendly features including undivided roads, stop signs, and street trees to alert drivers to the character of the streets and the need for slow speeds (up to 25 miles per hour).

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 1.5 Railroad Crossings Reduce conflicts and improve safety at railroad crossings through design, planning, and operation.	This policy is not applicable to the Project because there are no railroad crossings at the Project Site.
Policy 1.6 Multi-Modal Detour Facilities Design detour facilities to provide safe passage for all modes of travel.	**Consistent.** The Project would prepare a construction management plan that would include detour routes for all applicable travel modes, including pedestrian and transit users.
Policy 1.7 Regularly Maintained Streets Enhance roadway safety by maintaining the street, alley, tunnel, and bridge system in good to excellent condition.	**Consistent.** The Project would construct the extensions of Elmer Avenue and Klump Avenue and the new District Way as publicly accessible private streets. The Applicant would be responsible for maintaining these internal private streets in good condition. The Project would also reconstruct and maintain portions of Bakman Avenue and Weddington Street along the Project frontage.
Policy 1.8 Goods Movement Safety Ensure that the goods movement sector is integrated within the rest of the transportation system in such a way that does not endanger the health and safety of residents and roadway users.	This policy is not applicable to the Project because the Project does not affect goods movement.
Policy 1.9 Recreational Trail Safety Balance user needs on the City's public recreational trails.	This policy is not applicable to the Project because the Project is not near any recreational trails.
Chapter 2 – World Class Infrastructure	
Policy 2.1 Adaptive Reuse of Streets Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.	**Consistent.** The Project would repurpose Chandler Boulevard (north and south) between Tujunga Avenue and Lankershim Boulevard with bus-only lanes (eastbound on Chandler Boulevard north and westbound on Chandler Boulevard south) adjacent to the Consolidated Transit Center. The streets would also provide vehicular travel lanes and bicycle lanes in the opposite direction on each street. With this configuration, along with generous sidewalks for pedestrians, Chandler Boulevard would provide dedicated lanes or paths for each major mode of travel.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
<u>Policy 2.2 Complete Streets Design Guide</u> Establish the Complete Streets Design Guide as the City's document to guide the operations and design of streets and other public rights-of-way.	**Consistent.** The streets within Parcel 1 would be designed as neighborhood streets serving passenger and service vehicles, bicycles, and pedestrians while providing on-street parking and pick-up / drop-off areas.
<u>Policy 2.3 Pedestrian Infrastructure</u> Recognize walking as a component of every trip, and ensure high-quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.	**Consistent.** The Project is conceived as a pedestrian precinct that prioritizes the pedestrian experience. Parcel 1 provides sidewalks with a minimum width of 12 feet organized around a system of small blocks, connecting publicly accessible open spaces with activated ground-floor street frontages to create a high-quality pedestrian experience. The Consolidated Transit Center provides ample sidewalk and plaza space for transit riders to board, alight, transfer, and wait. Also, by consolidating Metro G (Orange) Line Busway and local bus station operations into a single location, there would be many fewer at-grade pedestrian crossings of Lankershim Boulevard compared to existing transit operations. Tujunga Avenue, Chandler Boulevard, and Lankershim Boulevard are designated parts of the pedestrian-enhanced district. The Project would provide an enhanced pedestrian experience all along its periphery, especially along Chandler Boulevard and Lankershim Boulevard in the southwest portion of Parcel 1, where open space and gathering areas would be provided. It would also widen the existing substandard sidewalk on the east side of Tujunga Avenue adjacent to Block 7 consistent with Avenue II standards to provide a safe and comfortable walking environment.
<u>Policy 2.4 Neighborhood Enhanced Network</u> Provide a slow speed network of locally serving streets.	**Consistent.** The Project Site is adjacent to several streets that are part of the neighborhood-enhanced network, including Tujunga Avenue, Bakman Avenue, Cumpston Street, and Fair Avenue. The Project frontage along these streets would be lined with street trees as visual cues to the neighborhood character of the streets. These streets would provide local access to the Project Site and would not encourage other vehicular traffic. A full analysis of Project effects on neighborhood streets, along with the Project's neighborhood traffic management plan, is provided in Chapter 10 of this Transportation Assessment.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 2.5 Transit Network Improve the performance and reliability of existing and future bus service.	**Consistent.** Lankershim Boulevard is designated as a Moderate Plus Transit-Enhanced Street as part of the transit enhanced network. The Project would encourage more efficient transit operations by reducing the number of pedestrian crossings on Lankershim Boulevard, despite the increased pedestrian activity generated by the Project (as further discussed in Chapter 6 of this Transportation Assessment). The reduced pedestrian crossings would be due both to the fact that the Consolidated Transit Center would locate all bus-based transit within the same facility on the west side of Lankershim Boulevard and because the Metro B (Red) Line subway fare gates would be reconfigured to allow pedestrians to pass freely under Lankershim Boulevard. The Project would not conflict with plans under development by Metro and/or LADOT including the Metro Orange Line Improvements Project, the Metro North Hollywood to Pasadena Bus Rapid Transit (BRT) Project, the Metro North San Fernando Valley BRT Project, or the Metro Next Gen Plan.
Policy 2.6 Bicycle Networks Provide safe, convenient, and comfortable local and regional bicycling facilities for people of all types and abilities. (includes scooters, skateboards, rollerblades, etc.)	**Consistent.** Mobility Plan 2035 designates Lankershim Boulevard as a candidate for Tier 1 protected bicycle lanes and Chandler Boulevard for Tier 2 bicycle lanes. The Project would include a new two-way bicycle route through the Project Site as shown in Figure 6 of this Transportation Assessment. Additionally, the Project would accommodate the City's proposed Chandler Bikeway project, which would install Class IV protected bicycle lanes in both directions on Chandler Boulevard, including a northbound connection on Lankershim Boulevard between Chandler Boulevard (North) and Chandler Boulevard. The Project would not interfere with any potential future implementation of bicycle lanes on Lankershim Boulevard.
Policy 2.7 Vehicle Network Provide vehicular access to the regional freeway system.	This policy is not applicable to the Project because the Project does not affect access to the regional freeway system.
Policy 2.8 Goods Movement Implement projects that would provide regionally significant transportation improvements for goods movement.	This policy is not applicable to the Project because it is not the Project's responsibility to implement transportation improvements affecting goods movement.
Policy 2.9 Multiple Networks Consider the role of each mode enhanced network when designing a street that included multiple modes.	**Consistent.** The Project would develop several publicly accessible private streets, including District Way and extensions to Elmer Avenue and Klump Avenue. These streets are envisioned as neighborhood streets, and as such have narrow roadways, 12-foot wide sidewalks, a bicycle path on District Way, and vehicular access to Project parcels is concentrated on Klump Avenue away from pedestrian access.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 2.10 Loading Areas Facilitate the provision of adequate on and off-street loading areas.	**Consistent.** In addition to providing on-site parking in subterranean and above-grade parking structures, the Project would proposes to provide on- and off-street loading facilities for passengers and commercial vehicles. It proposes passenger loading areas at various locations within and around Parcel 1, including with curb cuts to allow vehicles to load out of the traveled way. Each Block with the exceptions of Block 7 (which has alley frontage) and Block 0 (the Consolidated Transit Center, which has minimal physical structures) would provide off-street commercial vehicle loading for service.
Policy 2.11 Transit Right-of-Way Design Set high standards in designing public transit rights-of-way that considers user experience and supporting active transportation infrastructure.	This policy is not applicable to the Project because it does not designate any new public transit right-of-way.
Policy 2.12 Walkway and Bikeway Accommodations Design for pedestrian and bicycle travel when rehabilitating or installing a new bridge, tunnel, or exclusive transit right-of-way.	**Consistent.** The Project would improve bicycle lanes on Chandler Boulevard (North and South) while converting some vehicle lanes to bus-only lanes.
Policy 2.13 Highway Preservation and Enhancement Support preservation and enhancement of the State highways consistent with the RTP/SCS and the goals/policies of this General Plan.	This policy is not applicable to the Project because the Project is not adjacent to any State highways.
Policy 2.14 Street Design Designate a street's functional classification based upon its current dimensions, land use context, and role.	This policy is not applicable to the Project because it does not affect the City-established functional classification of any public street.
Policy 2.15 Allocation of Transportation Funds Expand funding to improve the built environment for people who walk, bike, take transit, and other vulnerable roadway users.	This policy is not applicable to the Project because it is not the Project's responsibility to procure or allocate funding for public use.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 2.16 Scenic Highways Ensure that future modifications to any scenic highway do not impact the unique identity or characteristic of that scenic highway.	This policy is not applicable to the Project because there are no scenic highways in the Study Area.
Policy 2.17 Street Widenings Carefully consider the overall implications (costs, character, safety, travel, infrastructure, environment) of widening a street before requiring the widening, even when the existing right of way does not include a curb and gutter or the resulting roadway would be less than the standard dimension.	**Consistent.** The Project proposes widenings primarily to provide sidewalks consistent with Mobility Plan 2035 designations. The Project's proposed dedications, vacations, and requests for waivers, summarized in Table 4 of this Transportation Assessment, would be reviewed by City staff as part of the Project's entitlements.
Chapter 3 – Access for All Angelenos	
Policy 3.1 Access for All Recognize all modes of travel, including pedestrian, bicycle, transit, and vehicular modes – including goods movement – as integral components of the City's transportation system.	**Consistent.** The Project provides facilities for all travel modes through development of the Consolidated Transit Center and bus-only lanes on Chandler Boulevard (north and south), extensions of Elmer Avenue and Klump Avenue and development of District Way, accommodation of the Chandler Bikeway Project and associated bicycle infrastructure improvements, and the provision of pedestrian sidewalks and plazas and general pedestrian orientation of the overall Project Site. It would also provide secure bicycle parking for transit riders at one or more Metro Bike Hubs as well as designated locations for Metro's Bikeshare rental program or similar first mile, last mile transportation alternatives. With respect to goods movement, as noted in Policy 2.8 above, it is not the Project's responsibility to implement transportation improvements affecting goods movement.
Policy 3.2 People with Disabilities Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.	**Consistent.** The Project would be designed consistent with all requirements of the Americans with Disabilities Act.
Policy 3.3 Land Use Access and Mix Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.	**Consistent.** The Project's mix of high-density residential uses, office space, and local-serving retail and restaurant located at the site of one of the largest public transit hubs in the San Fernando Valley helps to minimize vehicle trips and enhance proximity and convenience of residences to jobs and services.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 3.4 Transit Services Provide all residents, workers, and visitors with affordable, efficient, convenient, and attractive transit services.	**Consistent.** The Project includes development of the Consolidated Transit Center which will help to make public transit more efficient and convenient for Project residents and all users.
Policy 3.5 Multi-Modal Features Support "first-mile, last-mile solutions" such as multi-modal transportation services, organizations, and activities in the areas around transit stations and major bus stops (transit stops) to maximize multi-modal connectivity and access for transit riders.	**Consistent.** The Project would provide space for first-mile, last-mile solutions within the pedestrian plaza areas of the Project Site, including at the Consolidated Transit Center. The TDM program would include features such as bicycle and scooter rentals, as discussed in more detail in Chapter 5 of this Transportation Assessment.
Policy 3.6 Regional Transportation & Union Station Continue to promote Union Station as the major regional transportation hub linking Amtrak, Metrolink, Metro Rail, and high-speed rail service.	**Consistent.** The Metro B (Red) Line, with its northern terminus at the Project Site, provides a direct subway connection to Union Station. The Project's development of residential units and office space (jobs) enhances the value of the connection to Union Station.
Policy 3.7 Regional Transit Connections Improve transit access and service to major regional destinations, job centers, and inter-modal facilities.	**Consistent.** The Consolidated Transit Center improves the efficiency and convenience of bus transit at the Project Site. Additionally, the Project's development of residential units and office space (jobs) enhances the value of the Metro G (Orange) Line Busway's connections to the western San Fernando Valley.
Policy 3.8 Bicycle Parking Provide bicyclists with convenient, secure, and well-maintained bicycle parking facilities.	**Consistent.** The Project would provide convenient and secure long-term and short-term parking for bicycles at each Block. It would also provide secure parking for at least 100 bicycles at one or more Metro Bike Hubs as well as designated locations for Metro's Bikeshare rental program or similar first mile, last mile transportation alternatives.
Policy 3.9 Increased Network Access Discourage the vacation of public rights-of-way.	**Consistent.** The Project requests vacations of portions of right-of-way on the south side of Cumpston Street, the north side of Weddington Street, and the east side of Bakman Avenue. However, each of these vacations are minor narrowings of streets rather than full street vacations, and no loss of travel lanes or other loss of access would occur. Several of them are to bring the roadway in line with Mobility Plan 2035 standards where the public right-of-way currently exceeds the standards. A full discussion of requested roadway vacations is provided in Chapter 1 and Table 4 of this Transportation Assessment.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 3.10 Cul-de-sacs Discourage the use of cul-de-sacs that do not provide access for active transportation options.	This policy is not applicable to the Project because the Project does not propose any cul-de-sacs.
Policy 3.11 Open Streets Facilitate regular “open street” events andrepurposing of the public right of way.	This policy is not applicable to the Project because the Project does not control the public right-of-way.
Policy 3.12 Proposed Streets Plan for and accommodate future growth areas through the identification of "proposed streets" during the community planning process.	This policy is not applicable to the Project because the Project does not have the authority of a community plan.
Chapter 4 – Collaboration, Communication, & Informed Choices	
Policy 4.1 New Technologies Support new technology systems and infrastructure to expand access to transportation choices.	**Consistent.** The Project's TDM program, described in more detail in Chapter 5 of this Transportation Assessment, would support the latest improvements in first-mile, last-mile transportation solutions to be located at or near the Consolidated Transit Center.
Policy 4.2 Dynamic Transportation Information Support a comprehensive, integrated transportation database and digital platform that manages existing assets and dynamically updates users with new information.	**Consistent.** The Consolidated Transit Center would be equipped by Metro with real-time information displays about arriving buses and subways. As part of the TDM program, described in Chapter 5 of this Transportation Assessment, this information would also be made available to the Project's residential and office buildings to provide in lobbies.
Policy 4.3 Fair and Equitable Treatment Ensure the fair and equal treatment of people of all races, cultures, incomes, and education levels with respect to the development and implementation of citywide transportation policies and programs.	This policy is not applicable to the Project because the Project does not develop or implement citywide policies or programs.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 4.4 Community Collaboration Continue to support the role of community engagement in the design outcomes and implementation of mobility projects.	This policy is not applicable to the Project because the Project is not a mobility project.
Policy 4.5 Improved Communication Facilitate communications between citizens and the City in reporting on and receiving responses to non-emergency street improvements.	This policy is not applicable to the Project because the Project does not control City communications.
Policy 4.6 Data-Driven Prioritization of Projects Make the most of limited financial resources by utilizing data to prioritize transportation projects based upon equity in safety, public health, access, social benefits, and/or economic benefits.	This policy is not applicable to the Project because the Project does not implement transportation projects.
Policy 4.7 Performance Evaluation Evaluate performance of new transportation strategies through the collection and analysis of data.	This policy is not applicable to the Project because the Project does not propose new transportation strategies.
Policy 4.8 Transportation Demand Management Strategies Encourage greater utilization of Transportation Demand Management (TDM) strategies to reduce dependence on single-occupancy vehicles.	**Consistent.** The Project's TDM program, described in more detail in Chapter 5 of this Transportation Assessment, includes the following measures: • Reduced parking supply • TDM promotions and marketing • Pedestrian network improvements • Traffic calming improvements • Implement on-street bicycle facilities • Bicycle parking per LAMC
Policy 4.9 Transportation Management Organizations Partner with the private sector to foster the success of Transportation Management Organizations (TMOs) in the City's commercial districts.	This policy is not applicable to the Project because there is no TMO in the Study Area.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 4.10 Public-Private Partnerships Encourage partnerships with community groups (residents and business/property owners) to initiate and maintain enhanced public rights-of-way projects.	This policy is not applicable to the Project because the Project is not an enhanced public right-of-way project.
Policy 4.11 Cohesive Regional Mobility Communicate and partner with the Southern California Association of Governments (SCAG), Los Angeles County Metropolitan Transportation Authority (Metro), adjacent cities and local transit operators to plan and operate a cohesive regional mobility system.	**Consistent.** The Project was envisioned and sponsored by Metro and its design is coordinated with various regional mobility projects described in Chapter 2 of this Transportation Assessment, including the Metro Orange Line Improvements Project, the North Hollywood to Pasadena Bus Rapid Transit (BRT) project, and the North San Fernando Valley BRT project.
Policy 4.12 Goods Movement Increase public awareness about the importance and economic value of goods movement in the Los Angeles region.	This policy is not applicable to the Project because the Project does not affect goods movement.
Policy 4.13 Parking and Land Use Management Balance on-street and off-street parking supply with other transportation and land use objectives.	**Consistent.** The Project includes subterranean and above-grade parking structures to meet the needs of residents, workers, and transit riders at the Project Site. The overall parking supply for residents and workers is less than that which would be required by the LAMC but is consistent with the proposed District NoHo Specific Plan.
Policy 4.14 Wayfinding Provide widespread, user-friendly information about mobility options and local destinations, delivered through a variety of channels including traditional signage and digital platforms.	**Consistent.** The Project, through its TDM program, would include marketing activities, including printed/posted materials and digitally distributed information, to ensure that residents and employees at the Project Site would be aware of all mobility options available around the Project Site. Additionally, as the Project Site incorporates a major transit station, there would be maps, timetables, advertisements, and information kiosks on Block 0 and Block 5/6 at a minimum. The Project Site would also include pedestrian wayfinding signage to direct pedestrians to the Consolidated Transit Center.
Policy 4.15 Public Hearing Process Require a public hearing for the proposed removal of an existing or designated bicycle lane or path.	**Consistent.** The Project is subject to public hearings as part of its entitlement process, satisfying this requirement in the event of removal of any portions of an existing bicycle lane.

TABLE B-1 (CONTINUED)
PROJECT CONSISTENCY WITH MOBILITY PLAN 2035

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Chapter 5 – Clean Environments & Healthy Communities	
Policy 5.1 Sustainable Transportation Encourage the development of a sustainable transportation system that promotes environmental and public health.	**Consistent.** The Project would improve public transit efficiency and convenience through the development of the Consolidated Transit Center. It would also encourage sustainable transportation through the construction of a mixed-use development with substantial amounts of residential and office space as well as neighborhood-serving retail located at a major public transit station. The Project's location on a site with a major transit stop would reduce VMT and air pollution associated with vehicle trips, thereby promoting environmental and public health.
Policy 5.2 Vehicle Miles Traveled (VMT) Support ways to reduce vehicle miles traveled (VMT) per capita.	**Consistent.** The Project is estimated to generate lower VMT per capita for residents and employees than the average for the area, as demonstrated in Chapter 5 of this Transportation Assessment. Further, it would implement a TDM program, also described in Chapter 5, to further reduce VMT per capita.
Policy 5.3 Alternative Metrics Support a range of transportation metrics to evaluate the multiple purposes that streets serve.	This policy is not applicable to the Project because it is not the Project's responsibility to measure the transportation system.
Policy 5.4 Clean Fuels and Vehicles Continue to encourage the adoption of alternative fuels, new mobility technologies, and supporting infrastructure.	This policy is not applicable to the Project because the Project does not set environmental policy.
Policy 5.5 Green Streets Maximize opportunities to capture and infiltrate stormwater within the City's public rights-of-way.	This policy is not applicable to the Project because the Project does not control the public right-of-way.

Notes:
[a] Objectives, Policies, Programs, or Plans based on information provided in *Mobility Plan 2035: An Element of the General Plan* (Los Angeles Department of City Planning, January 2016).

TABLE B-2
PROJECT CONSISTENCY WITH PLAN FOR A HEALTHY LOS ANGELES

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Chapter 1 – Los Angeles, a Leader in Health and Equity	
Policy 1.5 Plan for Health Improve Angelenos' health and well-being by incorporating a health perspective into land use, design, policy, and zoning decisions through existing tools, practices, and programs.	**Consistent.** The Project is conceived as a pedestrian precinct that addresses the need for vehicles but prioritizes the pedestrian experience. A network with sidewalks with a minimum width of 12 feet are organized around a system of small blocks, connecting publicly accessible open spaces with activated ground-floor street frontages to create a high-quality pedestrian experience that promotes active transportation. This is supported by direct access to high-quality transit options through the Consolidated Transit Center and the Metro B (Red) Line subway station.
Policy 1.6 Poverty and Health Reduce the debilitating impact that poverty has on individual, familial, and community health and well-being by: promoting cross-cutting efforts and partnerships to increase access to income; safe, healthy, and stable affordable housing options; and attainable opportunities for social mobility.	**Consistent.** The Project includes 311 affordable housing units adjacent to market-rate buildings. Also, the Project's 105,125 square feet of retail and restaurant space and up to 580,374 square feet of office space provide employment and entrepreneurial opportunities.
Policy 1.7 Displacement and Health Reduce the harmful health impacts of displacement on individuals, families and communities by pursuing strategies to create opportunities for existing residents to benefit from local revitalization efforts by: creating local employment and economic opportunities for low-income residents and local small businesses; expanding and preserving existing housing opportunities available to low-income residents; preserving cultural and social resources; and creating and implementing tools to evaluate and mitigate the potential displacement caused by large-scale investment and development.	**Consistent.** In addition to 311 affordable housing units provided by the Project, it provides employment and entrepreneurial opportunities through the 105,125 square feet of retail and restaurant space and up to 580,374 square feet of office space. The Project does not displace any existing housing; rather, it converts a substantial amount of underutilized land into an active and vibrant mixed-use community.
Chapter 2 – A City Built for Health	
Policy 2.1 Access to Goods and Services Enhance opportunities for improved health and well-being for all Angelenos by increasing the availability of and access to affordable goods and services that promote health and healthy environments, with a priority on low-income neighborhoods.	**Consistent.** The Project would provide 105,125 square feet of community-serving retail and restaurant space on the ground level of the Project Site, easily accessed by foot from surrounding residential neighborhoods.

TABLE B-2 (CONTINUED)
PROJECT CONSISTENCY WITH PLAN FOR A HEALTHY LOS ANGELES

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Policy 2.8 Basic Amenities Promote increased access to basic amenities, which include public restrooms and free drinking water in public spaces, to support active living and access to health-promoting resources.	**Consistent.** The Project would provide public restrooms and drinking fountains adjacent to the open space in Block 5/6.
Chapter 5 – An Environment Where Life Thrives	
Policy 5.7 Land Use Planning for Public Health and GHG Emission Reduction Promote land use policies that reduce per capita greenhouse gas emissions, result in improved air quality and decreased air pollution, especially for children, seniors and others susceptible to respiratory diseases.	**Consistent.** The Project is estimated to generate VMT per capita for residents and employees at least 15% lower than the average for the area, as demonstrated in Chapter 5 of this Transportation Assessment. Further, it would implement a TDM program, also described in Chapter 5, to further reduce VMT per capita. VMT directly contributes to GHG emissions, so a reduced VMT per capita also reduces GHG per capita.

Notes:
[a] Objectives, Policies, Programs, or Plans based on information provided in *Plan for a Healthy Los Angeles: A Health and Wellness Element of the General Plan* (Los Angeles Department of City Planning, March 2015).

TABLE B-3
PROJECT CONSISTENCY WITH CITYWIDE DESIGN GUIDELINES

Objective, Policy, Program, or Plan [a]	**Analysis of Project Consistency**
Pedestrian-First Design	
Guideline 1: Promote a safe, comfortable, and accessible pedestrian experience for all Design projects to be safe and accessible and contribute to a better public right-of-way for people of all ages, genders, and abilities, especially the most vulnerable - children, seniors, and people with disabilities. **Guideline 2: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience** Design to avoid pedestrian and vehicular conflicts and to create an inviting and comfortable public right-of-way. A pleasant and welcoming public realm reinforces walkability and improves the quality of life for users. **Guideline 3: Design projects to actively engage with streets and public space and maintain human scale** New projects should be designed to contribute to a vibrant and attractive public realm that promotes a sense of civic pride. Better connections within the built environment contribute to a livable and accessible city and a healthier public realm.	**Consistent.** The Project specifically prioritizes the pedestrian experience. A network of sidewalks with a minimum width of 12 feet are organized around a system of small blocks, connecting a hierarchy of publicly accessible open spaces distributed throughout the project. In conjunction with activated ground floor street frontages, the sidewalk network is lined with regularly spaced street trees, pedestrian-scaled streetlights and understory planting to create a consistent, high-quality pedestrian experience. In order to clarify pedestrian and vehicular zones, the Project creates simple visual cues such as decorative pavement and provides for a neighborhood-like series of paths of travel. Through Parcel 1 east of Lankershim Boulevard, on which Metro parking is currently located, two existing north-south neighborhood streets, Elmer Avenue and Klump Avenue, are extended as publicly accessible private streets. Connecting with District Way, a new internal east-west shared street, the street grid creates five smaller pedestrian and bicycle-friendly blocks. With the exception of one vehicular access point for Block 1 off of Cumpston Street, all service and off-street parking are accessed from the North-South streets (Elmer Avenue, Klump Avenue and Fair Avenue). As a result, Lankershim Boulevard, Chandler Boulevard and District Way are entirely free from parking garage and service access, allowing for uninterrupted pedestrian and bicycle circulation. Where on-street parking and rideshare drop-off areas are proposed, generous tree-lined sidewalks are provided. For the remaining Blocks, vehicular access to parking garages is restricted to an existing alley behind Block 7 and to Bakman Avenue and Weddington Street for Block 8. The Transit Square along Lankershim at Block 0 East concentrates the limited-line bus access along an area which currently serves the same function but adds a connection for the transit rider to an active public plaza.

Notes:
[a] Objectives, Policies, Programs, or Plans based on information provided in the *Citywide Design Guidelines* (Los Angeles Department of City Planning, 2019).

Appendix C

Los Angeles Municipal Code Parking Requirements

LOS ANGELES MUNICIPAL CODE PARKING REQUIREMENT
PHASE 1

Type of Room or Land Use	Units or Size	Spaces
Los Angeles Municipal Code Parking Rates [a]		
Residential		
Studio		1 per unit
1-Bedroom		1.5 per unit
2-Bedroom		2 per unit
3-Bedroom		2 per unit
Office		2 per 1,000 sf
Retail		4 per 1,000 sf
Restaurant		10 per 1,000 sf
Project Parking Requirement		
Residential		
Studio	255 units	255
1-Bedroom	208 units	312
2-Bedroom	76 units	152
3-Bedroom	12 units	24
Office	580,374 sf	1,161
Retail	4,218 sf	17
Restaurant	53,690 sf	537
TOTAL CODE REQUIREMENT		**2,458**

Notes:

sf = square feet

[a] Base parking requirements from Los Angeles Municipal Code Section 12.21.A.4, without accounting for allowed reductions and credits due to the Project being in a Transit-Oriented Community Tier 4 area. Actual minimum parking requirement is substantially lower.

LOS ANGELES MUNICIPAL CODE PARKING REQUIREMENT
FULL BUILDOUT

Type of Room or Land Use	Units or Size	Spaces
Los Angeles Municipal Code Parking Rates [a]		
Residential		
Studio		1 per unit
1-Bedroom		1.5 per unit
2-Bedroom		2 per unit
3-Bedroom		2 per unit
Office		2 per 1,000 sf
Retail		4 per 1,000 sf
Restaurant		10 per 1,000 sf
Project Parking Requirement		
Residential		
Studio	441 units	441
1-Bedroom	709 units	1,064
2-Bedroom	298 units	596
3-Bedroom	79 units	158
Office	580,374 sf	1,161
Retail	30,125 sf	121
Restaurant	75,000 sf	750
TOTAL CODE REQUIREMENT		**4,291**

Notes:

sf = square feet

[a] Base parking requirements from Los Angeles Municipal Code Section 12.21.A.4, without accounting for allowed reductions and credits due to the Project being in a Transit-Oriented Community Tier 4 area. Actual minimum parking requirement is substantially lower.

DISTRICT NOHO SPECIFIC PLAN PARKING REQUIREMENT
PHASE 1

Type of Room or Land Use	Units or Size	Spaces
District NoHo Specific Plan Parking Rates [a]		
Residential		
Market-Rate Housing		1.25 per unit
Affordable Housing		no requirement
Office		2 per 1,000 sf
Retail [b]		3.5 per 1,000 sf
Restaurant [b]		3.5 per 1,000 sf
Project Parking Requirement		
Residential		
Market-Rate Housing	400 units	500
Affordable Housing	151 units	0
Office	580,374 sf	1,161
Retail [c]	2,575 sf	9
Restaurant [d]	47,193 sf	165
TOTAL CODE REQUIREMENT		**1,835**

Notes:

sf = square feet

[a] Parking requirements pursuant to District NoHo Specific Plan Section 7.2.

[b] No parking is required for ground-floor retail or restaurant uses in a buidling with less than 5,000 sf combined of such uses.

[c] Pursuant to [b], excludes 1,643 sf in Block 0 West.

[d] Pursuant to [b], excludes 2,839 sf in Block 0 West and 3,658 sf in Block 0 East.

DISTRICT NOHO SPECIFIC PLAN PARKING REQUIREMENT
FULL BUILDOUT

Type of Room or Land Use	Units or Size	Spaces
District NoHo Specific Plan Parking Rates [a]		
Residential		
Market-Rate Housing		1.25 per unit
Affordable Housing		no requirement
Block 4 Housing		1 per unit
Office		2 per 1,000 sf
Retail [b]		3.5 per 1,000 sf
Restaurant [b]		3.5 per 1,000 sf
Project Parking Requirement		
Residential		
Market-Rate Housing [c]	1,022 units	1,278
Affordable Housing	311 units	0
Block 4 Housing	194 units	194
Office	580,374 sf	1,161
Retail [d]	25,507 sf	89
Restaurant [e]	68,503 sf	240
TOTAL CODE REQUIREMENT		**2,962**

Notes:

sf = square feet

[a] Parking requirements pursuant to District NoHo Specific Plan Section 7.2.

[b] No parking is required for ground-floor retail or restaurant uses in a buidling with less than 5,000 sf combined of such uses.

[c] Excluding 194 units at Block 4.

[d] Pursuant to [b], excludes 1,643 sf in Block 0 West and 2,975 sf in Block 2.

[e] Pursuant to [b], excludes 2,839 sf in Block 0 West and 3,658 sf in Block 0 East.

BICYCLE PARKING REQUIREMENT
PHASE 1

Type of Room or Land Use	Units or Size	Spaces	
		Short Term	Long Term
Los Angeles Municipal Code Bicycle Parking Rates [a]			
Residential			
Units 1-25		1 per 10 units	1 per unit
Units 26-100		1 per 15 units	1 per 1.5 units
Units 101-200		1 per 20 units	1 per 2 units
Units 201+		1 per 40 units	1 per 4 units
Office		1 per 10,000 sf	1 per 5,000 sf
Retail		1 per 2000 sf	1 per 2000 sf
Restaurant		1 per 2000 sf	1 per 2000 sf
Project Bicycle Parking Requirement			
Residential			
Block 5/6	400 units	18	175
Block 7	151 units	11	101
Office	580,374 sf	58	116
Retail	4,218 sf	2	2
Restaurant [b]	40,666 sf	20	20
TOTAL CODE REQUIREMENT		**109**	**414**

Notes:

sf = square feet

[a] Pursuant to Los Angeles Municipal Code Section 12.21.A.16.

[b] Pursuant to the District NoHo Specific Plan, no long-term bicycle parking is required at the Block 6 restaurant space (13,024 sf). Restaurant sf reflects exclusion of Block 6.

[c] Including exceptions noted above pursuant to the District NoHo Specific Plan.

BICYCLE PARKING REQUIREMENT
FULL BUILDOUT

Type of Room or Land Use	Units or Size	Spaces	
		Short Term	**Long Term**
Los Angeles Municipal Code Bicycle Parking Rates [a]			
Residential			
Units 1-25		1 per 10 units	1 per unit
Units 26-100		1 per 15 units	1 per 1.5 units
Units 101-200		1 per 20 units	1 per 2 units
Units 201+		1 per 40 units	1 per 4 units
Office		1 per 10,000 sf	1 per 5,000 sf
Retail		1 per 2000 sf	1 per 2000 sf
Restaurant		1 per 2000 sf	1 per 2000 sf
Project Bicycle Parking Requirement			
Residential			
Block 1	313 units	16	153
Block 2	309 units	16	152
Block 3	160 units	11	105
Block 4	194 units	13	122
Block 5/6	400 units	18	175
Block 7	151 units	11	101
Office	580,374 sf	58	116
Retail [b]	30,125 sf	15	14
Restaurant [c]	61,976 sf	31	31
[d] **TOTAL CODE REQUIREMENT**		**189**	**969**

Notes:

sf = square feet

[a] Pursuant to Los Angeles Municipal Code Section 12.21.A.16.

[b] Pursuant to the District NoHo Specific Plan, no long-term bicycle parking is required at the Block 2 retail space (2,975 sf). Retail long-term bicycle parking requirement excludes Block 2 retail.

[c] Pursuant to the District NoHo Specific Plan, no long-term bicycle parking is required at the Block 6 restaurant space (13,024 sf). Restaurant sf reflects exclusion of Block 6.

[d] Including exceptions noted above pursuant to the District NoHo Specific Plan.

Appendix D

Pedestrian Trip Generation Estimates

TABLE D-1
PEDESTRIAN PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Size	Daily Vehicle Trips	Pedestrian-Generating Trip Reductions [a]	Daily Pedestrian Trips [b]
Block 0					
Office	710	709 sf	7		
Transit/Walk Adjustment - 25%			*(2)*	2	3
Retail	820	1,643 sf	62		
Internal Capture - 10%			*(6)*	6	8
Transit/Walk Adjustment - 25%			*(14)*	14	20
Pass-By Adjustment - 50%			*(21)*		
Restaurant	932	6,497 sf	729		
Internal Capture - 10%			*(73)*	73	102
Transit/Walk Adjustment - 25%			*(164)*	164	230
Pass-By Adjustment - 20%			*(98)*		
Block 0 Subtotal			**420**	**259**	**363**
Block 1					
Multi-Family Housing (High-Rise)	222	313 du	1,393	464	650
Retail	820	10,507 sf	397		
Internal Capture - 10%			*(40)*	40	56
Transit/Walk Adjustment - 25%			*(89)*	89	125
Pass-By Adjustment - 50%			*(134)*		
Restaurant	932	7,985 sf	896		
Internal Capture - 10%			*(90)*	90	126
Transit/Walk Adjustment - 25%			*(202)*	202	283
Pass-By Adjustment - 20%			*(121)*		
Block 1 Subtotal			**2,010**	**885**	**1,240**

Notes:
du = dwelling unit; sf = square feet. Daily vehicle trips based on trip generation estimates from Table 21.
[a] Vehicle trips reduced by internal capture and transit/walk adjustments. Also assumes that residential trip estimates have an inherent 25% transit/walk trip reduction.
[b] Assumes 1.4 persons per vehicle.

TABLE D-1 (CONT'D)
PEDESTRIAN PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Daily Vehicle Trips	Pedestrian-Generating Trip Reductions [a]	Daily Pedestrian Trips [b]
Block 2					
Multi-Family Housing (High-Rise)	222	309 du	1,375	458	642
Retail	820	2,975 sf	112		
Internal Capture - 10%			*(11)*	11	15
Transit/Walk Adjustment - 25%			*(25)*	25	35
Pass-By Adjustment - 50%			*(38)*		
Block 2 Subtotal			**1,413**	**494**	**692**
Block 3					
Affordable Family Housing	n/a	160 du	666	222	311
Block 3 Subtotal			**666**	**222**	**311**
Block 4					
Multi-Family Housing (Mid-Rise)	221	194 du	1,055	352	492
Retail [a]	820	12,425 sf	469		
Internal Capture - 10%			*(47)*	47	66
Transit/Walk Adjustment - 25%			*(106)*	106	148
Pass-By Adjustment - 50%			*(158)*		
Restaurant	932	13,325 sf	1,495		
Internal Capture - 10%			*(150)*	150	210
Transit/Walk Adjustment - 25%			*(336)*	336	470
Pass-By Adjustment - 20%			*(202)*		
Block 4 Subtotal			**2,020**	**991**	**1,386**

Notes:

du = dwelling unit; sf = square feet. Daily vehicle trips based on trip generation estimates from Table 21.

[a] Vehicle trips reduced by internal capture and transit/walk adjustments. Also assumes that residential trip estimates have an inherent 25% transit/walk trip reduction.

[b] Assumes 1.4 persons per vehicle.

TABLE D-1 (CONT'D)
PEDESTRIAN PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Daily Vehicle Trips	Pedestrian-Generating Trip Reductions [a]	Daily Pedestrian Trips [b]
Block 5					
Multi-Family Housing (High-Rise)	222	400 du	1,780	593	831
Office	710	91,345 sf	920		
Transit/Walk Adjustment - 25%			*(230)*	230	322
Retail	820	2,575 sf	97		
Internal Capture - 10%			*(10)*	10	14
Transit/Walk Adjustment - 25%			*(22)*	22	31
Pass-By Adjustment - 50%			*(33)*		
Restaurant	932	15,227 sf	1,708		
Internal Capture - 10%			*(171)*	171	239
Transit/Walk Adjustment - 25%			*(384)*	384	538
Pass-By Adjustment - 20%			*(231)*		
Block 5 Subtotal			**3,424**	**1,410**	**1,975**
Block 6					
Restaurant	932	13,024 sf	1,461		
Internal Capture - 10%			*(146)*	146	204
Transit/Walk Adjustment - 25%			*(329)*	329	461
Pass-By Adjustment - 20%			*(197)*		
Block 6 Subtotal			**789**	**475**	**665**

Notes:

du = dwelling unit; sf = square feet. Daily vehicle trips based on trip generation estimates from Table 21.

[a] Vehicle trips reduced by internal capture and transit/walk adjustments. Also assumes that residential trip estimates have an inherent 25% transit/walk trip reduction.

[b] Assumes 1.4 persons per vehicle.

TABLE D-1 (CONT'D)
PEDESTRIAN PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Daily Vehicle Trips	Pedestrian-Generating Trip Reductions [a]	Daily Pedestrian Trips [b]
Block 7					
Affordable Family Housing	n/a	151 du	628	209	293
Block 7 Subtotal			**628**	**209**	**293**
Block 8					
Office	710	488,320 sf	4,917		
Transit/Walk Adjustment - 25%			*(1,229)*	1,229	1,721
Retail [c]	820	0 sf	0		
Restaurant	932	18,942 sf	2,125		
Internal Capture - 10%			*(213)*	213	298
Transit/Walk Adjustment - 25%			*(478)*	478	669
Pass-By Adjustment - 20%			*(287)*		
Block 8 Subtotal			**4,835**	**1,920**	**2,688**
TOTAL - PROPOSED PROJECT			**16,205**	**6,866**	**9,613**

Notes:

du = dwelling unit; sf = square feet. Daily vehicle trips based on trip generation estimates from Table 21.

[a] Vehicle trips reduced by internal capture and transit/walk adjustments. Also assumes that residential trip estimates have an inherent 25% transit/walk trip reduction.

[b] Assumes 1.4 persons per vehicle.

[c] For future flexibility, 10,284 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 8.

Appendix E

Highway Capacity Manual Worksheets

Existing Conditions

Morning Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1483	6	0	1201	0	1	0	60	723	26	224
Future Volume (veh/h)	0	1483	6	0	1201	0	1	0	60	723	26	224
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1612	7	0	1305	0	1	0	65	528	388	243
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2136	9	0	1446	0	2	0	125	590	356	223
Arrive On Green	0.00	0.41	0.41	0.00	0.41	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Sat Flow, veh/h	0	5416	23	0	3741	0	24	0	1545	1781	1074	673
Grp Volume(v), veh/h	0	1046	573	0	1305	0	66	0	0	528	0	631
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1569	0	0	1781	0	1746
Q Serve(g_s), s	0.0	23.7	23.7	0.0	31.0	0.0	3.6	0.0	0.0	25.4	0.0	29.8
Cycle Q Clear(g_c), s	0.0	23.7	23.7	0.0	31.0	0.0	3.6	0.0	0.0	25.4	0.0	29.8
Prop In Lane	0.00		0.01	0.00		0.00	0.02		0.98	1.00		0.39
Lane Grp Cap(c), veh/h	0	1385	759	0	1446	0	127	0	0	590	0	578
V/C Ratio(X)	0.00	0.75	0.75	0.00	0.90	0.00	0.52	0.00	0.00	0.90	0.00	1.09
Avail Cap(c_a), veh/h	0	1385	759	0	1446	0	157	0	0	590	0	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.8	22.8	0.0	25.0	0.0	39.7	0.0	0.0	28.6	0.0	30.1
Incr Delay (d2), s/veh	0.0	3.9	6.9	0.0	9.5	0.0	3.3	0.0	0.0	16.2	0.0	64.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	14.4	16.4	0.0	19.8	0.0	2.7	0.0	0.0	18.5	0.0	31.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	26.7	29.7	0.0	34.5	0.0	43.0	0.0	0.0	44.8	0.0	94.8
LnGrp LOS	A	C	C	A	C	A	D	A	A	D	A	F
Approach Vol, veh/h		1619			1305			66			1159	
Approach Delay, s/veh		27.8			34.5			43.0			72.0	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	41.7	35.0	41.7	13.3
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	25.7	31.8	33.0	5.6
Green Ext Time (p_c), s	6.3	0.0	1.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1483	6	0	1201	0	1	0	60	723	26	224
Future Volume (veh/h)	0	1483	6	0	1201	0	1	0	60	723	26	224
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1612	7	0	1305	0	1	0	65	528	388	243
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2136	9	0	1446	0	2	0	125	590	356	223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.41	0.41	0.00	0.41	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	26.7	29.7	0.0	34.5	0.0	43.0	0.0	0.0	44.8	0.0	94.8
Ln Grp LOS	A	C	C	A	C	A	D	A	A	D	A	F
Approach Vol, veh/h		1619			1305			66			1159	
Approach Delay, s/veh		27.8			34.5			43.0			72.0	
Approach LOS		C			C			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		41.7	13.3	35.0		41.7		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		25.7	5.6	31.8		33.0		
Green Ext Time (g_e), s		6.3	0.1	0.0		1.4		
Prob of Phs Call (p_c)		1.00	0.82	1.00		1.00		
Prob of Max Out (p_x)		0.79	1.00	1.00		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	24	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5416	0	1074		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		23	1545	673		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	66	528	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1569	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	3.6	25.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	3.6	25.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	36.6	0.0	0.0	0.0	36.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.02	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	127	590	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.52	0.90	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	157	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	39.7	28.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.3	16.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	43.0	44.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.4	10.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	2.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.46	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	2.7	18.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.25	1.99	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1046	0	0	0	1305	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	23.7	0.0	0.0	0.0	31.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.7	0.0	0.0	0.0	31.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1385	0	0	0	1446	0	0
V/C Ratio (X)	0.00	0.75	0.00	0.00	0.00	0.90	0.00	0.00
Avail Cap (c_a), veh/h	0	1385	0	0	0	1446	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.8	0.0	0.0	0.0	25.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.9	0.0	0.0	0.0	9.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.7	0.0	0.0	0.0	34.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.7	0.0	0.0	0.0	11.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	1.9	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	1.00	1.00	0.00	1.44	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	14.4	0.0	0.0	0.0	19.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.00	0.00	2.83	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	573	0	631	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1746	0	0	0	0
Q Serve Time (g_s), s	0.0	23.7	0.0	29.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.7	0.0	29.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.98	0.39	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	759	0	578	0	0	0	0
V/C Ratio (X)	0.00	0.75	0.00	1.09	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	759	0	578	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.8	0.0	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.9	0.0	64.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.7	0.0	94.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	11.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	10.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.50	1.00	1.43	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	16.4	0.0	31.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.70	0.00	3.36	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	1036	159	77	1389	31	152	318	107	64	330	241
Future Volume (veh/h)	63	1036	159	77	1389	31	152	318	107	64	330	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	1126	173	84	1510	34	165	346	116	70	359	262
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1994	875	232	1994	875	199	586	469	223	586	469
Arrive On Green	0.56	0.56	0.56	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	335	3554	1560	424	3554	1560	789	1870	1496	910	1870	1496
Grp Volume(v), veh/h	68	1126	173	84	1510	34	165	346	116	70	359	262
Grp Sat Flow(s),veh/h/ln	335	1777	1560	424	1777	1560	789	1870	1496	910	1870	1496
Q Serve(g_s), s	10.1	18.3	4.9	10.0	0.0	0.0	13.5	14.0	5.2	6.3	14.7	13.1
Cycle Q Clear(g_c), s	10.1	18.3	4.9	28.3	0.0	0.0	28.2	14.0	5.2	20.3	14.7	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	1994	875	232	1994	875	199	586	469	223	586	469
V/C Ratio(X)	0.25	0.56	0.20	0.36	0.76	0.04	0.83	0.59	0.25	0.31	0.61	0.56
Avail Cap(c_a), veh/h	268	1994	875	232	1994	875	199	586	469	223	586	469
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.67	0.67	0.67	0.67	0.67	0.67	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	12.7	9.7	5.1	0.0	0.0	40.1	26.0	23.0	34.6	26.3	25.7
Incr Delay (d2), s/veh	2.3	1.2	0.5	2.9	1.9	0.1	17.8	1.1	0.2	0.8	1.9	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	10.8	2.9	1.1	0.9	0.0	7.4	9.3	3.2	2.5	10.6	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	13.9	10.3	8.1	1.9	0.1	58.0	27.1	23.2	35.4	28.1	27.2
LnGrp LOS	B	B	B	A	A	A	E	C	C	D	C	C
Approach Vol, veh/h		1367			1628			627			691	
Approach Delay, s/veh		13.4			2.1			34.5			28.5	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	56.0	34.0	56.0	34.0
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 51	28.2	* 51	28.2
Max Q Clear Time (g_c+I1), s	20.3	30.2	30.3	22.3
Green Ext Time (p_c), s	11.9	0.0	12.3	1.8

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	1036	159	77	1389	31	152	318	107	64	330	241
Future Volume (veh/h)	63	1036	159	77	1389	31	152	318	107	64	330	241
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	0.98		0.94	0.98		0.94
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	68	1126	173	84	1510	34	165	346	116	70	359	262
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	268	1994	875	232	1994	875	199	586	469	223	586	469
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.56	0.56	0.56	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	13.1	13.9	10.3	8.1	1.9	0.1	58.0	27.1	23.2	35.4	28.1	27.2
Ln Grp LOS	B	B	B	A	A	A	E	C	C	D	C	C
Approach Vol, veh/h		1367			1628			627			691	
Approach Delay, s/veh		13.4			2.1			34.5			28.5	
Approach LOS		B			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		56.0		34.0		56.0		34.0
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 51		28.2		* 51		28.2
Max Allow Headway (MAH), s		5.2		5.0		5.2		4.7
Max Q Clear (g_c+l1), s		20.3		30.2		30.3		22.3
Green Ext Time (g_e), s		11.9		0.0		12.3		1.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.76
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		335		789		424		910
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1560		1496		1560		1496
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	68	0	165	0	84	0	70
Grp Sat Flow (s), veh/h/ln	0	335	0	789	0	424	0	910
Q Serve Time (g_s), s	0.0	10.1	0.0	13.5	0.0	10.0	0.0	6.3
Cycle Q Clear Time (g_c), s	0.0	10.1	0.0	28.2	0.0	28.3	0.0	20.3
Perm LT Sat Flow (s_l), veh/h/ln	0	335	0	789	0	424	0	910
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	50.5	0.0	28.2	0.0	50.5	0.0	28.2
Perm LT Serve Time (g_u), s	0.0	50.5	0.0	13.5	0.0	32.2	0.0	14.2
Perm LT Q Serve Time (g_ps), s	0.0	10.1	0.0	13.5	0.0	10.0	0.0	6.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	268	0	199	0	232	0	223
V/C Ratio (X)	0.00	0.25	0.00	0.83	0.00	0.36	0.00	0.31
Avail Cap (c_a), veh/h	0	268	0	199	0	232	0	223
Upstream Filter (I)	0.00	1.00	0.00	0.67	0.00	0.67	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.9	0.0	40.1	0.0	5.1	0.0	34.6
Incr Delay (d2), s/veh	0.0	2.3	0.0	17.8	0.0	2.9	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.1	0.0	58.0	0.0	8.1	0.0	35.4
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	3.6	0.0	0.4	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.63	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.5	0.0	7.4	0.0	1.1	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	2.90	0.00	0.19	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1126	0	346	0	1510	0	359
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	18.3	0.0	14.0	0.0	0.0	0.0	14.7
Cycle Q Clear Time (g_c), s	0.0	18.3	0.0	14.0	0.0	0.0	0.0	14.7
Lane Grp Cap (c), veh/h	0	1994	0	586	0	1994	0	586
V/C Ratio (X)	0.00	0.56	0.00	0.59	0.00	0.76	0.00	0.61
Avail Cap (c_a), veh/h	0	1994	0	586	0	1994	0	586
Upstream Filter (I)	0.00	1.00	0.00	0.67	0.00	0.67	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	26.0	0.0	0.0	0.0	26.3
Incr Delay (d2), s/veh	0.0	1.2	0.0	1.1	0.0	1.9	0.0	1.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.9	0.0	27.1	0.0	1.9	0.0	28.1
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	5.9	0.0	0.0	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.5	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.55	0.00	1.80	0.00	1.65
%ile Back of Q (95%), veh/ln	0.0	10.8	0.0	9.3	0.0	0.9	0.0	10.6
%ile Storage Ratio (RQ%)	0.00	2.33	0.00	0.19	0.00	0.08	0.00	0.72
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	173	0	116	0	34	0	262
Grp Sat Flow (s), veh/h/ln	0	1560	0	1496	0	1560	0	1496
Q Serve Time (g_s), s	0.0	4.9	0.0	5.2	0.0	0.0	0.0	13.1
Cycle Q Clear Time (g_c), s	0.0	4.9	0.0	5.2	0.0	0.0	0.0	13.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	875	0	469	0	875	0	469
V/C Ratio (X)	0.00	0.20	0.00	0.25	0.00	0.04	0.00	0.56
Avail Cap (c_a), veh/h	0	875	0	469	0	875	0	469
Upstream Filter (I)	0.00	1.00	0.00	0.67	0.00	0.67	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.7	0.0	23.0	0.0	0.0	0.0	25.7
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.2	0.0	0.1	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.3	0.0	23.2	0.0	0.1	0.0	27.2
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	1.7	0.0	0.0	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.77
%ile Back of Q (95%), veh/ln	0.0	2.9	0.0	3.2	0.0	0.0	0.0	8.1
%ile Storage Ratio (RQ%)	0.00	0.67	0.00	0.85	0.00	0.01	0.00	2.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1242	0	0	872	3	435	21	217	12	0	52
Future Volume (veh/h)	10	1242	0	0	872	3	435	21	217	12	0	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	1350	0	0	948	3	366	173	236	13	0	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	243	1669	0	0	1669	738	466	188	256	28	0	121
Arrive On Green	0.94	0.94	0.00	0.00	0.47	0.47	0.26	0.26	0.26	0.09	0.00	0.09
Sat Flow, veh/h	590	3647	0	0	3647	1572	1781	716	977	300	0	1315
Grp Volume(v), veh/h	11	1350	0	0	948	3	366	0	409	70	0	0
Grp Sat Flow(s),veh/h/ln	590	1777	0	0	1777	1572	1781	0	1693	1615	0	0
Q Serve(g_s), s	0.8	8.6	0.0	0.0	17.4	0.1	17.2	0.0	21.2	3.7	0.0	0.0
Cycle Q Clear(g_c), s	18.1	8.6	0.0	0.0	17.4	0.1	17.2	0.0	21.2	3.7	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.58	0.19		0.81
Lane Grp Cap(c), veh/h	243	1669	0	0	1669	738	466	0	443	148	0	0
V/C Ratio(X)	0.05	0.81	0.00	0.00	0.57	0.00	0.78	0.00	0.92	0.47	0.00	0.00
Avail Cap(c_a), veh/h	243	1669	0	0	1669	738	477	0	453	179	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.00	0.00	0.52	0.52	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.0	1.7	0.0	0.0	17.3	12.7	30.9	0.0	32.3	38.8	0.0	0.0
Incr Delay (d2), s/veh	0.3	3.5	0.0	0.0	0.7	0.0	8.2	0.0	24.2	2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	2.9	0.0	0.0	9.6	0.1	12.7	0.0	16.6	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.3	5.3	0.0	0.0	18.0	12.7	39.1	0.0	56.5	41.1	0.0	0.0
LnGrp LOS	A	A	A	A	B	B	D	A	E	D	A	A
Approach Vol, veh/h		1361			951			775			70	
Approach Delay, s/veh		5.3			18.0			48.3			41.1	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	47.4	13.7	47.4	29.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	20.1	5.7	19.4	23.2
Green Ext Time (p_c), s	14.3	0.1	10.4	0.4

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1242	0	0	872	3	435	21	217	12	0	52
Future Volume (veh/h)	10	1242	0	0	872	3	435	21	217	12	0	52
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	1350	0	0	948	3	366	173	236	13	0	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	243	1669	0	0	1669	738	466	188	256	28	0	121
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.94	0.94	0.00	0.00	0.47	0.47	0.26	0.26	0.26	0.09	0.00	0.09
Unsig. Movement Delay												
Ln Grp Delay, s/veh	6.3	5.3	0.0	0.0	18.0	12.7	39.1	0.0	56.5	41.1	0.0	0.0
Ln Grp LOS	A	A	A	A	B	B	D	A	E	D	A	A
Approach Vol, veh/h		1361			951			775			70	
Approach Delay, s/veh		5.3			18.0			48.3			41.1	
Approach LOS		A			B			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		47.4	29.0	13.7		47.4		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.8	4.5	5.7		6.8		
Max Q Clear (g_c+I1), s		20.1	23.2	5.7		19.4		
Green Ext Time (g_e), s		14.3	0.4	0.1		10.4		
Prob of Phs Call (p_c)		1.00	1.00	0.83		1.00		
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		590	1781	300		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	716	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	977	1315		1572		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	11	366	70	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	590	1781	1615	0	0	0	0
Q Serve Time (g_s), s	0.0	0.8	17.2	3.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.1	17.2	3.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	590	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	42.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	24.9	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	42.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.19	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	243	466	148	0	0	0	0
V/C Ratio (X)	0.00	0.05	0.78	0.47	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	243	477	179	0	0	0	0
Upstream Filter (I)	0.00	0.81	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.0	30.9	38.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	8.2	2.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.3	39.1	41.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.1	7.0	1.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.1	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.58	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	12.7	2.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.98	0.18	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1350	0	0	0	948	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	8.6	0.0	0.0	0.0	17.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.6	0.0	0.0	0.0	17.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1669	0	0	0	1669	0	0
V/C Ratio (X)	0.00	0.81	0.00	0.00	0.00	0.57	0.00	0.00
Avail Cap (c_a), veh/h	0	1669	0	0	0	1669	0	0
Upstream Filter (I)	0.00	0.81	0.00	0.00	0.00	0.52	0.00	0.00
Uniform Delay (d1), s/veh	0.0	1.7	0.0	0.0	0.0	17.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.5	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.3	0.0	0.0	0.0	18.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	0.0	0.0	6.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.00	0.00	1.46	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.9	0.0	0.0	0.0	9.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.00	0.00	0.11	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	409	0	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1693	0	0	1572	0	0
Q Serve Time (g_s), s	0.0	0.0	21.2	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	21.2	0.0	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.58	0.81	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	443	0	0	738	0	0
V/C Ratio (X)	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	453	0	0	738	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.52	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	32.3	0.0	0.0	12.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	24.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	56.5	0.0	0.0	12.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.49	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	16.6	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.28	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	653	539	138	606	65	149	463	73	92	1130	43
Future Volume (veh/h)	146	653	539	138	606	65	149	463	73	92	1130	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	710	586	150	659	71	162	503	79	100	1228	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	292	613	618	164	998	107	182	672	546	277	1243	48
Arrive On Green	0.08	0.33	0.33	0.06	0.31	0.31	0.07	0.36	0.36	0.06	0.36	0.36
Sat Flow, veh/h	1781	1870	1563	1781	3231	348	1781	1870	1521	1781	3486	133
Grp Volume(v), veh/h	159	710	586	150	362	368	162	503	79	100	625	650
Grp Sat Flow(s),veh/h/ln	1781	1870	1563	1781	1777	1802	1781	1870	1521	1781	1777	1842
Q Serve(g_s), s	7.2	39.3	39.3	7.0	21.2	21.3	6.9	28.3	4.2	4.1	41.9	42.0
Cycle Q Clear(g_c), s	7.2	39.3	39.3	7.0	21.2	21.3	6.9	28.3	4.2	4.1	41.9	42.0
Prop In Lane	1.00		1.00	1.00		0.19	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	292	613	618	164	549	556	182	672	546	277	634	657
V/C Ratio(X)	0.54	1.16	0.95	0.92	0.66	0.66	0.89	0.75	0.14	0.36	0.99	0.99
Avail Cap(c_a), veh/h	320	613	618	164	549	556	182	672	546	281	634	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.43	0.43	0.32	0.32	0.32	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	40.3	35.2	32.0	36.0	36.0	29.6	33.7	26.0	25.0	38.3	38.4
Incr Delay (d2), s/veh	0.7	79.9	14.3	21.1	2.0	2.0	38.2	7.5	0.6	0.8	32.7	32.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	40.9	23.1	5.7	12.1	12.3	8.4	20.1	2.9	3.2	31.4	32.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	120.2	49.5	53.1	38.0	38.0	67.8	41.2	26.6	25.8	71.0	70.7
LnGrp LOS	C	F	D	D	D	D	E	D	C	C	E	E
Approach Vol, veh/h		1455			880			744			1375	
Approach Delay, s/veh		81.7			40.6			45.4			67.6	
Approach LOS		F			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	45.0	14.0	48.5	14.7	42.8	13.7	48.8
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 7	* 39	8.0	* 43	* 11	* 35	8.0	* 43
Max Q Clear Time (g_c+I1), s	9.0	41.3	8.9	44.0	9.2	23.3	6.1	30.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	3.4	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	63.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	653	539	138	606	65	149	463	73	92	1130	43
Future Volume (veh/h)	146	653	539	138	606	65	149	463	73	92	1130	43
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	710	586	150	659	71	162	503	79	100	1228	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	292	613	618	164	998	107	182	672	546	277	1243	48
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.33	0.33	0.06	0.31	0.31	0.07	0.36	0.36	0.06	0.36	0.36
Unsig. Movement Delay												
Ln Grp Delay, s/veh	27.9	120.2	49.5	53.1	38.0	38.0	67.8	41.2	26.6	25.8	71.0	70.7
Ln Grp LOS	C	F	D	D	D	D	E	D	C	C	E	E
Approach Vol, veh/h		1455			880			744			1375	
Approach Delay, s/veh		81.7			40.6			45.4			67.6	
Approach LOS		F			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	12.5	45.0	14.0	48.5	14.7	42.8	13.7	48.8
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 7	* 39	8.0	* 43	* 11	* 35	8.0	* 43
Max Allow Headway (MAH), s	3.7	4.6	3.8	5.1	3.7	5.0	3.8	5.0
Max Q Clear (g_c+l1), s	9.0	41.3	8.9	44.0	9.2	23.3	6.1	30.3
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.1	3.4	0.0	2.7
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	1.00	1.00	0.96	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt		1		3		5		7
Mvmt Sat Flow, veh/h		1781		1781		1781		1781

Through Movement Data								
Assigned Mvmt			2		4		6		8
Mvmt Sat Flow, veh/h			1870		3486		3231		1870

Right-Turn Movement Data								
Assigned Mvmt			12		14		16		18
Mvmt Sat Flow, veh/h			1563		133		348		1521

Left Lane Group Data								
Assigned Mvmt		1	0	3	0	5	0	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	150	0	162	0	159	0	100	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	6.9	0.0	7.2	0.0	4.1	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	6.9	0.0	7.2	0.0	4.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	425	0	434	0	724	0	833	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	37.1	0.0	42.8	0.0	37.1	0.0	42.8	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.8	0.0	15.8	0.0	14.8	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.8	0.0	6.0	0.0	3.8	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	164	0	182	0	292	0	277	0
V/C Ratio (X)	0.92	0.00	0.89	0.00	0.54	0.00	0.36	0.00
Avail Cap (c_a), veh/h	164	0	182	0	320	0	281	0
Upstream Filter (I)	0.32	0.00	1.00	0.00	0.43	0.00	1.00	0.00
Uniform Delay (d1), s/veh	32.0	0.0	29.6	0.0	27.3	0.0	25.0	0.0
Incr Delay (d2), s/veh	21.1	0.0	38.2	0.0	0.7	0.0	0.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.1	0.0	67.8	0.0	27.9	0.0	25.8	0.0
1st-Term Q (Q1), veh/ln	2.9	0.0	2.9	0.0	3.0	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	1.9	0.0	0.1	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.47	0.00	1.75	0.00	1.62	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	5.7	0.0	8.4	0.0	4.9	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.90	0.00	2.95	0.00	0.45	0.00	0.63	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	710	0	625	0	362	0	503
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	39.3	0.0	41.9	0.0	21.2	0.0	28.3
Cycle Q Clear Time (g_c), s	0.0	39.3	0.0	41.9	0.0	21.2	0.0	28.3
Lane Grp Cap (c), veh/h	0	613	0	634	0	549	0	672
V/C Ratio (X)	0.00	1.16	0.00	0.99	0.00	0.66	0.00	0.75
Avail Cap (c_a), veh/h	0	613	0	634	0	549	0	672
Upstream Filter (I)	0.00	0.43	0.00	1.00	0.00	0.32	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.3	0.0	38.3	0.0	36.0	0.0	33.7
Incr Delay (d2), s/veh	0.0	79.9	0.0	32.7	0.0	2.0	0.0	7.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	120.2	0.0	71.0	0.0	38.0	0.0	41.2
1st-Term Q (Q1), veh/ln	0.0	17.4	0.0	17.7	0.0	9.0	0.0	12.6
2nd-Term Q (Q2), veh/ln	0.0	13.6	0.0	5.8	0.0	0.3	0.0	1.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.32	0.00	1.34	0.00	1.30	0.00	1.44
%ile Back of Q (95%), veh/ln	0.0	40.9	0.0	31.4	0.0	12.1	0.0	20.1
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	6.23	0.00	0.12	0.00	7.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	24.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	586	0	650	0	368	0	79
Grp Sat Flow (s), veh/h/ln	0	1563	0	1842	0	1802	0	1521
Q Serve Time (g_s), s	0.0	39.3	0.0	42.0	0.0	21.3	0.0	4.2
Cycle Q Clear Time (g_c), s	0.0	39.3	0.0	42.0	0.0	21.3	0.0	4.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.07	0.00	0.19	0.00	1.00
Lane Grp Cap (c), veh/h	0	618	0	657	0	556	0	546
V/C Ratio (X)	0.00	0.95	0.00	0.99	0.00	0.66	0.00	0.14
Avail Cap (c_a), veh/h	0	618	0	657	0	556	0	546
Upstream Filter (I)	0.00	0.43	0.00	1.00	0.00	0.32	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.2	0.0	38.4	0.0	36.0	0.0	26.0
Incr Delay (d2), s/veh	0.0	14.3	0.0	32.4	0.0	2.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	49.5	0.0	70.7	0.0	38.0	0.0	26.6
1st-Term Q (Q1), veh/ln	0.0	16.0	0.0	18.4	0.0	9.1	0.0	1.5
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	5.9	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.25	0.00	1.33	0.00	1.30	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	23.1	0.0	32.4	0.0	12.3	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	6.43	0.00	0.12	0.00	1.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	63.2
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	546	259	87	462	47	77	537	115	113	1138	123
Future Volume (veh/h)	81	546	259	87	462	47	77	537	115	113	1138	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.89	0.97		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	593	282	95	502	51	84	584	125	123	1237	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	694	568	130	617	63	155	1797	709	373	1612	174
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	854	1870	1531	634	1664	169	396	3554	1403	718	3189	344
Grp Volume(v), veh/h	88	593	282	95	0	553	84	584	125	123	686	685
Grp Sat Flow(s),veh/h/ln	854	1870	1531	634	0	1833	396	1777	1403	718	1777	1756
Q Serve(g_s), s	8.9	26.3	12.8	7.1	0.0	24.5	17.0	8.8	4.4	11.0	28.0	28.5
Cycle Q Clear(g_c), s	33.4	26.3	12.8	33.4	0.0	24.5	45.5	8.8	4.4	19.8	28.0	28.5
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	165	694	568	130	0	680	155	1797	709	373	898	888
V/C Ratio(X)	0.53	0.85	0.50	0.73	0.00	0.81	0.54	0.33	0.18	0.33	0.76	0.77
Avail Cap(c_a), veh/h	165	694	568	130	0	680	155	1797	709	373	898	888
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	0.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	26.1	21.8	43.1	0.0	25.5	37.4	13.2	12.1	19.0	17.9	18.0
Incr Delay (d2), s/veh	1.1	1.3	0.3	30.0	0.0	10.3	3.5	0.1	0.1	0.5	3.9	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	12.6	5.3	5.7	0.0	17.3	3.5	5.7	2.3	3.2	16.5	16.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.8	27.4	22.1	73.1	0.0	35.7	40.9	13.3	12.2	19.5	21.9	22.3
LnGrp LOS	D	C	C	E	A	D	D	B	B	B	C	C
Approach Vol, veh/h		963			648			793			1494	
Approach Delay, s/veh		27.2			41.2			16.0			21.8	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	39.0	51.0	39.0	51.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 33	* 46	* 33	* 46
Max Q Clear Time (g_c+I1), s	35.4	47.5	35.4	30.5
Green Ext Time (p_c), s	0.0	0.0	0.0	8.6

Intersection Summary	
HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	546	259	87	462	47	77	537	115	113	1138	123
Future Volume (veh/h)	81	546	259	87	462	47	77	537	115	113	1138	123
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.89	0.97		0.89
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	593	282	95	502	51	84	584	125	123	1237	134
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	165	694	568	130	617	63	155	1797	709	373	1612	174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.51	0.51	0.51	0.51	0.51	0.51
Unsig. Movement Delay												
Ln Grp Delay, s/veh	41.8	27.4	22.1	73.1	0.0	35.7	40.9	13.3	12.2	19.5	21.9	22.3
Ln Grp LOS	D	C	C	E	A	D	D	B	B	B	C	C
Approach Vol, veh/h		963			648			793			1494	
Approach Delay, s/veh		27.2			41.2			16.0			21.8	
Approach LOS		C			D			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		6.0		6.0
Phs Duration (G+Y+Rc), s		39.0		51.0		39.0		51.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 33		* 46		* 33		* 46
Max Allow Headway (MAH), s		4.8		5.4		5.3		5.1
Max Q Clear (g_c+l1), s		35.4		47.5		35.4		30.5
Green Ext Time (g_e), s		0.0		0.0		0.0		8.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.59

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		854		396		634		718

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1664		3189

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1531		1403		169		344

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	88	0	84	0	95	0	123
Grp Sat Flow (s), veh/h/ln	0	854	0	396	0	634	0	718
Q Serve Time (g_s), s	0.0	8.9	0.0	17.0	0.0	7.1	0.0	11.0
Cycle Q Clear Time (g_c), s	0.0	33.4	0.0	45.5	0.0	33.4	0.0	19.8
Perm LT Sat Flow (s_l), veh/h/ln	0	854	0	396	0	634	0	718
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	33.4	0.0	45.5	0.0	33.4	0.0	45.5
Perm LT Serve Time (g_u), s	0.0	8.9	0.0	17.0	0.0	7.1	0.0	36.7
Perm LT Q Serve Time (g_ps), s	0.0	8.9	0.0	17.0	0.0	7.1	0.0	11.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	165	0	155	0	130	0	373
V/C Ratio (X)	0.00	0.53	0.00	0.54	0.00	0.73	0.00	0.33
Avail Cap (c_a), veh/h	0	165	0	155	0	130	0	373
Upstream Filter (I)	0.00	0.09	0.00	0.91	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.7	0.0	37.4	0.0	43.1	0.0	19.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	3.5	0.0	30.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.8	0.0	40.9	0.0	73.1	0.0	19.5
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	1.8	0.0	2.1	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	1.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.35	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.6	0.0	3.5	0.0	5.7	0.0	3.2
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	1.28	0.00	1.06	0.00	1.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T				T
Lanes in Grp	0	1	0	2	0	0	0	1
Grp Vol (v), veh/h	0	593	0	584	0	0	0	686
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	26.3	0.0	8.8	0.0	0.0	0.0	28.0
Cycle Q Clear Time (g_c), s	0.0	26.3	0.0	8.8	0.0	0.0	0.0	28.0
Lane Grp Cap (c), veh/h	0	694	0	1797	0	0	0	898
V/C Ratio (X)	0.00	0.85	0.00	0.33	0.00	0.00	0.00	0.76
Avail Cap (c_a), veh/h	0	694	0	1797	0	0	0	898
Upstream Filter (I)	0.00	0.09	0.00	0.91	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.1	0.0	13.2	0.0	0.0	0.0	17.9
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.1	0.0	0.0	0.0	3.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.4	0.0	13.3	0.0	0.0	0.0	21.9
1st-Term Q (Q1), veh/ln	0.0	10.7	0.0	3.1	0.0	0.0	0.0	10.1
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.15	0.00	1.80	0.00	1.00	0.00	1.49
%ile Back of Q (95%), veh/ln	0.0	12.6	0.0	5.7	0.0	0.0	0.0	16.5
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.12	0.00	0.00	0.00	0.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	282	0	125	0	553	0	685
Grp Sat Flow (s), veh/h/ln	0	1531	0	1403	0	1833	0	1756
Q Serve Time (g_s), s	0.0	12.8	0.0	4.4	0.0	24.5	0.0	28.5
Cycle Q Clear Time (g_c), s	0.0	12.8	0.0	4.4	0.0	24.5	0.0	28.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	0.20
Lane Grp Cap (c), veh/h	0	568	0	709	0	680	0	888
V/C Ratio (X)	0.00	0.50	0.00	0.18	0.00	0.81	0.00	0.77
Avail Cap (c_a), veh/h	0	568	0	709	0	680	0	888
Upstream Filter (I)	0.00	0.09	0.00	0.91	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.8	0.0	12.1	0.0	25.5	0.0	18.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.0	10.3	0.0	4.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.1	0.0	12.2	0.0	35.7	0.0	22.3
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	1.2	0.0	9.8	0.0	10.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	1.9	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.24	0.00	1.80	0.00	1.48	0.00	1.49
%ile Back of Q (95%), veh/ln	0.0	5.3	0.0	2.3	0.0	17.3	0.0	16.6
%ile Storage Ratio (RQ%)	0.00	0.85	0.00	0.52	0.00	1.23	0.00	0.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	55	28	212	370	33
Future Vol, veh/h	8	55	28	212	370	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	60	30	230	402	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	595	420	438	0	-	0
Stage 1	420	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	451	632	1120	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	439	632	1120	-	-	-
Mov Cap-2 Maneuver	524	-	-	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1120	-	616	-	-
HCM Lane V/C Ratio	0.027	-	0.111	-	-
HCM Control Delay (s)	8.3	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	6	40	184	18	369
Future Vol, veh/h	34	6	40	184	18	369
Conflicting Peds, #/hr	10	6	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	7	43	200	20	401

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	495	50	0	0	244	0
Stage 1	44	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	534	1018	-	-	1322	-
Stage 1	978	-	-	-	-	-
Stage 2	642	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	521	1012	-	-	1321	-
Mov Cap-2 Maneuver	554	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	627	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	594	1321	-
HCM Lane V/C Ratio	-	-	0.073	0.015	-
HCM Control Delay (s)	-	-	11.5	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	75	41	55	35	121	18	422	67	236	1155	14
Future Volume (veh/h)	109	75	41	55	35	121	18	422	67	236	1155	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	118	82	45	60	38	132	20	459	73	257	1255	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	278	153	314	89	310	270	2250	962	535	2276	27
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.21	0.21	0.21	0.63	0.63	0.63
Sat Flow, veh/h	1202	1128	619	1248	362	1257	436	3554	1520	864	3594	43
Grp Volume(v), veh/h	118	0	127	60	0	170	20	459	73	257	620	650
Grp Sat Flow(s),veh/h/ln	1202	0	1746	1248	0	1618	436	1777	1520	864	1777	1860
Q Serve(g_s), s	8.2	0.0	5.3	3.7	0.0	8.0	3.6	9.6	3.5	18.1	17.7	17.7
Cycle Q Clear(g_c), s	16.2	0.0	5.3	9.0	0.0	8.0	21.3	9.6	3.5	27.7	17.7	17.7
Prop In Lane	1.00		0.35	1.00		0.78	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	270	0	431	314	0	400	270	2250	962	535	1125	1178
V/C Ratio(X)	0.44	0.00	0.29	0.19	0.00	0.43	0.07	0.20	0.08	0.48	0.55	0.55
Avail Cap(c_a), veh/h	484	0	741	536	0	687	270	2250	962	535	1125	1178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	27.5	31.2	0.0	28.5	29.2	16.9	14.4	14.4	9.3	9.3
Incr Delay (d2), s/veh	1.1	0.0	0.4	0.3	0.0	0.7	0.5	0.2	0.2	3.1	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	0.0	4.1	2.0	0.0	5.7	0.8	7.6	2.0	6.6	10.5	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	0.0	27.9	31.5	0.0	29.2	29.7	17.1	14.6	17.4	11.3	11.2
LnGrp LOS	D	A	C	C	A	C	C	B	B	B	B	B
Approach Vol, veh/h		245			230			552			1527	
Approach Delay, s/veh		32.0			29.8			17.2			12.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	62.0	28.0	62.0	28.0
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	29.7	18.2	23.3	11.0
Green Ext Time (p_c), s	7.1	1.1	3.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	75	41	55	35	121	18	422	67	236	1155	14
Future Volume (veh/h)	109	75	41	55	35	121	18	422	67	236	1155	14
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.98	0.99		0.98	1.00		0.96	0.99		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	118	82	45	60	38	132	20	459	73	257	1255	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	270	278	153	314	89	310	270	2250	962	535	2276	27
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.21	0.21	0.21	0.63	0.63	0.63
Unsig. Movement Delay												
Ln Grp Delay, s/veh	36.4	0.0	27.9	31.5	0.0	29.2	29.7	17.1	14.6	17.4	11.3	11.2
Ln Grp LOS	D	A	C	C	A	C	C	B	B	B	B	B
Approach Vol, veh/h		245			230			552			1527	
Approach Delay, s/veh		32.0			29.8			17.2			12.3	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		62.0		28.0		62.0		28.0
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.2		4.9		5.1		5.3
Max Q Clear (g_c+l1), s		29.7		18.2		23.3		11.0
Green Ext Time (g_e), s		7.1		1.1		3.2		1.3
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		864		1202		436		1248

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3594		1128		3554		362

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		43		619		1520		1257

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	257	0	118	0	20	0	60
Grp Sat Flow (s), veh/h/ln	0	864	0	1202	0	436	0	1248
Q Serve Time (g_s), s	0.0	18.1	0.0	8.2	0.0	3.6	0.0	3.7
Cycle Q Clear Time (g_c), s	0.0	27.7	0.0	16.2	0.0	21.3	0.0	9.0
Perm LT Sat Flow (s_l), veh/h/ln	0	864	0	1202	0	436	0	1248
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	57.0	0.0	22.2	0.0	57.0	0.0	22.2
Perm LT Serve Time (g_u), s	0.0	47.4	0.0	14.3	0.0	39.3	0.0	16.9
Perm LT Q Serve Time (g_ps), s	0.0	18.1	0.0	8.2	0.0	3.6	0.0	3.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	535	0	270	0	270	0	314
V/C Ratio (X)	0.00	0.48	0.00	0.44	0.00	0.07	0.00	0.19
Avail Cap (c_a), veh/h	0	535	0	484	0	270	0	536
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.99	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.4	0.0	35.3	0.0	29.2	0.0	31.2
Incr Delay (d2), s/veh	0.0	3.1	0.0	1.1	0.0	0.5	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.4	0.0	36.4	0.0	29.7	0.0	31.5
1st-Term Q (Q1), veh/ln	0.0	3.2	0.0	2.4	0.0	0.4	0.0	1.1
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	6.6	0.0	4.5	0.0	0.8	0.0	2.0
%ile Storage Ratio (RQ%)	0.00	1.11	0.00	2.85	0.00	0.21	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	620	0	0	0	459	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	17.7	0.0	0.0	0.0	9.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	0.0	0.0	9.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	1125	0	0	0	2250	0	0
V/C Ratio (X)	0.00	0.55	0.00	0.00	0.00	0.20	0.00	0.00
Avail Cap (c_a), veh/h	0	1125	0	0	0	2250	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.99	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.3	0.0	0.0	0.0	16.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.3	0.0	0.0	0.0	17.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.8	0.0	0.0	0.0	4.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.65	0.00	1.00	0.00	1.79	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	10.5	0.0	0.0	0.0	7.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.00	0.00	0.62	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	650	0	127	0	73	0	170
Grp Sat Flow (s), veh/h/ln	0	1860	0	1746	0	1520	0	1618
Q Serve Time (g_s), s	0.0	17.7	0.0	5.3	0.0	3.5	0.0	8.0
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	5.3	0.0	3.5	0.0	8.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.35	0.00	1.00	0.00	0.78
Lane Grp Cap (c), veh/h	0	1178	0	431	0	962	0	400
V/C Ratio (X)	0.00	0.55	0.00	0.29	0.00	0.08	0.00	0.43
Avail Cap (c_a), veh/h	0	1178	0	741	0	962	0	687
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.99	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.3	0.0	27.5	0.0	14.4	0.0	28.5
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.4	0.0	0.2	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.2	0.0	27.9	0.0	14.6	0.0	29.2
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	2.2	0.0	1.1	0.0	3.1
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.63	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.9	0.0	4.1	0.0	2.0	0.0	5.7
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	0.38	0.00	0.51	0.00	0.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	72	334	168	10	30	51
Future Vol, veh/h	72	334	168	10	30	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	363	183	11	33	55
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	11.8	9.3	8.8
HCM LOS	B	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	37%
Vol Thru, %	0%	100%	94%	0%
Vol Right, %	0%	0%	6%	63%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	334	178	81
LT Vol	72	0	0	30
Through Vol	0	334	168	0
RT Vol	0	0	10	51
Lane Flow Rate	78	363	193	88
Geometry Grp	7	7	5	2
Degree of Util (X)	0.118	0.495	0.252	0.124
Departure Headway (Hd)	5.409	4.907	4.697	5.054
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	663	733	764	708
Service Time	3.141	2.638	2.732	3.095
HCM Lane V/C Ratio	0.118	0.495	0.253	0.124
HCM Control Delay	8.9	12.4	9.3	8.8
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.4	2.8	1	0.4

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	38	94	105	62	13	57
Future Vol, veh/h	38	94	105	62	13	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	102	114	67	14	62
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.3	8.2	7.6
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	19%
Vol Thru, %	0%	100%	63%	0%
Vol Right, %	0%	0%	37%	81%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	94	167	70
LT Vol	38	0	0	13
Through Vol	0	94	105	0
RT Vol	0	0	62	57
Lane Flow Rate	41	102	182	76
Geometry Grp	7	7	5	2
Degree of Util (X)	0.06	0.135	0.204	0.089
Departure Headway (Hd)	5.265	4.764	4.052	4.21
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	675	746	871	856
Service Time	3.035	2.534	2.148	2.21
HCM Lane V/C Ratio	0.061	0.137	0.209	0.089
HCM Control Delay	8.4	8.3	8.2	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.5	0.8	0.3

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	81	40	65	3	87	2	11	6	43	32
Future Vol, veh/h	0	10	81	40	65	3	87	2	11	6	43	32
Conflicting Peds, #/hr	41	0	57	57	0	41	13	0	50	50	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	88	43	71	3	95	2	12	7	47	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	156	0	0	281	269	118	312	356	127
Stage 1	-	-	-	-	-	-	68	68	-	200	200	-
Stage 2	-	-	-	-	-	-	213	201	-	112	156	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1424	-	-	671	637	934	641	570	923
Stage 1	0	-	-	-	-	-	942	838	-	802	736	-
Stage 2	0	-	-	-	-	-	789	735	-	893	769	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1360	-	-	556	569	856	571	510	884
Mov Cap-2 Maneuver	-	-	-	-	-	-	592	591	-	626	548	-
Stage 1	-	-	-	-	-	-	942	800	-	802	689	-
Stage 2	-	-	-	-	-	-	677	688	-	843	734	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.9	11.9	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	592	856	-	-	1360	-	-	654
HCM Lane V/C Ratio	0.16	0.014	-	-	0.032	-	-	0.125
HCM Control Delay (s)	12.2	9.3	-	-	7.7	-	-	11.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	27	100	19	10	178
Future Vol, veh/h	55	27	100	19	10	178
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	29	109	21	11	193

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	335	120	0	0	130	0
Stage 1	120	-	-	-	-	-
Stage 2	215	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	660	931	-	-	1455	-
Stage 1	905	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	655	931	-	-	1455	-
Mov Cap-2 Maneuver	655	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	726	1455	-
HCM Lane V/C Ratio	-	-	0.123	0.007	-
HCM Control Delay (s)	-	-	10.7	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	818	169	124	332	70	84	383	68	111	472	22
Future Volume (veh/h)	113	818	169	124	332	70	84	383	68	111	472	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.90	1.00		0.82	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	889	184	135	361	76	91	416	74	121	513	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	1338	537	161	1360	547	114	515	357	147	549	386
Arrive On Green	0.08	0.38	0.38	0.09	0.38	0.38	0.06	0.28	0.28	0.08	0.29	0.29
Sat Flow, veh/h	1781	3554	1427	1781	3554	1430	1781	1870	1297	1781	1870	1315
Grp Volume(v), veh/h	123	889	184	135	361	76	91	416	74	121	513	24
Grp Sat Flow(s),veh/h/ln	1781	1777	1427	1781	1777	1430	1781	1870	1297	1781	1870	1315
Q Serve(g_s), s	8.2	25.0	11.1	8.9	8.4	4.2	6.0	24.9	5.3	8.0	32.0	1.6
Cycle Q Clear(g_c), s	8.2	25.0	11.1	8.9	8.4	4.2	6.0	24.9	5.3	8.0	32.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	150	1338	537	161	1360	547	114	515	357	147	549	386
V/C Ratio(X)	0.82	0.66	0.34	0.84	0.27	0.14	0.79	0.81	0.21	0.82	0.93	0.06
Avail Cap(c_a), veh/h	251	1338	537	178	1360	547	178	586	406	184	592	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	54.0	31.1	26.8	53.7	25.4	24.1	55.4	40.5	33.4	54.2	41.2	30.5
Incr Delay (d2), s/veh	10.4	2.6	1.7	26.3	0.5	0.5	12.5	7.4	0.3	18.2	19.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.2	16.2	7.2	8.8	6.4	2.7	5.6	18.1	3.0	7.5	23.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.4	33.7	28.5	80.0	25.9	24.7	67.9	47.9	33.7	72.4	60.2	30.5
LnGrp LOS	E	C	C	E	C	C	E	D	C	E	E	C
Approach Vol, veh/h		1196			572			581			658	
Approach Delay, s/veh		36.1			38.5			49.2			61.4	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	50.9	12.7	40.2	16.9	50.2	14.9	38.0
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	16.9	* 32	12.0	* 38	12.0	* 37	12.4	* 38
Max Q Clear Time (g_c+I1), s	10.2	10.4	8.0	34.0	10.9	27.0	10.0	26.9
Green Ext Time (p_c), s	0.1	2.4	0.1	1.2	0.0	4.6	0.1	2.1

Intersection Summary	
HCM 6th Ctrl Delay	44.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	818	169	124	332	70	84	383	68	111	472	22
Future Volume (veh/h)	113	818	169	124	332	70	84	383	68	111	472	22
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.90	1.00		0.90	1.00		0.82	1.00		0.83
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	889	184	135	361	76	91	416	74	121	513	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	150	1338	537	161	1360	547	114	515	357	147	549	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.38	0.38	0.09	0.38	0.38	0.06	0.28	0.28	0.08	0.29	0.29
Unsig. Movement Delay												
Ln Grp Delay, s/veh	64.4	33.7	28.5	80.0	25.9	24.7	67.9	47.9	33.7	72.4	60.2	30.5
Ln Grp LOS	E	C	C	E	C	C	E	D	C	E	E	C
Approach Vol, veh/h		1196			572			581			658	
Approach Delay, s/veh		36.1			38.5			49.2			61.4	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.1	50.9	12.7	40.2	16.9	50.2	14.9	38.0
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	16.9	* 32	12.0	* 38	12.0	* 37	12.4	* 38
Max Allow Headway (MAH), s	3.7	4.9	3.8	5.1	3.7	4.9	3.8	5.0
Max Q Clear (g_c+I1), s	10.2	10.4	8.0	34.0	10.9	27.0	10.0	26.9
Green Ext Time (g_e), s	0.1	2.4	0.1	1.2	0.0	4.6	0.1	2.1
Prob of Phs Call (p_c)	0.98	1.00	0.95	1.00	0.99	1.00	0.98	1.00
Prob of Max Out (p_x)	0.05	0.00	0.81	1.00	1.00	0.00	1.00	0.21

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	1870	3554	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1430	1315	1427	1297

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	123	0	91	0	135	0	121	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	8.2	0.0	6.0	0.0	8.9	0.0	8.0	0.0
Cycle Q Clear Time (g_c), s	8.2	0.0	6.0	0.0	8.9	0.0	8.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	150	0	114	0	161	0	147	0
V/C Ratio (X)	0.82	0.00	0.79	0.00	0.84	0.00	0.82	0.00
Avail Cap (c_a), veh/h	251	0	178	0	178	0	184	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.85	0.00
Uniform Delay (d1), s/veh	54.0	0.0	55.4	0.0	53.7	0.0	54.2	0.0
Incr Delay (d2), s/veh	10.4	0.0	12.5	0.0	26.3	0.0	18.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.4	0.0	67.9	0.0	80.0	0.0	72.4	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	2.7	0.0	3.9	0.0	3.6	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.4	0.0	1.2	0.0	0.7	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.72	0.00	1.73	0.00
%ile Back of Q (95%), veh/ln	7.2	0.0	5.6	0.0	8.8	0.0	7.5	0.0
%ile Storage Ratio (RQ%)	0.86	0.00	1.13	0.00	1.12	0.00	2.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	361	0	513	0	889	0	416
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	8.4	0.0	32.0	0.0	25.0	0.0	24.9
Cycle Q Clear Time (g_c), s	0.0	8.4	0.0	32.0	0.0	25.0	0.0	24.9
Lane Grp Cap (c), veh/h	0	1360	0	549	0	1338	0	515
V/C Ratio (X)	0.00	0.27	0.00	0.93	0.00	0.66	0.00	0.81
Avail Cap (c_a), veh/h	0	1360	0	592	0	1338	0	586
Upstream Filter (I)	0.00	1.00	0.00	0.85	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	41.2	0.0	31.1	0.0	40.5
Incr Delay (d2), s/veh	0.0	0.5	0.0	19.0	0.0	2.6	0.0	7.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.9	0.0	60.2	0.0	33.7	0.0	47.9
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	14.4	0.0	10.3	0.0	11.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.9	0.0	0.5	0.0	1.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.36	0.00	1.50	0.00	1.47
%ile Back of Q (95%), veh/ln	0.0	6.4	0.0	23.6	0.0	16.2	0.0	18.1
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.49	0.00	0.50	0.00	0.86
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	76	0	24	0	184	0	74
Grp Sat Flow (s), veh/h/ln	0	1430	0	1315	0	1427	0	1297
Q Serve Time (g_s), s	0.0	4.2	0.0	1.6	0.0	11.1	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	1.6	0.0	11.1	0.0	5.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	547	0	386	0	537	0	357
V/C Ratio (X)	0.00	0.14	0.00	0.06	0.00	0.34	0.00	0.21
Avail Cap (c_a), veh/h	0	547	0	416	0	537	0	406
Upstream Filter (I)	0.00	1.00	0.00	0.85	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.1	0.0	30.5	0.0	26.8	0.0	33.4
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.1	0.0	1.7	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.7	0.0	30.5	0.0	28.5	0.0	33.7
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	0.5	0.0	3.7	0.0	1.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.7	0.0	0.9	0.0	7.2	0.0	3.0
%ile Storage Ratio (RQ%)	0.00	0.68	0.00	0.21	0.00	1.82	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.6
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	24	76	22	174	202	0	0	387	56
Future Volume (veh/h)	0	0	0	24	76	22	174	202	0	0	387	56
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.92	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				26	83	24	189	220	0	0	421	61
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				89	305	159	718	2869	0	0	1114	161
Arrive On Green				0.11	0.11	0.11	0.13	1.00	0.00	0.00	0.70	0.70
Sat Flow, veh/h				816	2791	1455	1781	3647	0	0	1593	231
Grp Volume(v), veh/h				58	51	24	189	220	0	0	0	482
Grp Sat Flow(s),veh/h/ln				1830	1777	1455	1781	1777	0	0	0	1824
Q Serve(g_s), s				3.5	3.1	1.8	3.3	0.0	0.0	0.0	0.0	13.0
Cycle Q Clear(g_c), s				3.5	3.1	1.8	3.3	0.0	0.0	0.0	0.0	13.0
Prop In Lane				0.45		1.00	1.00		0.00	0.00		0.13
Lane Grp Cap(c), veh/h				200	194	159	718	2869	0	0	0	1275
V/C Ratio(X)				0.29	0.26	0.15	0.26	0.08	0.00	0.00	0.00	0.38
Avail Cap(c_a), veh/h				412	400	327	718	2869	0	0	0	1275
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.93	0.93	0.93	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				49.2	49.0	48.4	4.0	0.0	0.0	0.0	0.0	7.4
Incr Delay (d2), s/veh				0.7	0.7	0.4	0.2	0.1	0.0	0.0	0.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				2.9	2.5	1.2	1.5	0.0	0.0	0.0	0.0	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				49.9	49.6	48.8	4.2	0.1	0.0	0.0	0.0	8.2
LnGrp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					133			409			482	
Approach Delay, s/veh					49.6			2.0			8.2	
Approach LOS					D			A			A	

Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	13.0	88.9		18.1		101.9	
Change Period (Y+Rc), s	* 5	* 5		* 5		* 5	
Max Green Setting (Gmax), s	* 8	* 70		* 27		* 83	
Max Q Clear Time (g_c+I1), s	5.3	15.0		5.5		2.0	
Green Ext Time (p_c), s	0.1	5.1		0.5		2.2	

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	24	76	22	174	202	0	0	387	56
Future Volume (veh/h)	0	0	0	24	76	22	174	202	0	0	387	56
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.92	1.00		1.00	1.00		0.98
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				26	83	24	189	220	0	0	421	61
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Opposing Right Turn Influence				Yes			Yes			No		
Cap, veh/h				89	305	159	718	2869	0	0	1114	161
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Prop Arrive On Green				0.11	0.11	0.11	0.13	1.00	0.00	0.00	0.70	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh				49.9	49.6	48.8	4.2	0.1	0.0	0.0	0.0	8.2
Ln Grp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					133			409			482	
Approach Delay, s/veh					49.6			2.0			8.2	
Approach LOS					D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	1.2	8.0		11.0		4.0		
Phs Duration (G+Y+Rc), s	13.0	88.9		18.1		101.9		
Change Period (Y+Rc), s	* 5	* 5		* 5		* 5		
Max Green (Gmax), s	* 8	* 70		* 27		* 83		
Max Allow Headway (MAH), s	3.8	6.2		4.9		6.1		
Max Q Clear (g_c+l1), s	5.3	15.0		5.5		2.0		
Green Ext Time (g_e), s	0.1	5.1		0.5		2.2		
Prob of Phs Call (p_c)	1.00	1.00		0.99		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		816				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1593		2791		3647		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		231		1455		0		

Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Pr/Pm)			L+T				

Lanes in Grp	1	0	0	1	0	0	0	0
Grp Vol (v), veh/h	189	0	0	58	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1830	0	0	0	0
Q Serve Time (g_s), s	3.3	0.0	0.0	3.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	3.3	0.0	0.0	3.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	913	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	85.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	70.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	83.9	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	718	0	0	200	0	0	0	0
V/C Ratio (X)	0.26	0.00	0.00	0.29	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	718	0	0	412	0	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	0.93	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	4.0	0.0	0.0	49.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	4.2	0.0	0.0	49.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.8	0.0	0.0	1.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	0.00	1.80	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	1.5	0.0	0.0	2.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.55	0.00	0.00	0.16	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment				T		T		
Lanes in Grp	0	0	0	1	0	2	0	0
Grp Vol (v), veh/h	0	0	0	51	0	220	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	194	0	2869	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.26	0.00	0.08	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	400	0	2869	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.93	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	49.6	0.0	0.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	482	0	24	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1824	0	1455	0	0	0	0
Q Serve Time (g_s), s	0.0	13.0	0.0	1.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.0	0.0	1.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.13	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1275	0	159	0	0	0	0
V/C Ratio (X)	0.00	0.38	0.00	0.15	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1275	0	327	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.93	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.4	0.0	48.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.2	0.0	48.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	0.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.5	0.0	1.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.98	0.00	0.07	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	61	507	1192	70
Future Volume (veh/h)	0	0	61	507	1192	70
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.90
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			66	551	1296	76
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			112	3352	2787	163
Arrive On Green			0.06	0.94	1.00	1.00
Sat Flow, veh/h			1781	3647	3481	198
Grp Volume(v), veh/h			66	551	678	694
Grp Sat Flow(s),veh/h/ln			1781	1777	1777	1808
Q Serve(g_s), s			3.2	0.9	0.0	0.0
Cycle Q Clear(g_c), s			3.2	0.9	0.0	0.0
Prop In Lane			1.00			0.11
Lane Grp Cap(c), veh/h			112	3352	1462	1488
V/C Ratio(X)			0.59	0.16	0.46	0.47
Avail Cap(c_a), veh/h			471	3352	1462	1488
HCM Platoon Ratio			1.00	1.00	2.00	2.00
Upstream Filter(I)			0.95	0.95	0.83	0.83
Uniform Delay (d), s/veh			41.0	0.2	0.0	0.0
Incr Delay (d2), s/veh			4.6	0.1	0.9	0.9
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln			2.8	0.1	0.6	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			45.7	0.3	0.9	0.9
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				617	1372	
Approach Delay, s/veh				5.1	0.9	
Approach LOS				A	A	

Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		90.0			10.9	79.1
Change Period (Y+Rc), s		5.1			* 5.2	5.1
Max Green Setting (Gmax), s		84.9			* 24	55.9
Max Q Clear Time (g_c+I1), s		2.9			5.2	2.0
Green Ext Time (p_c), s		4.3			0.1	14.4

Intersection Summary	
HCM 6th Ctrl Delay	2.2
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	61	507	1192	70
Future Volume (veh/h)	0	0	61	507	1192	70
Number			5	2	6	16
Initial Q, veh			0	0	0	0
Ped-Bike Adj (A_pbT)			1.00			0.90
Parking Bus Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			66	551	1296	76
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Opposing Right Turn Influence			Yes			
Cap, veh/h			112	3352	2787	163
HCM Platoon Ratio			1.00	1.00	2.00	2.00
Prop Arrive On Green			0.06	0.94	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh			45.7	0.3	0.9	0.9
Ln Grp LOS			D	A	A	A
Approach Vol, veh/h				617	1372	
Approach Delay, s/veh				5.1	0.9	
Approach LOS				A	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		
Case No		4.0			2.0	8.0		
Phs Duration (G+Y+Rc), s		90.0			10.9	79.1		
Change Period (Y+Rc), s		5.1			* 5.2	5.1		
Max Green (Gmax), s		84.9			* 24	55.9		
Max Allow Headway (MAH), s		5.2			3.8	5.3		
Max Q Clear (g_c+I1), s		2.9			5.2	2.0		
Green Ext Time (g_e), s		4.3			0.1	14.4		
Prob of Phs Call (p_c)		1.00			0.81	1.00		
Prob of Max Out (p_x)		0.00			0.00	0.06		
Left-Turn Movement Data								
Assigned Mvmt					5	1		
Mvmt Sat Flow, veh/h					1781	0		
Through Movement Data								
Assigned Mvmt		2				6		
Mvmt Sat Flow, veh/h		3647				3481		
Right-Turn Movement Data								
Assigned Mvmt		12				16		
Mvmt Sat Flow, veh/h		0				198		
Left Lane Group Data								
Assigned Mvmt	0	0	0	0	5	1	0	0
Lane Assignment					L (Prot)			

Lanes in Grp	0	0	0	0	1	0	0	0
Grp Vol (v), veh/h	0	0	0	0	66	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	74.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	112	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	471	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	41.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	45.7	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	1.42	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	551	0	0	0	678	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	3352	0	0	0	1462	0	0
V/C Ratio (X)	0.00	0.16	0.00	0.00	0.00	0.46	0.00	0.00
Avail Cap (c_a), veh/h	0	3352	0	0	0	1462	0	0
Upstream Filter (I)	0.00	0.95	0.00	0.00	0.00	0.83	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	0.0	0.0	0.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	0	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	694	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1808	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1488	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1488	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	2.2
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	0	0	351	4	0	379	0
Future Volume (veh/h)	0	13	1	0	13	0	0	351	4	0	379	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	0	0	382	4	0	412	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Cap, veh/h	0	40	3	0	43	0	0	3159	33	0	1640	0
Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.00	0.00	0.88	0.88	0.00	1.00	0.00
Sat Flow, veh/h	0	1725	123	0	1870	0	0	3696	38	0	1870	0
Grp Volume(v), veh/h	0	0	15	0	14	0	0	188	198	0	412	0
Grp Sat Flow(s),veh/h/ln	0	0	1848	0	1870	0	0	1777	1863	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.0	0.0	0.9	0.0	0.0	1.7	1.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.0	0.0	0.9	0.0	0.0	1.7	1.8	0.0	0.0	0.0
Prop In Lane	0.00		0.07	0.00		0.00	0.00		0.02	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	42	0	43	0	0	1558	1634	0	1640	0
V/C Ratio(X)	0.00	0.00	0.35	0.00	0.33	0.00	0.00	0.12	0.12	0.00	0.25	0.00
Avail Cap(c_a), veh/h	0	0	108	0	109	0	0	1558	1634	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.95	0.95	0.00	0.91	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.7	0.0	57.7	0.0	0.0	1.0	1.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	21.6	0.0	19.1	0.0	0.0	0.2	0.1	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.3	0.0	1.2	0.0	0.0	0.5	0.5	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	79.4	0.0	76.8	0.0	0.0	1.2	1.2	0.0	0.3	0.0
LnGrp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		15			14			386			412	
Approach Delay, s/veh		79.4			76.8			1.2			0.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.2	9.8	110.2	9.8
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	3.8	3.0	2.0	2.9
Green Ext Time (p_c), s	3.6	0.0	4.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑↑			↑	
Traffic Volume (veh/h)	0	13	1	0	13	0	0	351	4	0	379	0
Future Volume (veh/h)	0	13	1	0	13	0	0	351	4	0	379	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	0	0	382	4	0	412	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	40	3	0	43	0	0	3159	33	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.00	0.00	0.88	0.88	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	79.4	0.0	76.8	0.0	0.0	1.2	1.2	0.0	0.3	0.0
Ln Grp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		15			14			386			412	
Approach Delay, s/veh		79.4			76.8			1.2			0.3	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.2		9.8		110.2		9.8
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+I1), s		3.8		3.0		2.0		2.9
Green Ext Time (g_e), s		3.6		0.0		4.2		0.0
Prob of Phs Call (p_c)		1.00		0.39		1.00		0.37
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3696		1725		1870		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		38		123		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.2	0.0	2.8	0.0	105.2	0.0	2.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	188	0	0	0	412	0	14
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	1870
Q Serve Time (g_s), s	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.9
Cycle Q Clear Time (g_c), s	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.9
Lane Grp Cap (c), veh/h	0	1558	0	0	0	1640	0	43
V/C Ratio (X)	0.00	0.12	0.00	0.00	0.00	0.25	0.00	0.33
Avail Cap (c_a), veh/h	0	1558	0	0	0	1640	0	109
Upstream Filter (I)	0.00	0.95	0.00	0.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	0.0	0.0	0.0	0.0	57.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.3	0.0	19.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.2	0.0	0.0	0.0	0.3	0.0	76.8
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.5	0.0	0.0	0.0	0.3	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.00	0.00	0.09	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	198	0	15	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	1848	0	0	0	0
Q Serve Time (g_s), s	0.0	1.8	0.0	1.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.8	0.0	1.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.07	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1634	0	42	0	0	0	0
V/C Ratio (X)	0.00	0.12	0.00	0.35	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1634	0	108	0	0	0	0
Upstream Filter (I)	0.00	0.95	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	57.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	21.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.2	0.0	79.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.5	0.0	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.4
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	666	251	89	0	79	0	202	102	38	351	0
Future Volume (veh/h)	84	666	251	89	0	79	0	202	102	38	351	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.72	1.00		0.94	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	91	724	273	97	0	86	0	220	111	41	382	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	887	912	368	158	0	102	0	1081	518	574	1048	0
Arrive On Green	0.26	0.26	0.26	0.09	0.00	0.09	0.00	0.47	0.47	0.05	0.56	0.00
Sat Flow, veh/h	3456	3554	1433	1781	0	1146	0	2372	1092	1781	1870	0
Grp Volume(v), veh/h	91	724	273	97	0	86	0	169	162	41	382	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1433	1781	0	1146	0	1777	1594	1781	1870	0
Q Serve(g_s), s	3.1	29.3	26.9	8.1	0.0	11.4	0.0	8.5	9.2	1.7	17.4	0.0
Cycle Q Clear(g_c), s	3.1	29.3	26.9	8.1	0.0	11.4	0.0	8.5	9.2	1.7	17.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.69	1.00		0.00
Lane Grp Cap(c), veh/h	887	912	368	158	0	102	0	843	756	574	1048	0
V/C Ratio(X)	0.10	0.79	0.74	0.61	0.00	0.84	0.00	0.20	0.21	0.07	0.36	0.00
Avail Cap(c_a), veh/h	1122	1154	465	208	0	134	0	843	756	594	1048	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	43.7	53.4	52.6	67.6	0.0	69.1	0.0	23.5	23.7	17.0	18.7	0.0
Incr Delay (d2), s/veh	0.1	3.5	5.7	3.8	0.0	29.6	0.0	0.5	0.6	0.1	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	19.4	15.4	6.9	0.0	7.5	0.0	6.7	6.5	1.3	12.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	57.0	58.3	71.4	0.0	98.7	0.0	24.1	24.3	17.1	19.7	0.0
LnGrp LOS	D	E	E	E	A	F	A	C	C	B	B	A
Approach Vol, veh/h		1088			183			331			423	
Approach Delay, s/veh		56.2			84.2			24.2			19.4	
Approach LOS		E			F			C			B	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	91.3		44.5	13.3	78.0		18.2
Change Period (Y+Rc), s	* 5		* 5	* 5	* 5		4.5
Max Green Setting (Gmax), s	* 72		* 50	* 10	* 57		18.0
Max Q Clear Time (g_c+I1), s	19.4		31.3	3.7	11.2		13.4
Green Ext Time (p_c), s	5.2		8.2	0.0	4.3		0.3

Intersection Summary	
HCM 6th Ctrl Delay	45.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	666	251	89	0	79	0	202	102	38	351	0
Future Volume (veh/h)	84	666	251	89	0	79	0	202	102	38	351	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.90	1.00		0.72	1.00		0.94	0.99		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	91	724	273	97	0	86	0	220	111	41	382	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	887	912	368	158	0	102	0	1081	518	574	1048	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.26	0.09	0.00	0.09	0.00	0.47	0.47	0.05	0.56	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	43.8	57.0	58.3	71.4	0.0	98.7	0.0	24.1	24.3	17.1	19.7	0.0
Ln Grp LOS	D	E	E	E	A	F	A	C	C	B	B	A
Approach Vol, veh/h		1088			183			331			423	
Approach Delay, s/veh		56.2			84.2			24.2			19.4	
Approach LOS		E			F			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	10.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		91.3	18.2	44.5	13.3	78.0		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 72	18.0	* 50	* 10	* 57		
Max Allow Headway (MAH), s		7.1	4.9	5.7	3.8	7.3		
Max Q Clear (g_c+l1), s		19.4	13.4	31.3	3.7	11.2		
Green Ext Time (g_e), s		5.2	0.3	8.2	0.0	4.3		
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.83	1.00		
Prob of Max Out (p_x)		0.00	1.00	0.33	0.02	0.00		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		2372		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1146	1433		1092		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L	LL (Pr/Pm)				

Lanes in Grp	0	0	1	2	1	0	0	0
Grp Vol (v), veh/h	0	0	97	91	41	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	8.1	3.1	1.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	8.1	3.1	1.7	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1781	1728	1040	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	75.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	63.9	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	73.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	158	887	574	0	0	0
V/C Ratio (X)	0.00	0.00	0.61	0.10	0.07	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	208	1122	594	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.98	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	67.6	43.7	17.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.8	0.1	0.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	71.4	43.8	17.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.7	1.3	0.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.80	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	6.9	2.4	1.3	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.43	1.22	0.53	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	382	0	724	0	169	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	17.4	0.0	29.3	0.0	8.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.4	0.0	29.3	0.0	8.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	1048	0	912	0	843	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.79	0.00	0.20	0.00	0.00
Avail Cap (c_a), veh/h	0	1048	0	1154	0	843	0	0
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.7	0.0	53.4	0.0	23.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	3.5	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.7	0.0	57.0	0.0	24.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	12.9	0.0	3.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.4	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.58	1.00	1.45	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	12.4	0.0	19.4	0.0	6.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	4.08	0.00	0.82	0.00	0.50	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	86	273	0	162	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1146	1433	0	1594	0	0
Q Serve Time (g_s), s	0.0	0.0	11.4	26.9	0.0	9.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	11.4	26.9	0.0	9.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	0.69	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	102	368	0	756	0	0
V/C Ratio (X)	0.00	0.00	0.84	0.74	0.00	0.21	0.00	0.00
Avail Cap (c_a), veh/h	0	0	134	465	0	756	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	69.1	52.6	0.0	23.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	29.6	5.7	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	98.7	58.3	0.0	24.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.3	9.6	0.0	3.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.8	0.6	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.51	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	7.5	15.4	0.0	6.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.47	5.22	0.00	0.49	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	45.8
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	663	43	154	227	8	81
Future Vol, veh/h	663	43	154	227	8	81
Conflicting Peds, #/hr	0	53	53	0	14	32
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	40	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	721	47	167	247	9	88

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	821	0	1369	446
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	595	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	806	-	149	561
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	550	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	772	-	111	524
Mov Cap-2 Maneuver	-	-	-	-	239	-
Stage 1	-	-	-	-	399	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.4	14.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	473	-	-	772	-
HCM Lane V/C Ratio	0.205	-	-	0.217	-
HCM Control Delay (s)	14.6	-	-	10.9	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.8	-	-	0.8	-

HCM 6th Signalized Intersection Summary
20: Lankershim Blvd & Chandler Blvd (S)/Chandler Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	472	108	94	193	139	51	300	47	113	883	137
Future Volume (veh/h)	168	472	108	94	193	139	51	300	47	113	883	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.86	0.95		0.86	0.97		0.86	0.94		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	513	117	102	210	151	55	326	51	123	960	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	390	1002	385	326	516	506	185	1293	626	490	1472	228
Arrive On Green	0.09	0.28	0.28	0.08	0.28	0.28	0.36	0.36	0.36	0.08	0.49	0.49
Sat Flow, veh/h	1781	3554	1367	1781	1870	1363	494	3554	1368	1781	2990	463
Grp Volume(v), veh/h	183	513	117	102	210	151	55	326	51	123	570	539
Grp Sat Flow(s),veh/h/ln	1781	1777	1367	1781	1870	1363	494	1777	1368	1781	1777	1676
Q Serve(g_s), s	8.8	14.5	8.1	4.7	11.0	9.6	11.2	7.7	2.6	4.8	28.8	28.9
Cycle Q Clear(g_c), s	8.8	14.5	8.1	4.7	11.0	9.6	24.7	7.7	2.6	4.8	28.8	28.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	390	1002	385	326	516	506	185	1293	626	490	875	826
V/C Ratio(X)	0.47	0.51	0.30	0.31	0.41	0.30	0.30	0.25	0.08	0.25	0.65	0.65
Avail Cap(c_a), veh/h	390	1007	387	470	676	623	185	1293	626	498	875	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.84	0.84	0.84
Uniform Delay (d), s/veh	27.8	36.2	33.8	27.3	35.4	27.8	37.8	26.7	19.2	19.1	22.8	22.8
Incr Delay (d2), s/veh	0.9	0.4	0.4	0.5	0.5	0.3	4.0	0.5	0.3	0.2	3.2	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	10.5	4.9	3.7	8.8	5.7	2.8	6.1	1.6	3.6	17.9	17.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.7	36.6	34.3	27.8	36.0	28.2	41.8	27.2	19.5	19.3	25.9	26.1
LnGrp LOS	C	D	C	C	D	C	D	C	B	B	C	C
Approach Vol, veh/h		813			463			432			1232	
Approach Delay, s/veh		34.5			31.6			28.1			25.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		64.9	16.0	39.1	15.4	49.5	15.3	39.8
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s		* 49	10.4	* 43	10.4	* 33	19.4	* 34
Max Q Clear Time (g_c+I1), s		30.9	10.8	13.0	6.8	26.7	6.7	16.5
Green Ext Time (p_c), s		7.5	0.0	1.9	0.1	1.6	0.2	3.7

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	472	108	94	193	139	51	300	47	113	883	137
Future Volume (veh/h)	168	472	108	94	193	139	51	300	47	113	883	137
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.94		0.86	0.95		0.86	0.97		0.86	0.94		0.83
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	513	117	102	210	151	55	326	51	123	960	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	390	1002	385	326	516	506	185	1293	626	490	1472	228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.28	0.28	0.08	0.28	0.28	0.36	0.36	0.36	0.08	0.49	0.49
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.7	36.6	34.3	27.8	36.0	28.2	41.8	27.2	19.5	19.3	25.9	26.1
Ln Grp LOS	C	D	C	C	D	C	D	C	B	B	C	C
Approach Vol, veh/h		813			463			432			1232	
Approach Delay, s/veh		34.5			31.6			28.1			25.4	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		4.0	1.1	3.0	1.2	5.3	1.1	3.0
Phs Duration (G+Y+Rc), s		64.9	16.0	39.1	15.4	49.5	15.3	39.8
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s		* 49	10.4	* 43	10.4	* 33	19.4	* 34
Max Allow Headway (MAH), s		5.3	3.8	4.9	3.8	5.6	3.8	5.1
Max Q Clear (g_c+l1), s		30.9	10.8	13.0	6.8	26.7	6.7	16.5
Green Ext Time (g_e), s		7.5	0.0	1.9	0.1	1.6	0.2	3.7
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.98	1.00	0.97	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00	1.00	0.00	0.00	0.06

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			1781		1781	494	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2990		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		463		1363		1368		1367

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		LL (Pr/Pm)		

Lanes in Grp	0	0	1	0	1	1	1	0
Grp Vol (v), veh/h	0	0	183	0	123	55	102	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	1781	494	1781	0
Q Serve Time (g_s), s	0.0	0.0	8.8	0.0	4.8	11.2	4.7	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	8.8	0.0	4.8	24.7	4.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	955	0	947	494	759	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	33.1	0.0	45.7	43.7	33.1	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	22.1	0.0	36.0	30.2	19.3	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.6	0.0	1.4	11.2	2.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	390	0	490	185	326	0
V/C Ratio (X)	0.00	0.00	0.47	0.00	0.25	0.30	0.31	0.00
Avail Cap (c_a), veh/h	0	0	390	0	498	185	470	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.84	0.98	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	27.8	0.0	19.1	37.8	27.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	0.0	0.2	4.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	28.7	0.0	19.3	41.8	27.8	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.7	0.0	2.0	1.4	2.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.80	0.00	1.80	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	6.9	0.0	3.6	2.8	3.7	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.92	0.00	0.84	0.48	0.70	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	2	0	2
Grp Vol (v), veh/h	0	570	0	210	0	326	0	513
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	28.8	0.0	11.0	0.0	7.7	0.0	14.5
Cycle Q Clear Time (g_c), s	0.0	28.8	0.0	11.0	0.0	7.7	0.0	14.5
Lane Grp Cap (c), veh/h	0	875	0	516	0	1293	0	1002
V/C Ratio (X)	0.00	0.65	0.00	0.41	0.00	0.25	0.00	0.51
Avail Cap (c_a), veh/h	0	875	0	676	0	1293	0	1007
Upstream Filter (I)	0.00	0.84	0.00	1.00	0.00	0.98	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.8	0.0	35.4	0.0	26.7	0.0	36.2
Incr Delay (d2), s/veh	0.0	3.2	0.0	0.5	0.0	0.5	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.9	0.0	36.0	0.0	27.2	0.0	36.6
1st-Term Q (Q1), veh/ln	0.0	11.8	0.0	5.0	0.0	3.3	0.0	6.3
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.42	0.00	1.73	0.00	1.80	0.00	1.65
%ile Back of Q (95%), veh/ln	0.0	17.9	0.0	8.8	0.0	6.1	0.0	10.5
%ile Storage Ratio (RQ%)	0.00	1.92	0.00	0.65	0.00	0.44	0.00	1.79
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	539	0	151	0	51	0	117
Grp Sat Flow (s), veh/h/ln	0	1676	0	1363	0	1368	0	1367
Q Serve Time (g_s), s	0.0	28.9	0.0	9.6	0.0	2.6	0.0	8.1
Cycle Q Clear Time (g_c), s	0.0	28.9	0.0	9.6	0.0	2.6	0.0	8.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.8	0.0	9.7	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.28	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	826	0	506	0	626	0	385
V/C Ratio (X)	0.00	0.65	0.00	0.30	0.00	0.08	0.00	0.30
Avail Cap (c_a), veh/h	0	826	0	623	0	626	0	387
Upstream Filter (I)	0.00	0.84	0.00	1.00	0.00	0.98	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.8	0.0	27.8	0.0	19.2	0.0	33.8
Incr Delay (d2), s/veh	0.0	3.4	0.0	0.3	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.1	0.0	28.2	0.0	19.5	0.0	34.3
1st-Term Q (Q1), veh/ln	0.0	11.1	0.0	3.1	0.0	0.8	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.44	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	17.1	0.0	5.7	0.0	1.6	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	1.84	0.00	1.08	0.00	0.11	0.00	0.84
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	536	27	13	392	1	21
Future Vol, veh/h	536	27	13	392	1	21
Conflicting Peds, #/hr	0	39	39	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	583	29	14	426	1	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	651	0	1093	345
Stage 1	-	-	-	-	637	-
Stage 2	-	-	-	-	456	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	933	-	222	652
Stage 1	-	-	-	-	490	-
Stage 2	-	-	-	-	637	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	904	-	210	632
Mov Cap-2 Maneuver	-	-	-	-	339	-
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	623	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	608	-	-	904	-
HCM Lane V/C Ratio	0.039	-	-	0.016	-
HCM Control Delay (s)	11.2	-	-	9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 6th Signalized Intersection Summary
22: Driveway/Fair Ave & Chandler Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	491	5	2	286	122	2	1	6	98	1	136
Future Volume (veh/h)	105	491	5	2	286	122	2	1	6	98	1	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	0.99		0.96	0.96		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	534	5	2	311	133	2	1	7	107	1	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	529	2200	21	545	749	320	104	68	290	451	3	420
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	940	3606	34	857	1228	525	205	250	1062	1352	10	1538
Grp Volume(v), veh/h	114	263	276	2	0	444	10	0	0	107	0	149
Grp Sat Flow(s),veh/h/ln	940	1777	1863	857	0	1753	1518	0	0	1352	0	1549
Q Serve(g_s), s	6.5	6.1	6.1	0.1	0.0	11.9	0.0	0.0	0.0	5.1	0.0	7.0
Cycle Q Clear(g_c), s	18.4	6.1	6.1	6.2	0.0	11.9	0.4	0.0	0.0	5.5	0.0	7.0
Prop In Lane	1.00		0.02	1.00		0.30	0.20		0.70	1.00		0.99
Lane Grp Cap(c), veh/h	529	1084	1136	545	0	1069	463	0	0	451	0	423
V/C Ratio(X)	0.22	0.24	0.24	0.00	0.00	0.42	0.02	0.00	0.00	0.24	0.00	0.35
Avail Cap(c_a), veh/h	529	1084	1136	545	0	1069	463	0	0	451	0	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.00	0.90	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.0	8.0	8.0	9.5	0.0	9.2	23.9	0.0	0.0	25.7	0.0	26.3
Incr Delay (d2), s/veh	0.9	0.5	0.5	0.0	0.0	1.1	0.1	0.0	0.0	0.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	3.8	4.0	0.0	0.0	7.3	0.3	0.0	0.0	3.3	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	8.6	8.5	9.5	0.0	10.2	24.0	0.0	0.0	26.0	0.0	26.8
LnGrp LOS	B	A	A	A	A	B	C	A	A	C	A	C
Approach Vol, veh/h		653			446			10			256	
Approach Delay, s/veh		9.7			10.2			24.0			26.5	
Approach LOS		A			B			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0				
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4				
Max Green Setting (Gmax), s		* 55		* 25		* 55		* 25				
Max Q Clear Time (g_c+I1), s		13.9		9.0		20.4		2.4				
Green Ext Time (p_c), s		5.1		1.1		6.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	491	5	2	286	122	2	1	6	98	1	136
Future Volume (veh/h)	105	491	5	2	286	122	2	1	6	98	1	136
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.96	0.99		0.96	0.99		0.96	0.96		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	534	5	2	311	133	2	1	7	107	1	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	529	2200	21	545	749	320	104	68	290	451	3	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	14.9	8.6	8.5	9.5	0.0	10.2	24.0	0.0	0.0	26.0	0.0	26.8
Ln Grp LOS	B	A	A	A	A	B	C	A	A	C	A	C
Approach Vol, veh/h		653			446			10			256	
Approach Delay, s/veh		9.7			10.2			24.0			26.5	
Approach LOS		A			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		5.0		6.3		5.8
Max Q Clear (g_c+l1), s		13.9		9.0		20.4		2.4
Green Ext Time (g_e), s		5.1		1.1		6.5		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.01		0.02		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		857		1352		940		205
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1228		10		3606		250
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		525		1538		34		1062
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	2	0	107	0	114	0	10
Grp Sat Flow (s), veh/h/ln	0	857	0	1352	0	940	0	1518
Q Serve Time (g_s), s	0.0	0.1	0.0	5.1	0.0	6.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.2	0.0	5.5	0.0	18.4	0.0	0.4
Perm LT Sat Flow (s_l), veh/h/ln	0	857	0	1352	0	940	0	1241
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1712	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	48.8	0.0	24.2	0.0	43.0	0.0	17.6
Perm LT Q Serve Time (g_ps), s	0.0	0.1	0.0	5.1	0.0	6.5	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	545	0	451	0	529	0	463
V/C Ratio (X)	0.00	0.00	0.00	0.24	0.00	0.22	0.00	0.02
Avail Cap (c_a), veh/h	0	545	0	451	0	529	0	463
Upstream Filter (I)	0.00	0.90	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.5	0.0	25.7	0.0	14.0	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.9	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.5	0.0	26.0	0.0	14.9	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.8	0.0	1.3	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	3.3	0.0	2.5	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	1.67	0.00	0.43	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	263	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	444	0	149	0	276	0	0
Grp Sat Flow (s), veh/h/ln	0	1753	0	1549	0	1863	0	0
Q Serve Time (g_s), s	0.0	11.9	0.0	7.0	0.0	6.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.9	0.0	7.0	0.0	6.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.30	0.00	0.99	0.00	0.02	0.00	0.70
Lane Grp Cap (c), veh/h	0	1069	0	423	0	1136	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.35	0.00	0.24	0.00	0.00
Avail Cap (c_a), veh/h	0	1069	0	423	0	1136	0	0
Upstream Filter (I)	0.00	0.90	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.2	0.0	26.3	0.0	8.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.5	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.2	0.0	26.8	0.0	8.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.8	0.0	2.6	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	7.3	0.0	4.7	0.0	4.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	3.23	0.00	0.46	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	336	240	89	525	1074	279
Future Volume (veh/h)	336	240	89	525	1074	279
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	365	261	97	571	1167	303
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	662	304	122	2550	2189	956
Arrive On Green	0.19	0.19	0.07	0.72	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1553
Grp Volume(v), veh/h	365	261	97	571	1167	303
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1553
Q Serve(g_s), s	11.5	19.1	6.4	6.5	0.0	0.0
Cycle Q Clear(g_c), s	11.5	19.1	6.4	6.5	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	662	304	122	2550	2189	956
V/C Ratio(X)	0.55	0.86	0.80	0.22	0.53	0.32
Avail Cap(c_a), veh/h	950	436	223	2550	2189	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.87	0.87	0.82	0.82
Uniform Delay (d), s/veh	43.8	46.9	55.1	5.7	0.0	0.0
Incr Delay (d2), s/veh	0.7	10.6	9.9	0.2	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	13.0	5.7	3.8	0.4	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.5	57.5	64.9	5.9	0.8	0.7
LnGrp LOS	D	E	E	A	A	A
Approach Vol, veh/h	626			668	1470	
Approach Delay, s/veh	49.9			14.5	0.8	
Approach LOS	D			B	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.2	78.8		29.0		91.0
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	8.4	2.0		21.1		8.5
Green Ext Time (p_c), s	0.1	16.3		1.9		3.3

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	336	240	89	525	1074	279
Future Volume (veh/h)	336	240	89	525	1074	279
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	365	261	97	571	1167	303
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	662	304	122	2550	2189	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.19	0.19	0.07	0.72	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	44.5	57.5	64.9	5.9	0.8	0.7
Ln Grp LOS	D	E	E	A	A	A
Approach Vol, veh/h	626			668	1470	
Approach Delay, s/veh	49.9			14.5	0.8	
Approach LOS	D			B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	12.2	78.8		29.0		91.0		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.8		3.9		5.0		
Max Q Clear (g_c+l1), s	8.4	2.0		21.1		8.5		
Green Ext Time (g_e), s	0.1	16.3		1.9		3.3		
Prob of Phs Call (p_c)	0.96	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.04	0.66		0.05		0.05		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1553		1585		0		
Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	97	0	0	365	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	6.4	0.0	0.0	11.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	6.4	0.0	0.0	11.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	73.9	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	122	0	0	662	0	0	0	0
V/C Ratio (X)	0.80	0.00	0.00	0.55	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.87	0.00	0.00	0.92	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	55.1	0.0	0.0	43.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	9.9	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.9	0.0	0.0	44.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.8	0.0	0.0	4.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	0.00	1.71	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	5.7	0.0	0.0	8.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.69	0.00	0.00	1.96	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1167	0	0	0	571	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2189	0	0	0	2550	0	0
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	0.22	0.00	0.00
Avail Cap (c_a), veh/h	0	2189	0	0	0	2550	0	0
Upstream Filter (I)	0.00	0.82	0.00	0.00	0.00	0.87	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.8	0.0	0.0	0.0	5.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	0.0	0.0	3.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	303	0	261	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1553	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	19.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	956	0	304	0	0	0	0
V/C Ratio (X)	0.00	0.32	0.00	0.86	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	956	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.82	0.00	0.92	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	46.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	10.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.7	0.0	57.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.54	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	13.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.30	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		15.2						
HCM 6th LOS		B						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	81	28	706	136	42	1302
Future Volume (veh/h)	81	28	706	136	42	1302
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	30	767	148	46	1415
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	169	58	2072	400	60	2720
Arrive On Green	0.14	0.14	0.93	0.93	0.03	0.77
Sat Flow, veh/h	1246	425	3060	572	1781	3647
Grp Volume(v), veh/h	119	0	459	456	46	1415
Grp Sat Flow(s),veh/h/ln	1684	0	1777	1762	1781	1777
Q Serve(g_s), s	7.9	0.0	3.4	3.4	3.1	18.6
Cycle Q Clear(g_c), s	7.9	0.0	3.4	3.4	3.1	18.6
Prop In Lane	0.74	0.25		0.32	1.00	
Lane Grp Cap(c), veh/h	228	0	1241	1231	60	2720
V/C Ratio(X)	0.52	0.00	0.37	0.37	0.77	0.52
Avail Cap(c_a), veh/h	323	0	1241	1231	223	2720
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.89	0.89	0.49	0.49
Uniform Delay (d), s/veh	48.2	0.0	1.4	1.4	57.5	5.5
Incr Delay (d2), s/veh	1.8	0.0	0.8	0.8	9.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.2	0.0	1.9	1.8	2.7	8.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.1	0.0	2.2	2.2	67.4	5.8
LnGrp LOS	D	A	A	A	E	A
Approach Vol, veh/h	119		915			1461
Approach Delay, s/veh	50.1		2.2			7.8
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		98.7		21.3	8.0	90.7
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		20.6		9.9	5.1	5.4
Green Ext Time (p_c), s		3.9		0.2	0.0	15.3

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	81	28	706	136	42	1302
Future Volume (veh/h)	81	28	706	136	42	1302
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	30	767	148	46	1415
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	169	58	2072	400	60	2720
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Prop Arrive On Green	0.14	0.14	0.93	0.93	0.03	0.77
Unsig. Movement Delay						
Ln Grp Delay, s/veh	50.1	0.0	2.2	2.2	67.4	5.8
Ln Grp LOS	D	A	A	A	E	A
Approach Vol, veh/h	119		915			1461
Approach Delay, s/veh	50.1		2.2			7.8
Approach LOS	D		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		98.7		21.3	8.0	90.7		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+I1), s		20.6		9.9	5.1	5.4		
Green Ext Time (g_e), s		3.9		0.2	0.0	15.3		
Prob of Phs Call (p_c)		1.00		0.99	0.78	1.00		
Prob of Max Out (p_x)		1.00		0.00	0.00	0.04		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1246	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		14		3060		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		425		572		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	119	46	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1684	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	7.9	3.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.9	3.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	83.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.74	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	228	60	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.52	0.77	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	323	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.49	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	48.2	57.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.8	9.9	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.1	67.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.3	1.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	6.2	2.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.12	0.52	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1415	0	0	0	459	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	18.6	0.0	0.0	0.0	3.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.6	0.0	0.0	0.0	3.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	2720	0	0	0	1241	0	0
V/C Ratio (X)	0.00	0.52	0.00	0.00	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	2720	0	0	0	1241	0	0
Upstream Filter (I)	0.00	0.49	0.00	0.00	0.00	0.89	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.5	0.0	0.0	0.0	1.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.8	0.0	0.0	0.0	2.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	0.0	0.0	0.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.1	0.0	0.0	0.0	1.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.00	0.00	0.48	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	456	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1762	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.25	0.00	0.32	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1231	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1231	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	32	30	111	62	7	25	78	44	11	157	24
Future Vol, veh/h	7	32	30	111	62	7	25	78	44	11	157	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	35	33	121	67	8	27	85	48	12	171	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	9.9	9	9.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	10%	62%	6%
Vol Thru, %	53%	46%	34%	82%
Vol Right, %	30%	43%	4%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	147	69	180	192
LT Vol	25	7	111	11
Through Vol	78	32	62	157
RT Vol	44	30	7	24
Lane Flow Rate	160	75	196	209
Geometry Grp	1	1	1	1
Degree of Util (X)	0.209	0.101	0.271	0.275
Departure Headway (Hd)	4.72	4.827	4.995	4.74
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	756	736	714	753
Service Time	2.778	2.898	3.055	2.794
HCM Lane V/C Ratio	0.212	0.102	0.275	0.278
HCM Control Delay	9	8.4	9.9	9.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.3	1.1	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	34	23	51	44	65	20	380	82	56	1121	19
Future Volume (veh/h)	5	34	23	51	44	65	20	380	82	56	1121	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	1.00		0.93	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	37	25	55	48	71	22	413	89	61	1218	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	134	83	154	117	201	358	2152	458	697	2675	46
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	47	1025	638	712	896	1541	448	2872	611	873	3569	62
Grp Volume(v), veh/h	67	0	0	103	0	71	22	253	249	61	606	633
Grp Sat Flow(s),veh/h/ln	1711	0	0	1608	0	1541	448	1777	1706	873	1777	1854
Q Serve(g_s), s	0.0	0.0	0.0	1.8	0.0	3.8	1.8	3.8	3.8	2.0	11.7	11.7
Cycle Q Clear(g_c), s	3.1	0.0	0.0	5.0	0.0	3.8	13.5	3.8	3.8	5.8	11.7	11.7
Prop In Lane	0.07		0.37	0.53		1.00	1.00		0.36	1.00		0.03
Lane Grp Cap(c), veh/h	266	0	0	271	0	201	358	1332	1279	697	1332	1389
V/C Ratio(X)	0.25	0.00	0.00	0.38	0.00	0.35	0.06	0.19	0.19	0.09	0.46	0.46
Avail Cap(c_a), veh/h	572	0	0	550	0	483	358	1332	1279	697	1332	1389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.87	0.87	0.87	0.75	0.75	0.75
Uniform Delay (d), s/veh	35.4	0.0	0.0	36.1	0.0	35.7	6.8	3.3	3.3	4.2	4.3	4.3
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.9	0.0	1.0	0.3	0.3	0.3	0.2	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.0	0.0	3.9	0.0	2.7	0.3	1.9	1.8	0.6	5.8	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	0.0	0.0	36.9	0.0	36.7	7.1	3.6	3.6	4.3	5.1	5.1
LnGrp LOS	D	A	A	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		67			174			524			1300	
Approach Delay, s/veh		35.9			36.8			3.7			5.1	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	72.4	17.6	72.4	17.6
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	13.7	7.0	15.5	5.1
Green Ext Time (p_c), s	11.0	0.8	3.6	0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	34	23	51	44	65	20	380	82	56	1121	19
Future Volume (veh/h)	5	34	23	51	44	65	20	380	82	56	1121	19
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.97	0.98		0.97	1.00		0.93	0.97		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	37	25	55	48	71	22	413	89	61	1218	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	49	134	83	154	117	201	358	2152	458	697	2675	46
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.75	0.75	0.75	0.75	0.75	0.75
Unsig. Movement Delay												
Ln Grp Delay, s/veh	35.9	0.0	0.0	36.9	0.0	36.7	7.1	3.6	3.6	4.3	5.1	5.1
Ln Grp LOS	D	A	A	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		67			174			524			1300	
Approach Delay, s/veh		35.9			36.8			3.7			5.1	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		72.4		17.6		72.4		17.6
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.1		5.0		5.4		5.6
Max Q Clear (g_c+l1), s		13.7		7.0		15.5		5.1
Green Ext Time (g_e), s		11.0		0.8		3.6		0.3
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		873		712		448		47
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3569		896		2872		1025
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		62		1541		611		638
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	61	0	103	0	22	0	67
Grp Sat Flow (s), veh/h/ln	0	873	0	1608	0	448	0	1711
Q Serve Time (g_s), s	0.0	2.0	0.0	1.8	0.0	1.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.8	0.0	5.0	0.0	13.5	0.0	3.1
Perm LT Sat Flow (s_l), veh/h/ln	0	873	0	1332	0	448	0	1269
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1800	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	67.4	0.0	11.8	0.0	67.4	0.0	11.8
Perm LT Serve Time (g_u), s	0.0	63.6	0.0	8.6	0.0	55.8	0.0	6.8
Perm LT Q Serve Time (g_ps), s	0.0	2.0	0.0	1.8	0.0	1.8	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	7.3
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	3.1
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.53	0.00	1.00	0.00	0.07
Lane Grp Cap (c), veh/h	0	697	0	271	0	358	0	266
V/C Ratio (X)	0.00	0.09	0.00	0.38	0.00	0.06	0.00	0.25
Avail Cap (c_a), veh/h	0	697	0	550	0	358	0	572
Upstream Filter (I)	0.00	0.75	0.00	1.00	0.00	0.87	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.2	0.0	36.1	0.0	6.8	0.0	35.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.9	0.0	0.3	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.3	0.0	36.9	0.0	7.1	0.0	35.9
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	2.1	0.0	0.1	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.6	0.0	3.9	0.0	0.3	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.21	0.00	0.07	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	606	0	0	0	253	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	11.7	0.0	0.0	0.0	3.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	0.0	0.0	3.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	1332	0	0	0	1332	0	0
V/C Ratio (X)	0.00	0.46	0.00	0.00	0.00	0.19	0.00	0.00
Avail Cap (c_a), veh/h	0	1332	0	0	0	1332	0	0
Upstream Filter (I)	0.00	0.75	0.00	0.00	0.00	0.87	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.3	0.0	0.0	0.0	3.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.1	0.0	0.0	0.0	3.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	0.0	0.0	0.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	5.8	0.0	0.0	0.0	1.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	633	0	71	0	249	0	0
Grp Sat Flow (s), veh/h/ln	0	1854	0	1541	0	1706	0	0
Q Serve Time (g_s), s	0.0	11.7	0.0	3.8	0.0	3.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	3.8	0.0	3.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.03	0.00	1.00	0.00	0.36	0.00	0.37
Lane Grp Cap (c), veh/h	0	1389	0	201	0	1279	0	0
V/C Ratio (X)	0.00	0.46	0.00	0.35	0.00	0.19	0.00	0.00
Avail Cap (c_a), veh/h	0	1389	0	483	0	1279	0	0
Upstream Filter (I)	0.00	0.75	0.00	1.00	0.00	0.87	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.3	0.0	35.7	0.0	3.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	1.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.1	0.0	36.7	0.0	3.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	1.4	0.0	0.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.78	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.0	0.0	2.7	0.0	1.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	1.69	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.4
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	556	593	72	929	0	0	0	0	744	347	270
Future Volume (veh/h)	0	556	593	72	929	0	0	0	0	744	347	270
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	604	645	78	1010	0				740	474	293
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	934	808	161	1868	0				653	396	245
Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	1870	1537	445	3647	0				1781	1080	667
Grp Volume(v), veh/h	0	604	645	78	1010	0				740	0	767
Grp Sat Flow(s),veh/h/ln	0	1777	1537	445	1777	0				1781	0	1747
Q Serve(g_s), s	0.0	22.0	30.9	15.6	17.0	0.0				33.0	0.0	33.0
Cycle Q Clear(g_c), s	0.0	22.0	30.9	46.5	17.0	0.0				33.0	0.0	33.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	934	808	161	1868	0				653	0	641
V/C Ratio(X)	0.00	0.65	0.80	0.48	0.54	0.00				1.13	0.00	1.20
Avail Cap(c_a), veh/h	0	934	808	161	1868	0				653	0	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.3	17.5	36.5	14.2	0.0				28.5	0.0	28.5
Incr Delay (d2), s/veh	0.0	3.5	8.1	8.8	1.0	0.0				77.9	0.0	103.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.8	17.1	3.7	10.3	0.0				38.6	0.0	45.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.8	25.6	45.3	15.1	0.0				106.4	0.0	132.0
LnGrp LOS	A	B	C	D	B	A				F	A	F
Approach Vol, veh/h		1249			1088						1507	
Approach Delay, s/veh		22.3			17.3						119.4	
Approach LOS		C			B						F	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	52.0	38.0	52.0
Change Period (Y+Rc), s	* 4.7	5.0	* 4.7
Max Green Setting (Gmax), s	* 47	33.0	* 47
Max Q Clear Time (g_c+I1), s	48.5	35.0	32.9
Green Ext Time (p_c), s	0.0	0.0	7.5

Intersection Summary	
HCM 6th Ctrl Delay	58.9
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	556	593	72	929	0	0	0	0	744	347	270
Future Volume (veh/h)	0	556	593	72	929	0	0	0	0	744	347	270
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	604	645	78	1010	0				740	474	293
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	934	808	161	1868	0				653	396	245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	18.8	25.6	45.3	15.1	0.0				106.4	0.0	132.0
Ln Grp LOS	A	B	C	D	B	A				F	A	F
Approach Vol, veh/h		1249			1088						1507	
Approach Delay, s/veh		22.3			17.3						119.4	
Approach LOS		C			B						F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		5.4		4.5		5.3		
Max Q Clear (g_c+I1), s		48.5		35.0		32.9		
Green Ext Time (g_e), s		0.0		0.0		7.5		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		1.00		0.53		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		445		1781		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1080		1870		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		667		1537		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	78	0	740	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	445	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	15.6	0.0	33.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	46.5	0.0	33.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	445	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	16.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	15.6	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	47.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	161	0	653	0	0	0	0
V/C Ratio (X)	0.00	0.48	0.00	1.13	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	161	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.87	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	36.5	0.0	28.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.8	0.0	77.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	45.3	0.0	106.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	12.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	14.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.43	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	3.7	0.0	38.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	2.03	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	21.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1010	0	0	0	604	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	17.0	0.0	0.0	0.0	22.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.0	0.0	0.0	0.0	22.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1868	0	0	0	934	0	0
V/C Ratio (X)	0.00	0.54	0.00	0.00	0.00	0.65	0.00	0.00
Avail Cap (c_a), veh/h	0	1868	0	0	0	934	0	0
Upstream Filter (I)	0.00	0.87	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	14.2	0.0	0.0	0.0	15.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	3.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.1	0.0	0.0	0.0	18.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	0.0	0.0	8.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.9	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.60	0.00	1.00	0.00	1.55	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	10.3	0.0	0.0	0.0	13.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.80	0.00	0.00	0.00	0.74	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	767	0	645	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1747	0	1537	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	33.0	0.0	30.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	33.0	0.0	30.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.38	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	641	0	808	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.20	0.00	0.80	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	641	0	808	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.5	0.0	17.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	103.5	0.0	8.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	132.0	0.0	25.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.6	0.0	9.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	18.4	0.0	1.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.45	0.00	1.48	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	45.1	0.0	17.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.37	0.00	0.92	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	31.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.9
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1160	0	0	608	364	403	3	157	0	0	0
Future Volume (veh/h)	141	1160	0	0	608	364	403	3	157	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	153	1261	0	0	661	396	306	188	171			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	296	2232	0	0	2138	962	439	221	201			
Arrive On Green	1.00	1.00	0.00	0.00	0.21	0.21	0.25	0.25	0.25			
Sat Flow, veh/h	534	3647	0	0	3572	1532	1781	897	816			
Grp Volume(v), veh/h	153	1261	0	0	661	396	306	0	359			
Grp Sat Flow(s),veh/h/ln	534	1777	0	0	1702	1532	1781	0	1713			
Q Serve(g_s), s	16.9	0.0	0.0	0.0	14.8	20.2	14.1	0.0	18.0			
Cycle Q Clear(g_c), s	37.1	0.0	0.0	0.0	14.8	20.2	14.1	0.0	18.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.48			
Lane Grp Cap(c), veh/h	296	2232	0	0	2138	962	439	0	422			
V/C Ratio(X)	0.52	0.57	0.00	0.00	0.31	0.41	0.70	0.00	0.85			
Avail Cap(c_a), veh/h	296	2232	0	0	2138	962	523	0	502			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.24	0.24	0.00	0.00	0.83	0.83	1.00	0.00	1.00			
Uniform Delay (d), s/veh	6.6	0.0	0.0	0.0	19.1	21.3	30.9	0.0	32.3			
Incr Delay (d2), s/veh	1.6	0.3	0.0	0.0	0.1	0.2	3.2	0.0	11.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	2.1	0.1	0.0	0.0	10.5	12.5	10.2	0.0	13.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.2	0.3	0.0	0.0	19.2	21.5	34.1	0.0	43.8			
LnGrp LOS	A	A	A	A	B	C	C	A	D			
Approach Vol, veh/h		1414			1057			665				
Approach Delay, s/veh		1.1			20.1			39.3				
Approach LOS		A			C			D				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	62.2	27.8	62.2
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	39.1	20.0	22.2
Green Ext Time (p_c), s	8.3	1.7	8.4

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1160	0	0	608	364	403	3	157	0	0	0
Future Volume (veh/h)	141	1160	0	0	608	364	403	3	157	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	153	1261	0	0	661	396	306	188	171			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	296	2232	0	0	2138	962	439	221	201			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.21	0.21	0.25	0.25	0.25			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	8.2	0.3	0.0	0.0	19.2	21.5	34.1	0.0	43.8			
Ln Grp LOS	A	A	A	A	B	C	C	A	D			
Approach Vol, veh/h		1414			1057			665				
Approach Delay, s/veh		1.1			20.1			39.3				
Approach LOS		A			C			D				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		62.2		27.8		62.2		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		5.4		4.5		5.3		
Max Q Clear (g_c+l1), s		39.1		20.0		22.2		
Green Ext Time (g_e), s		8.3		1.7		8.4		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		0.62		0.07		

Left-Turn Movement Data			
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		534		1781		0		

Through Movement Data			
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		897		3572		

Right-Turn Movement Data			
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		816		1532		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	153	0	306	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	534	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	16.9	0.0	14.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	37.1	0.0	14.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	534	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	56.5	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	36.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	56.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	296	0	439	0	0	0	0
V/C Ratio (X)	0.00	0.52	0.00	0.70	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	296	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.24	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.6	0.0	30.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	3.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.2	0.0	34.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	5.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.66	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.1	0.0	10.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.57	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1261	0	0	0	661	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	14.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	14.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	2232	0	0	0	2138	0	0
V/C Ratio (X)	0.00	0.57	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	2232	0	0	0	2138	0	0
Upstream Filter (I)	0.00	0.24	0.00	0.00	0.00	0.83	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	19.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	0.0	0.0	19.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.58	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	10.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.30	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	359	0	396	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1713	0	1532	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	18.0	0.0	20.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.0	0.0	20.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.48	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	422	0	962	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.85	0.00	0.41	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	502	0	962	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.83	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	32.3	0.0	21.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	11.4	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	43.8	0.0	21.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.1	0.0	8.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.57	0.00	1.52	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	13.1	0.0	12.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.73	0.00	0.35	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	706	485	206	697	19	108	190	92	48	499	165
Future Volume (veh/h)	99	706	485	206	697	19	108	190	92	48	499	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.97	1.00		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	767	527	224	758	21	117	207	100	52	542	179
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	453	811	549	256	1587	688	148	665	693	370	665	544
Arrive On Green	0.02	0.13	0.13	0.19	0.89	0.89	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1781	2000	1353	1781	3554	1541	732	1870	1529	1055	1870	1529
Grp Volume(v), veh/h	108	680	614	224	758	21	117	207	100	52	542	179
Grp Sat Flow(s),veh/h/ln	1781	1777	1577	1781	1777	1541	732	1870	1529	1055	1870	1529
Q Serve(g_s), s	3.1	34.1	34.8	6.5	3.6	0.1	8.3	7.2	3.5	3.4	23.7	7.7
Cycle Q Clear(g_c), s	3.1	34.1	34.8	6.5	3.6	0.1	32.0	7.2	3.5	10.6	23.7	7.7
Prop In Lane	1.00		0.86	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	453	721	639	256	1587	688	148	665	693	370	665	544
V/C Ratio(X)	0.24	0.94	0.96	0.87	0.48	0.03	0.79	0.31	0.14	0.14	0.82	0.33
Avail Cap(c_a), veh/h	477	721	639	274	1587	688	148	665	693	370	665	544
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	1.00	1.00	1.00	0.47	0.47	0.47	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.6	38.0	38.3	17.9	2.8	2.7	42.6	21.0	14.6	24.9	26.3	21.2
Incr Delay (d2), s/veh	0.2	18.4	22.7	24.4	1.0	0.1	18.2	0.6	0.2	0.8	10.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	26.1	24.8	6.7	1.9	0.1	5.4	5.2	2.2	1.6	17.7	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	56.4	61.0	42.3	3.9	2.7	60.8	21.6	14.8	25.6	36.9	22.8
LnGrp LOS	B	E	E	D	A	A	E	C	B	C	D	C
Approach Vol, veh/h		1402			1003			424			773	
Approach Delay, s/veh		55.2			12.4			30.8			32.9	
Approach LOS		E			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	45.2		37.0	11.5	41.5		37.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	6.0	* 39		* 32	9.4	* 36		* 32
Max Q Clear Time (g_c+I1), s	5.1	5.6		25.7	8.5	36.8		34.0
Green Ext Time (p_c), s	0.0	5.9		2.4	0.1	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	706	485	206	697	19	108	190	92	48	499	165
Future Volume (veh/h)	99	706	485	206	697	19	108	190	92	48	499	165
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.97	1.00		0.97	1.00		0.96	0.98		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	767	527	224	758	21	117	207	100	52	542	179
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	453	811	549	256	1587	688	148	665	693	370	665	544
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.13	0.13	0.19	0.89	0.89	0.36	0.36	0.36	0.36	0.36	0.36
Unsig. Movement Delay												
Ln Grp Delay, s/veh	14.8	56.4	61.0	42.3	3.9	2.7	60.8	21.6	14.8	25.6	36.9	22.8
Ln Grp LOS	B	E	E	D	A	A	E	C	B	C	D	C
Approach Vol, veh/h		1402			1003			424			773	
Approach Delay, s/veh		55.2			12.4			30.8			32.9	
Approach LOS		E			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	7.8	45.2		37.0	11.5	41.5		37.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	6.0	* 39		* 32	9.4	* 36		* 32
Max Allow Headway (MAH), s	3.8	5.1		5.0	3.8	5.3		5.2
Max Q Clear (g_c+I1), s	5.1	5.6		25.7	8.5	36.8		34.0
Green Ext Time (g_e), s	0.0	5.9		2.4	0.1	0.0		0.0
Prob of Phs Call (p_c)	0.93	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1055	1781			732

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		2000		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1541		1529		1353		1529

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	108	0	0	52	224	0	0	117
Grp Sat Flow (s), veh/h/ln	1781	0	0	1055	1781	0	0	732
Q Serve Time (g_s), s	3.1	0.0	0.0	3.4	6.5	0.0	0.0	8.3
Cycle Q Clear Time (g_c), s	3.1	0.0	0.0	10.6	6.5	0.0	0.0	32.0
Perm LT Sat Flow (s_l), veh/h/ln	686	0	0	1055	426	0	0	732
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	36.5	0.0	0.0	32.0	38.5	0.0	0.0	32.0
Perm LT Serve Time (g_u), s	36.5	0.0	0.0	24.8	1.7	0.0	0.0	8.3
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	3.4	1.7	0.0	0.0	8.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	453	0	0	370	256	0	0	148
V/C Ratio (X)	0.24	0.00	0.00	0.14	0.87	0.00	0.00	0.79
Avail Cap (c_a), veh/h	477	0	0	370	274	0	0	148
Upstream Filter (I)	0.76	0.00	0.00	1.00	1.00	0.00	0.00	0.47
Uniform Delay (d1), s/veh	14.6	0.0	0.0	24.9	17.9	0.0	0.0	42.6
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.8	24.4	0.0	0.0	18.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	14.8	0.0	0.0	25.6	42.3	0.0	0.0	60.8
1st-Term Q (Q1), veh/ln	1.2	0.0	0.0	0.8	2.0	0.0	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	1.7	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.62
%ile Back of Q (95%), veh/ln	2.3	0.0	0.0	1.6	6.7	0.0	0.0	5.4
%ile Storage Ratio (RQ%)	0.39	0.00	0.00	0.24	1.22	0.00	0.00	0.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	758	0	542	0	680	0	207
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	3.6	0.0	23.7	0.0	34.1	0.0	7.2
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	23.7	0.0	34.1	0.0	7.2
Lane Grp Cap (c), veh/h	0	1587	0	665	0	721	0	665
V/C Ratio (X)	0.00	0.48	0.00	0.82	0.00	0.94	0.00	0.31
Avail Cap (c_a), veh/h	0	1587	0	665	0	721	0	665
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.76	0.00	0.47
Uniform Delay (d1), s/veh	0.0	2.8	0.0	26.3	0.0	38.0	0.0	21.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	10.6	0.0	18.4	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.9	0.0	36.9	0.0	56.4	0.0	21.6
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	10.1	0.0	16.1	0.0	3.1
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	2.0	0.0	3.7	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.47	0.00	1.32	0.00	1.63
%ile Back of Q (95%), veh/ln	0.0	1.9	0.0	17.7	0.0	26.1	0.0	5.2
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.66	0.00	0.73	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	21	0	179	0	614	0	100
Grp Sat Flow (s), veh/h/ln	0	1541	0	1529	0	1577	0	1529
Q Serve Time (g_s), s	0.0	0.1	0.0	7.7	0.0	34.8	0.0	3.5
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	7.7	0.0	34.8	0.0	3.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.86	0.00	1.00
Lane Grp Cap (c), veh/h	0	688	0	544	0	639	0	693
V/C Ratio (X)	0.00	0.03	0.00	0.33	0.00	0.96	0.00	0.14
Avail Cap (c_a), veh/h	0	688	0	544	0	639	0	693
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.76	0.00	0.47
Uniform Delay (d1), s/veh	0.0	2.7	0.0	21.2	0.0	38.3	0.0	14.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.6	0.0	22.7	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	2.7	0.0	22.8	0.0	61.0	0.0	14.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.7	0.0	14.6	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	4.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.33	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	5.3	0.0	24.8	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	1.34	0.00	0.70	0.00	0.61
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.6
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	488	211	51	742	63	85	283	44	92	914	134
Future Volume (veh/h)	186	488	211	51	742	63	85	283	44	92	914	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.93	0.97		0.89	0.99		0.82	0.94		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	202	530	229	55	807	68	92	308	48	100	993	146
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	755	593	175	937	371	189	1173	178	483	1543	227
Arrive On Green	0.09	0.40	0.40	0.26	0.26	0.26	0.39	0.39	0.39	0.06	0.50	0.50
Sat Flow, veh/h	1781	1870	1470	686	3554	1408	488	2994	455	1781	3067	450
Grp Volume(v), veh/h	202	530	229	55	807	68	92	180	176	100	575	564
Grp Sat Flow(s),veh/h/ln	1781	1870	1470	686	1777	1408	488	1777	1672	1781	1777	1741
Q Serve(g_s), s	9.6	28.3	13.2	8.7	26.0	4.5	20.5	8.2	8.6	3.8	28.5	28.6
Cycle Q Clear(g_c), s	9.6	28.3	13.2	20.2	26.0	4.5	35.8	8.2	8.6	3.8	28.5	28.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.26
Lane Grp Cap(c), veh/h	259	755	593	175	937	371	189	696	655	483	894	875
V/C Ratio(X)	0.78	0.70	0.39	0.31	0.86	0.18	0.49	0.26	0.27	0.21	0.64	0.64
Avail Cap(c_a), veh/h	259	761	598	177	948	376	189	696	655	487	894	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.78	0.78	0.78	0.96	0.96	0.96	0.86	0.86	0.86
Uniform Delay (d), s/veh	30.7	29.8	25.3	45.2	42.1	34.2	40.0	24.7	24.8	18.2	21.9	21.9
Incr Delay (d2), s/veh	14.2	2.9	0.4	0.8	6.5	0.2	8.3	0.9	1.0	0.2	3.1	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	19.1	8.2	2.7	17.2	2.8	5.2	6.5	6.4	2.8	17.5	17.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.9	32.6	25.7	45.9	48.5	34.4	48.3	25.5	25.8	18.4	25.0	25.1
LnGrp LOS	D	C	C	D	D	C	D	C	C	B	C	C
Approach Vol, veh/h		961			930			448			1239	
Approach Delay, s/veh		33.6			47.3			30.3			24.5	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	65.8	16.8	37.4	13.3	52.5	54.2
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 60	* 11	* 32	8.0	* 46	* 49
Max Q Clear Time (g_c+I1), s	30.6	11.6	28.0	5.8	37.8	30.3
Green Ext Time (p_c), s	8.9	0.0	2.2	0.0	2.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	488	211	51	742	63	85	283	44	92	914	134
Future Volume (veh/h)	186	488	211	51	742	63	85	283	44	92	914	134
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.93	0.97		0.89	0.99		0.82	0.94		0.92
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	202	530	229	55	807	68	92	308	48	100	993	146
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	259	755	593	175	937	371	189	1173	178	483	1543	227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.40	0.40	0.26	0.26	0.26	0.39	0.39	0.39	0.06	0.50	0.50
Unsig. Movement Delay												
Ln Grp Delay, s/veh	44.9	32.6	25.7	45.9	48.5	34.4	48.3	25.5	25.8	18.4	25.0	25.1
Ln Grp LOS	D	C	C	D	D	C	D	C	C	B	C	C
Approach Vol, veh/h		961			930			448			1239	
Approach Delay, s/veh		33.6			47.3			30.3			24.5	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		65.8	16.8	37.4	13.3	52.5		54.2
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 60	* 11	* 32	8.0	* 46		* 49
Max Allow Headway (MAH), s		5.2	3.8	5.2	3.8	5.9		5.0
Max Q Clear (g_c+I1), s		30.6	11.6	28.0	5.8	37.8		30.3
Green Ext Time (g_e), s		8.9	0.0	2.2	0.0	2.0		4.2
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.96	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		0.09

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	686	1781	488		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3067		3554		2994		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		450		1408		455		1470

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L (Pr/Pm)		LL (Pr/Pm)	L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	202	55	100	92	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	686	1781	488	0	0
Q Serve Time (g_s), s	0.0	0.0	9.6	8.7	3.8	20.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	9.6	20.2	3.8	35.8	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	625	686	963	488	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	33.7	31.7	49.0	47.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	5.7	20.2	38.4	31.7	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	5.7	8.7	1.2	20.5	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	259	175	483	189	0	0
V/C Ratio (X)	0.00	0.00	0.78	0.31	0.21	0.49	0.00	0.00
Avail Cap (c_a), veh/h	0	0	259	177	487	189	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.78	0.86	0.96	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	30.7	45.2	18.2	40.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	14.2	0.8	0.2	8.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	44.9	45.9	18.4	48.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.1	1.5	1.5	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.73	1.80	1.80	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	8.8	2.7	2.8	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.49	0.35	0.79	0.62	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	575	0	807	0	180	0	530
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	28.5	0.0	26.0	0.0	8.2	0.0	28.3
Cycle Q Clear Time (g_c), s	0.0	28.5	0.0	26.0	0.0	8.2	0.0	28.3
Lane Grp Cap (c), veh/h	0	894	0	937	0	696	0	755
V/C Ratio (X)	0.00	0.64	0.00	0.86	0.00	0.26	0.00	0.70
Avail Cap (c_a), veh/h	0	894	0	948	0	696	0	761
Upstream Filter (I)	0.00	0.86	0.00	0.78	0.00	0.96	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.9	0.0	42.1	0.0	24.7	0.0	29.8
Incr Delay (d2), s/veh	0.0	3.1	0.0	6.5	0.0	0.9	0.0	2.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.0	0.0	48.5	0.0	25.5	0.0	32.6
1st-Term Q (Q1), veh/ln	0.0	11.4	0.0	11.3	0.0	3.4	0.0	12.6
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.8	0.0	0.2	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.44	0.00	1.42	0.00	1.80	0.00	1.45
%ile Back of Q (95%), veh/ln	0.0	17.5	0.0	17.2	0.0	6.5	0.0	19.1
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.37	0.00	0.06	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	564	0	68	0	176	0	229
Grp Sat Flow (s), veh/h/ln	0	1741	0	1408	0	1672	0	1470
Q Serve Time (g_s), s	0.0	28.6	0.0	4.5	0.0	8.6	0.0	13.2
Cycle Q Clear Time (g_c), s	0.0	28.6	0.0	4.5	0.0	8.6	0.0	13.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.26	0.00	1.00	0.00	0.27	0.00	1.00
Lane Grp Cap (c), veh/h	0	875	0	371	0	655	0	593
V/C Ratio (X)	0.00	0.64	0.00	0.18	0.00	0.27	0.00	0.39
Avail Cap (c_a), veh/h	0	875	0	376	0	655	0	598
Upstream Filter (I)	0.00	0.86	0.00	0.78	0.00	0.96	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.9	0.0	34.2	0.0	24.8	0.0	25.3
Incr Delay (d2), s/veh	0.0	3.1	0.0	0.2	0.0	1.0	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.1	0.0	34.4	0.0	25.8	0.0	25.7
1st-Term Q (Q1), veh/ln	0.0	11.2	0.0	1.5	0.0	3.4	0.0	4.6
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.44	0.00	1.80	0.00	1.80	0.00	1.76
%ile Back of Q (95%), veh/ln	0.0	17.3	0.0	2.8	0.0	6.4	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.60	0.00	0.60	0.00	0.06	0.00	1.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	475	35	88	598	107	137	365	68	258	793	182
Future Volume (veh/h)	66	475	35	88	598	107	137	365	68	258	793	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	516	38	96	650	116	149	397	74	280	862	198
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	791	642	251	1265	225	193	747	315	315	1002	417
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.04	0.07	0.07	0.18	0.28	0.28
Sat Flow, veh/h	694	1870	1519	845	2991	533	1781	3554	1499	1781	3554	1478
Grp Volume(v), veh/h	72	516	38	96	386	380	149	397	74	280	862	198
Grp Sat Flow(s),veh/h/ln	694	1870	1519	845	1777	1747	1781	1777	1499	1781	1777	1478
Q Serve(g_s), s	7.7	19.8	1.3	9.2	14.4	14.5	7.5	9.7	4.2	13.8	20.7	10.0
Cycle Q Clear(g_c), s	22.1	19.8	1.3	29.0	14.4	14.5	7.5	9.7	4.2	13.8	20.7	10.0
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	791	642	251	751	739	193	747	315	315	1002	417
V/C Ratio(X)	0.27	0.65	0.06	0.38	0.51	0.51	0.77	0.53	0.23	0.89	0.86	0.47
Avail Cap(c_a), veh/h	262	791	642	251	751	739	232	869	366	338	1094	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	1.00	1.00	1.00	0.86	0.86	0.86	0.61	0.61	0.61
Uniform Delay (d), s/veh	27.3	20.7	15.4	32.3	19.1	19.2	42.3	37.6	35.0	36.2	30.6	26.8
Incr Delay (d2), s/veh	1.8	2.9	0.1	4.4	2.5	2.6	10.8	0.5	0.3	15.5	4.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	12.7	0.8	3.8	10.2	10.1	7.0	7.7	2.8	10.5	12.7	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.1	23.6	15.5	36.6	21.6	21.7	53.1	38.1	35.4	51.7	34.8	27.3
LnGrp LOS	C	C	B	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		626			862			620			1340	
Approach Delay, s/veh		23.7			23.3			41.4			37.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.1	15.4	30.6		44.1	21.8	24.1
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green Setting (Gmax), s		* 34	11.7	* 28		* 34	17.1	* 22
Max Q Clear Time (g_c+I1), s		31.0	9.5	22.7		24.1	15.8	11.7
Green Ext Time (p_c), s		1.4	0.1	2.7		2.7	0.1	1.9

Intersection Summary	
HCM 6th Ctrl Delay	32.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	475	35	88	598	107	137	365	68	258	793	182
Future Volume (veh/h)	66	475	35	88	598	107	137	365	68	258	793	182
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.96	0.99		0.96	1.00		0.95	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	516	38	96	650	116	149	397	74	280	862	198
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	262	791	642	251	1265	225	193	747	315	315	1002	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.04	0.07	0.07	0.18	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	29.1	23.6	15.5	36.6	21.6	21.7	53.1	38.1	35.4	51.7	34.8	27.3
Ln Grp LOS	C	C	B	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		626			862			620			1340	
Approach Delay, s/veh		23.7			23.3			41.4			37.2	
Approach LOS		C			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		44.1	15.4	30.6		44.1	21.8	24.1
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 34	11.7	* 28		* 34	17.1	* 22
Max Allow Headway (MAH), s		5.2	3.7	4.8		5.2	3.7	4.9
Max Q Clear (g_c+I1), s		31.0	9.5	22.7		24.1	15.8	11.7
Green Ext Time (g_e), s		1.4	0.1	2.7		2.7	0.1	1.9
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	0.98		0.00	1.00	0.17

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		845	1781			694	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2991		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		533		1478		1519		1499

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	96	149	0	0	72	280	0
Grp Sat Flow (s), veh/h/ln	0	845	1781	0	0	694	1781	0
Q Serve Time (g_s), s	0.0	9.2	7.5	0.0	0.0	7.7	13.8	0.0
Cycle Q Clear Time (g_c), s	0.0	29.0	7.5	0.0	0.0	22.1	13.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	845	0	0	0	694	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.1	0.0	0.0	0.0	38.1	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	18.3	0.0	0.0	0.0	23.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	9.2	0.0	0.0	0.0	7.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	251	193	0	0	262	315	0
V/C Ratio (X)	0.00	0.38	0.77	0.00	0.00	0.27	0.89	0.00
Avail Cap (c_a), veh/h	0	251	232	0	0	262	338	0
Upstream Filter (I)	0.00	1.00	0.86	0.00	0.00	0.68	0.61	0.00
Uniform Delay (d1), s/veh	0.0	32.3	42.3	0.0	0.0	27.3	36.2	0.0
Incr Delay (d2), s/veh	0.0	4.4	10.8	0.0	0.0	1.8	15.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.6	53.1	0.0	0.0	29.1	51.7	0.0
1st-Term Q (Q1), veh/ln	0.0	1.8	3.4	0.0	0.0	1.2	5.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.6	0.0	0.0	0.1	1.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.77	0.00	0.00	1.80	1.48	0.00
%ile Back of Q (95%), veh/ln	0.0	3.8	7.0	0.0	0.0	2.4	10.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.56	1.77	0.00	0.00	0.36	1.77	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	386	0	862	0	516	0	397
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	14.4	0.0	20.7	0.0	19.8	0.0	9.7
Cycle Q Clear Time (g_c), s	0.0	14.4	0.0	20.7	0.0	19.8	0.0	9.7
Lane Grp Cap (c), veh/h	0	751	0	1002	0	791	0	747
V/C Ratio (X)	0.00	0.51	0.00	0.86	0.00	0.65	0.00	0.53
Avail Cap (c_a), veh/h	0	751	0	1094	0	791	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.61	0.00	0.68	0.00	0.86
Uniform Delay (d1), s/veh	0.0	19.1	0.0	30.6	0.0	20.7	0.0	37.6
Incr Delay (d2), s/veh	0.0	2.5	0.0	4.2	0.0	2.9	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.6	0.0	34.8	0.0	23.6	0.0	38.1
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	8.3	0.0	8.1	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.6	0.0	0.6	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.66	0.00	1.43	0.00	1.46	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	10.2	0.0	12.7	0.0	12.7	0.0	7.7
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.29	0.00	0.27	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	380	0	198	0	38	0	74
Grp Sat Flow (s), veh/h/ln	0	1747	0	1478	0	1519	0	1499
Q Serve Time (g_s), s	0.0	14.5	0.0	10.0	0.0	1.3	0.0	4.2
Cycle Q Clear Time (g_c), s	0.0	14.5	0.0	10.0	0.0	1.3	0.0	4.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	739	0	417	0	642	0	315
V/C Ratio (X)	0.00	0.51	0.00	0.47	0.00	0.06	0.00	0.23
Avail Cap (c_a), veh/h	0	739	0	455	0	642	0	366
Upstream Filter (I)	0.00	1.00	0.00	0.61	0.00	0.68	0.00	0.86
Uniform Delay (d1), s/veh	0.0	19.2	0.0	26.8	0.0	15.4	0.0	35.0
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.5	0.0	0.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.7	0.0	27.3	0.0	15.5	0.0	35.4
1st-Term Q (Q1), veh/ln	0.0	5.5	0.0	3.3	0.0	0.4	0.0	1.5
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.67	0.00	1.69	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.1	0.0	5.8	0.0	0.8	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.98	0.00	0.21	0.00	0.57
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	32.1
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	43	404	0	0	1001
Future Vol, veh/h	20	43	404	0	0	1001
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	47	439	0	0	1088

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	983	439	0	-	-	-
Stage 1	439	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	260	617	-	0	0	-
Stage 1	649	-	-	0	0	-
Stage 2	547	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	260	617	-	-	-	-
Mov Cap-2 Maneuver	388	-	-	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	388	617	-
HCM Lane V/C Ratio	-	0.056	0.076	-
HCM Control Delay (s)	-	14.8	11.3	-
HCM Lane LOS	-	B	B	-
HCM 95th %tile Q(veh)	-	0.2	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	793	188	216	178	126	44	439	617	221	697	34
Future Volume (veh/h)	39	793	188	216	178	126	44	439	617	221	697	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	862	204	235	193	137	48	477	671	240	758	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	860	203	247	1267	565	280	1158	516	306	1221	544
Arrive On Green	0.05	0.30	0.30	0.11	0.36	0.36	0.06	0.33	0.33	0.08	0.34	0.34
Sat Flow, veh/h	1781	2851	675	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	42	537	529	235	193	137	48	477	671	240	758	37
Grp Sat Flow(s),veh/h/ln	1781	1777	1749	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.9	36.2	36.2	11.7	4.4	7.3	2.0	12.5	39.1	9.3	21.4	1.9
Cycle Q Clear(g_c), s	1.9	36.2	36.2	11.7	4.4	7.3	2.0	12.5	39.1	9.3	21.4	1.9
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	536	528	247	1267	565	280	1158	516	306	1221	544
V/C Ratio(X)	0.09	1.00	1.00	0.95	0.15	0.24	0.17	0.41	1.30	0.78	0.62	0.07
Avail Cap(c_a), veh/h	496	536	528	247	1267	565	307	1158	516	306	1221	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.38	0.88	0.88	0.88	1.00	1.00	1.00	0.56	0.56	0.56
Uniform Delay (d), s/veh	25.8	41.9	41.9	34.1	26.3	27.2	24.9	31.5	40.4	28.9	32.9	26.5
Incr Delay (d2), s/veh	0.0	24.4	24.8	40.6	0.0	0.2	0.3	1.1	148.4	7.3	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	23.4	23.1	11.9	3.3	4.9	1.6	9.3	53.3	8.0	12.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	66.3	66.7	74.7	26.3	27.4	25.2	32.6	188.8	36.2	34.2	26.6
LnGrp LOS	C	F	F	E	C	C	C	C	F	D	C	C
Approach Vol, veh/h		1108			565			1196			1035	
Approach Delay, s/veh		65.0			46.7			119.9			34.4	
Approach LOS		E			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	46.6	11.6	48.7	15.2	44.5	18.2	42.1
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	39.4	8.0	40.8	9.3	39.1	12.6	36.2
Max Q Clear Time (g_c+I1), s	4.0	23.4	3.9	9.3	11.3	41.1	13.7	38.2
Green Ext Time (p_c), s	0.0	4.6	0.0	1.6	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	71.1
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	793	188	216	178	126	44	439	617	221	697	34
Future Volume (veh/h)	39	793	188	216	178	126	44	439	617	221	697	34
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	862	204	235	193	137	48	477	671	240	758	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	466	860	203	247	1267	565	280	1158	516	306	1221	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.30	0.30	0.11	0.36	0.36	0.06	0.33	0.33	0.08	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.8	66.3	66.7	74.7	26.3	27.4	25.2	32.6	188.8	36.2	34.2	26.6
Ln Grp LOS	C	F	F	E	C	C	C	C	F	D	C	C
Approach Vol, veh/h		1108			565			1196			1035	
Approach Delay, s/veh		65.0			46.7			119.9			34.4	
Approach LOS		E			D			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.1	46.6	11.6	48.7	15.2	44.5	18.2	42.1
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	39.4	8.0	40.8	9.3	39.1	12.6	36.2
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.4	3.7	5.1
Max Q Clear (g_c+I1), s	4.0	23.4	3.9	9.3	11.3	41.1	13.7	38.2
Green Ext Time (g_e), s	0.0	4.6	0.0	1.6	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.80	1.00	0.75	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.18	0.00	0.57	0.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		2851

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		675

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	48	0	42	0	240	0	235	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.0	0.0	1.9	0.0	9.3	0.0	11.7	0.0
Cycle Q Clear Time (g_c), s	2.0	0.0	1.9	0.0	9.3	0.0	11.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	683	0	1050	0	490	0	529	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.1	0.0	36.2	0.0	39.1	0.0	38.2	0.0
Perm LT Serve Time (g_u), s	19.9	0.0	36.2	0.0	26.6	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	1.5	0.0	0.0	0.0	23.5	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	280	0	466	0	306	0	247	0
V/C Ratio (X)	0.17	0.00	0.09	0.00	0.78	0.00	0.95	0.00
Avail Cap (c_a), veh/h	307	0	496	0	306	0	247	0
Upstream Filter (I)	1.00	0.00	0.38	0.00	0.56	0.00	0.88	0.00
Uniform Delay (d1), s/veh	24.9	0.0	25.8	0.0	28.9	0.0	34.1	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	7.3	0.0	40.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	25.2	0.0	25.8	0.0	36.2	0.0	74.7	0.0
1st-Term Q (Q1), veh/ln	0.8	0.0	0.8	0.0	4.6	0.0	4.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.6	0.0	2.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.54	0.00	1.56	0.00
%ile Back of Q (95%), veh/ln	1.6	0.0	1.4	0.0	8.0	0.0	11.9	0.0
%ile Storage Ratio (RQ%)	0.19	0.00	0.45	0.00	0.90	0.00	2.52	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	758	0	193	0	477	0	537
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	21.4	0.0	4.4	0.0	12.5	0.0	36.2
Cycle Q Clear Time (g_c), s	0.0	21.4	0.0	4.4	0.0	12.5	0.0	36.2
Lane Grp Cap (c), veh/h	0	1221	0	1267	0	1158	0	536
V/C Ratio (X)	0.00	0.62	0.00	0.15	0.00	0.41	0.00	1.00
Avail Cap (c_a), veh/h	0	1221	0	1267	0	1158	0	536
Upstream Filter (I)	0.00	0.56	0.00	0.88	0.00	1.00	0.00	0.38
Uniform Delay (d1), s/veh	0.0	32.9	0.0	26.3	0.0	31.5	0.0	41.9
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	1.1	0.0	24.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.2	0.0	26.3	0.0	32.6	0.0	66.3
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	1.8	0.0	5.3	0.0	15.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	3.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.41	0.00	1.80	0.00	1.70	0.00	1.23
%ile Back of Q (95%), veh/ln	0.0	12.9	0.0	3.3	0.0	9.3	0.0	23.4
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.10	0.00	0.74	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	37	0	137	0	671	0	529
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1749
Q Serve Time (g_s), s	0.0	1.9	0.0	7.3	0.0	39.1	0.0	36.2
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	7.3	0.0	39.1	0.0	36.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.39
Lane Grp Cap (c), veh/h	0	544	0	565	0	516	0	528
V/C Ratio (X)	0.00	0.07	0.00	0.24	0.00	1.30	0.00	1.00
Avail Cap (c_a), veh/h	0	544	0	565	0	516	0	528
Upstream Filter (I)	0.00	0.56	0.00	0.88	0.00	1.00	0.00	0.38
Uniform Delay (d1), s/veh	0.0	26.5	0.0	27.2	0.0	40.4	0.0	41.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	148.4	0.0	24.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.6	0.0	27.4	0.0	188.8	0.0	66.7
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	2.7	0.0	14.7	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	21.3	0.0	3.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.48	0.00	1.24
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	4.9	0.0	53.3	0.0	23.1
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	1.05	0.00	8.47	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	38.6	0.0	0.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	71.1
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	451	0	269	0	352	0	0	1228	0
Future Volume (veh/h)	0	0	0	451	0	269	0	352	0	0	1228	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	490	0	292	0	383	0	0	1335	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Cap, veh/h	0	604	0	695	0	501	0	1850	0	0	1850	0
Arrive On Green	0.00	0.00	0.00	0.32	0.00	0.32	0.00	0.52	0.00	0.00	0.52	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1551	0	3741	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	490	0	292	0	383	0	0	1335	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1551	0	1777	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	15.4	0.0	9.4	0.0	3.5	0.0	0.0	17.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	15.4	0.0	9.4	0.0	3.5	0.0	0.0	17.3	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	604	0	695	0	501	0	1850	0	0	1850	0
V/C Ratio(X)	0.00	0.00	0.00	0.71	0.00	0.58	0.00	0.21	0.00	0.00	0.72	0.00
Avail Cap(c_a), veh/h	0	733	0	818	0	608	0	1850	0	0	1850	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.98	0.00	0.00	0.09	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	19.0	0.0	17.0	0.0	7.7	0.0	0.0	11.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.3	0.0	1.1	0.0	0.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	10.2	0.0	5.7	0.0	2.0	0.0	0.0	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	21.2	0.0	18.0	0.0	8.0	0.0	0.0	11.3	0.0
LnGrp LOS	A	A	A	C	A	B	A	A	A	A	B	A
Approach Vol, veh/h		0			782			383			1335	
Approach Delay, s/veh		0.0			20.0			8.0			11.3	
Approach LOS					C			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	36.1	23.9	36.1	23.9
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	27.1	23.5	27.1	23.5
Max Q Clear Time (g_c+I1), s	5.5	17.4	19.3	0.0
Green Ext Time (p_c), s	2.4	1.9	5.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	451	0	269	0	352	0	0	1228	0
Future Volume (veh/h)	0	0	0	451	0	269	0	352	0	0	1228	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	490	0	292	0	383	0	0	1335	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	604	0	695	0	501	0	1850	0	0	1850	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.32	0.00	0.32	0.00	0.52	0.00	0.00	0.52	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	21.2	0.0	18.0	0.0	8.0	0.0	0.0	11.3	0.0
Ln Grp LOS	A	A	A	C	A	B	A	A	A	A	B	A
Approach Vol, veh/h		0			782			383			1335	
Approach Delay, s/veh		0.0			20.0			8.0			11.3	
Approach LOS					C			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		36.1		23.9		36.1		23.9
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		27.1		23.5		27.1		23.5
Max Allow Headway (MAH), s		5.1		4.4		5.1		0.0
Max Q Clear (g_c+I1), s		5.5		17.4		19.3		0.0
Green Ext Time (g_e), s		2.4		1.9		5.1		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		0.69		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3741		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1551		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	490	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	19.4	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	19.4	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	31.2	0.0	0.0	0.0	31.2	0.0	19.4
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	695	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	818	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.66	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	10.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	383	0	0	0	1335	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	3.5	0.0	0.0	0.0	17.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.5	0.0	0.0	0.0	17.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1850	0	0	0	1850	0	604
V/C Ratio (X)	0.00	0.21	0.00	0.00	0.00	0.72	0.00	0.00
Avail Cap (c_a), veh/h	0	1850	0	0	0	1850	0	733
Upstream Filter (I)	0.00	0.98	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.7	0.0	0.0	0.0	11.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.0	0.0	0.0	0.0	11.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	0.0	0.0	5.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.21	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	2.0	0.0	0.0	0.0	6.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.00	0.00	0.11	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	292	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1551	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	9.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	501	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	608	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		13.5						
HCM 6th LOS		B						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	397	205	70	314	49	91	247	58	205	1086	361
Future Volume (veh/h)	40	397	205	70	314	49	91	247	58	205	1086	361
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	432	223	76	341	53	99	268	63	223	1180	392
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	539	275	241	780	120	250	1402	617	612	1492	657
Arrive On Green	0.05	0.24	0.24	0.07	0.25	0.25	0.07	0.39	0.39	0.10	0.42	0.42
Sat Flow, veh/h	1781	2260	1155	1781	3079	474	1781	3554	1565	1781	3554	1566
Grp Volume(v), veh/h	43	339	316	76	195	199	99	268	63	223	1180	392
Grp Sat Flow(s),veh/h/ln	1781	1777	1638	1781	1777	1776	1781	1777	1565	1781	1777	1566
Q Serve(g_s), s	1.6	16.1	16.4	2.8	8.3	8.5	2.8	4.4	2.3	6.5	26.0	17.4
Cycle Q Clear(g_c), s	1.6	16.1	16.4	2.8	8.3	8.5	2.8	4.4	2.3	6.5	26.0	17.4
Prop In Lane	1.00		0.70	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	328	424	391	241	450	450	250	1402	617	612	1492	657
V/C Ratio(X)	0.13	0.80	0.81	0.31	0.43	0.44	0.40	0.19	0.10	0.36	0.79	0.60
Avail Cap(c_a), veh/h	375	582	537	262	582	582	261	1402	617	677	1492	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.97	0.97	0.97	0.30	0.30	0.30
Uniform Delay (d), s/veh	23.6	32.2	32.3	24.4	28.2	28.3	18.1	17.8	17.2	13.3	22.7	20.2
Incr Delay (d2), s/veh	0.0	0.5	0.6	0.7	0.7	0.7	1.0	0.3	0.3	0.1	1.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.0	7.9	7.4	2.1	6.2	6.3	2.0	3.2	1.5	3.9	13.3	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	32.8	33.0	25.1	28.8	28.9	19.1	18.1	17.5	13.4	24.0	21.4
LnGrp LOS	C	C	C	C	C	C	B	B	B	B	C	C
Approach Vol, veh/h		698			470			430			1795	
Approach Delay, s/veh		32.3			28.3			18.3			22.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	43.2	8.6	27.8	12.7	40.9	10.0	26.5
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.0	28.1	7.0	* 30	12.0	23.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	4.8	28.0	3.6	10.5	8.5	6.4	4.8	18.4
Green Ext Time (p_c), s	0.0	0.1	0.0	2.0	0.2	1.6	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	397	205	70	314	49	91	247	58	205	1086	361
Future Volume (veh/h)	40	397	205	70	314	49	91	247	58	205	1086	361
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	432	223	76	341	53	99	268	63	223	1180	392
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	328	539	275	241	780	120	250	1402	617	612	1492	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.24	0.24	0.07	0.25	0.25	0.07	0.39	0.39	0.10	0.42	0.42
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.6	32.8	33.0	25.1	28.8	28.9	19.1	18.1	17.5	13.4	24.0	21.4
Ln Grp LOS	C	C	C	C	C	C	B	B	B	B	C	C
Approach Vol, veh/h		698			470			430			1795	
Approach Delay, s/veh		32.3			28.3			18.3			22.1	
Approach LOS		C			C			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	10.4	43.2	8.6	27.8	12.7	40.9	10.0	26.5
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	12.0	23.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.9	3.7	5.1	3.8	4.9	3.7	5.1
Max Q Clear (g_c+l1), s	4.8	28.0	3.6	10.5	8.5	6.4	4.8	18.4
Green Ext Time (g_e), s	0.0	0.1	0.0	2.0	0.2	1.6	0.0	2.9
Prob of Phs Call (p_c)	0.92	1.00	0.66	1.00	1.00	1.00	0.85	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.30

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	3079	3554	2260

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1566	474	1565	1155

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	99	0	43	0	223	0	76	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.8	0.0	1.6	0.0	6.5	0.0	2.8	0.0
Cycle Q Clear Time (g_c), s	2.8	0.0	1.6	0.0	6.5	0.0	2.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	326	0	982	0	1042	0	775	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	35.5	0.0	21.5	0.0	35.8	0.0	21.5	0.0
Perm LT Serve Time (g_u), s	11.8	0.0	14.3	0.0	31.1	0.0	5.0	0.0
Perm LT Q Serve Time (g_ps), s	10.3	0.0	0.3	0.0	1.3	0.0	1.8	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	250	0	328	0	612	0	241	0
V/C Ratio (X)	0.40	0.00	0.13	0.00	0.36	0.00	0.31	0.00
Avail Cap (c_a), veh/h	261	0	375	0	677	0	262	0
Upstream Filter (I)	0.97	0.00	0.09	0.00	0.30	0.00	1.00	0.00
Uniform Delay (d1), s/veh	18.1	0.0	23.6	0.0	13.3	0.0	24.4	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.0	0.1	0.0	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	19.1	0.0	23.6	0.0	13.4	0.0	25.1	0.0
1st-Term Q (Q1), veh/ln	1.1	0.0	0.6	0.0	2.4	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.62	0.00	1.57	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.0	0.0	1.0	0.0	3.9	0.0	2.1	0.0
%ile Storage Ratio (RQ%)	0.30	0.00	0.22	0.00	0.56	0.00	0.53	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1180	0	195	0	268	0	339
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	26.0	0.0	8.3	0.0	4.4	0.0	16.1
Cycle Q Clear Time (g_c), s	0.0	26.0	0.0	8.3	0.0	4.4	0.0	16.1
Lane Grp Cap (c), veh/h	0	1492	0	450	0	1402	0	424
V/C Ratio (X)	0.00	0.79	0.00	0.43	0.00	0.19	0.00	0.80
Avail Cap (c_a), veh/h	0	1492	0	582	0	1402	0	582
Upstream Filter (I)	0.00	0.30	0.00	1.00	0.00	0.97	0.00	0.09
Uniform Delay (d1), s/veh	0.0	22.7	0.0	28.2	0.0	17.8	0.0	32.2
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.7	0.0	0.3	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.0	0.0	28.8	0.0	18.1	0.0	32.8
1st-Term Q (Q1), veh/ln	0.0	10.1	0.0	3.4	0.0	1.7	0.0	6.6
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.28	0.00	1.80	0.00	1.80	0.00	1.19
%ile Back of Q (95%), veh/ln	0.0	13.3	0.0	6.2	0.0	3.2	0.0	7.9
%ile Storage Ratio (RQ%)	0.00	0.95	0.00	0.13	0.00	0.13	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	392	0	199	0	63	0	316
Grp Sat Flow (s), veh/h/ln	0	1566	0	1776	0	1565	0	1638
Q Serve Time (g_s), s	0.0	17.4	0.0	8.5	0.0	2.3	0.0	16.4
Cycle Q Clear Time (g_c), s	0.0	17.4	0.0	8.5	0.0	2.3	0.0	16.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.27	0.00	1.00	0.00	0.70
Lane Grp Cap (c), veh/h	0	657	0	450	0	617	0	391
V/C Ratio (X)	0.00	0.60	0.00	0.44	0.00	0.10	0.00	0.81
Avail Cap (c_a), veh/h	0	657	0	582	0	617	0	537
Upstream Filter (I)	0.00	0.30	0.00	1.00	0.00	0.97	0.00	0.09
Uniform Delay (d1), s/veh	0.0	20.2	0.0	28.3	0.0	17.2	0.0	32.3
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.7	0.0	0.3	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.4	0.0	28.9	0.0	17.5	0.0	33.0
1st-Term Q (Q1), veh/ln	0.0	5.8	0.0	3.4	0.0	0.8	0.0	6.2
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.36	0.00	1.80	0.00	1.80	0.00	1.20
%ile Back of Q (95%), veh/ln	0.0	8.3	0.0	6.3	0.0	1.5	0.0	7.4
%ile Storage Ratio (RQ%)	0.00	1.62	0.00	0.13	0.00	0.29	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.6
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	329	157	54	331	29	47	328	35	18	1268	117
Future Volume (veh/h)	57	329	157	54	331	29	47	328	35	18	1268	117
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	358	171	59	360	32	51	357	38	20	1378	127
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	453	216	219	710	597	135	1444	153	487	1467	134
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	989	1193	570	872	1870	1574	348	3230	341	972	3279	300
Grp Volume(v), veh/h	62	0	529	59	360	32	51	195	200	20	743	762
Grp Sat Flow(s),veh/h/ln	989	0	1763	872	1870	1574	348	1777	1794	972	1777	1803
Q Serve(g_s), s	3.1	0.0	16.0	3.9	8.9	0.8	2.6	4.1	4.2	0.8	23.8	24.3
Cycle Q Clear(g_c), s	12.0	0.0	16.0	19.8	8.9	0.8	26.8	4.1	4.2	4.9	23.8	24.3
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.19	1.00		0.17
Lane Grp Cap(c), veh/h	349	0	669	219	710	597	135	795	802	487	795	806
V/C Ratio(X)	0.18	0.00	0.79	0.27	0.51	0.05	0.38	0.25	0.25	0.04	0.93	0.95
Avail Cap(c_a), veh/h	386	0	735	251	779	656	135	795	802	487	795	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Uniform Delay (d), s/veh	18.9	0.0	16.5	25.3	14.3	11.8	29.6	10.3	10.3	11.9	15.8	15.9
Incr Delay (d2), s/veh	0.2	0.0	5.4	0.7	0.6	0.0	7.9	0.7	0.7	0.1	8.4	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	0.0	10.6	1.4	6.0	0.4	1.8	2.7	2.8	0.3	12.6	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	21.9	25.9	14.9	11.8	37.5	11.0	11.1	11.9	24.1	25.1
LnGrp LOS	B	A	C	C	B	B	D	B	B	B	C	C
Approach Vol, veh/h		591			451			446			1525	
Approach Delay, s/veh		21.6			16.1			14.1			24.4	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	31.8	28.2	31.8	28.2
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	28.8	18.0	26.3	21.8
Green Ext Time (p_c), s	0.0	2.1	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	329	157	54	331	29	47	328	35	18	1268	117
Future Volume (veh/h)	57	329	157	54	331	29	47	328	35	18	1268	117
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	358	171	59	360	32	51	357	38	20	1378	127
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	349	453	216	219	710	597	135	1444	153	487	1467	134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.45	0.45	0.45	0.45	0.45	0.45
Unsig. Movement Delay												
Ln Grp Delay, s/veh	19.1	0.0	21.9	25.9	14.9	11.8	37.5	11.0	11.1	11.9	24.1	25.1
Ln Grp LOS	B	A	C	C	B	B	D	B	B	B	C	C
Approach Vol, veh/h		591			451			446			1525	
Approach Delay, s/veh		21.6			16.1			14.1			24.4	
Approach LOS		C			B			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		31.8		28.2		31.8		28.2
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		5.9		5.2		5.1		5.1
Max Q Clear (g_c+I1), s		28.8		18.0		26.3		21.8
Green Ext Time (g_e), s		0.0		2.1		0.0		0.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.68		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		348		989		972		872
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3230		1193		3279		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		341		570		300		1574
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	51	0	62	0	20	0	59
Grp Sat Flow (s), veh/h/ln	0	348	0	989	0	972	0	872
Q Serve Time (g_s), s	0.0	2.6	0.0	3.1	0.0	0.8	0.0	3.9
Cycle Q Clear Time (g_c), s	0.0	26.8	0.0	12.0	0.0	4.9	0.0	19.8
Perm LT Sat Flow (s_l), veh/h/ln	0	348	0	989	0	972	0	872
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	26.8	0.0	22.8	0.0	26.8	0.0	22.8
Perm LT Serve Time (g_u), s	0.0	2.6	0.0	13.9	0.0	22.7	0.0	6.8
Perm LT Q Serve Time (g_ps), s	0.0	2.6	0.0	3.1	0.0	0.8	0.0	3.9
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	135	0	349	0	487	0	219
V/C Ratio (X)	0.00	0.38	0.00	0.18	0.00	0.04	0.00	0.27
Avail Cap (c_a), veh/h	0	135	0	386	0	487	0	251
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.33	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.6	0.0	18.9	0.0	11.9	0.0	25.3
Incr Delay (d2), s/veh	0.0	7.9	0.0	0.2	0.0	0.1	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.5	0.0	19.1	0.0	11.9	0.0	25.9
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.6	0.0	0.1	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.8	0.0	1.2	0.0	0.3	0.0	1.4
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.30	0.00	0.07	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	195	0	0	0	743	0	360
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	4.1	0.0	0.0	0.0	23.8	0.0	8.9
Cycle Q Clear Time (g_c), s	0.0	4.1	0.0	0.0	0.0	23.8	0.0	8.9
Lane Grp Cap (c), veh/h	0	795	0	0	0	795	0	710
V/C Ratio (X)	0.00	0.25	0.00	0.00	0.00	0.93	0.00	0.51
Avail Cap (c_a), veh/h	0	795	0	0	0	795	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.33	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.3	0.0	0.0	0.0	15.8	0.0	14.3
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	8.4	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.0	0.0	0.0	0.0	24.1	0.0	14.9
1st-Term Q (Q1), veh/ln	0.0	1.3	0.0	0.0	0.0	7.8	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	1.8	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.30	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.7	0.0	0.0	0.0	12.6	0.0	6.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.00	0.00	0.49	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	200	0	529	0	762	0	32
Grp Sat Flow (s), veh/h/ln	0	1794	0	1763	0	1803	0	1574
Q Serve Time (g_s), s	0.0	4.2	0.0	16.0	0.0	24.3	0.0	0.8
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	16.0	0.0	24.3	0.0	0.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.19	0.00	0.32	0.00	0.17	0.00	1.00
Lane Grp Cap (c), veh/h	0	802	0	669	0	806	0	597
V/C Ratio (X)	0.00	0.25	0.00	0.79	0.00	0.95	0.00	0.05
Avail Cap (c_a), veh/h	0	802	0	735	0	806	0	656
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.33	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.3	0.0	16.5	0.0	15.9	0.0	11.8
Incr Delay (d2), s/veh	0.0	0.7	0.0	5.4	0.0	9.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.1	0.0	21.9	0.0	25.1	0.0	11.8
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	5.5	0.0	8.1	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.0	0.0	2.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.64	0.00	1.30	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.8	0.0	10.6	0.0	13.1	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.31	0.00	0.51	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/10/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	154	404	221	108	20	207	424	115	20	405	40	73
Future Volume (vph)	154	404	221	108	20	207	424	115	20	405	40	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.99	0.97			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Frt	1.00	0.97	0.85			1.00	0.97		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1648	3050	1304			1651	3172		1649	3176		
Flt Permitted	0.32	1.00	1.00			0.15	1.00		0.16	1.00		
Satd. Flow (perm)	556	3050	1304			262	3172		278	3176		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	167	439	240	117	22	225	461	125	22	440	43	79
RTOR Reduction (vph)	0	0	142	0	0	0	17	0	0	9	0	0
Lane Group Flow (vph)	167	552	102	0	0	247	569	0	22	553	0	0
Confl. Peds. (#/hr)	7		9	2	9	2		7	11		1	9
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	40.9	28.0	28.0			54.1	35.7		25.0	25.0		
Effective Green, g (s)	40.9	28.0	28.0			54.1	35.7		25.0	25.0		
Actuated g/C Ratio	0.29	0.20	0.20			0.39	0.26		0.18	0.18		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	263	610	260			294	808		49	567		
v/s Ratio Prot	0.06	0.18				c0.12	c0.18			0.17		
v/s Ratio Perm	0.13		0.08			c0.21			0.08			
v/c Ratio	0.63	0.90	0.39			0.84	0.70		0.45	0.98		
Uniform Delay, d1	39.3	54.7	48.6			33.7	47.4		51.3	57.2		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	4.9	19.3	4.4			18.9	5.1		27.0	32.2		
Delay (s)	44.2	74.0	53.0			52.6	52.5		78.3	89.4		
Level of Service	D	E	D			D	D		E	F		
Approach Delay (s)		63.5					52.5			88.9		
Approach LOS		E					D			F		

Intersection Summary			
HCM 2000 Control Delay	85.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	12	208	1059	46	127	147	109	8
Future Volume (vph)	12	208	1059	46	127	147	109	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	1.00			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.99			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1651	3279			3195	1345	
Flt Permitted		0.13	1.00			0.95	1.00	
Satd. Flow (perm)		223	3279			3195	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	226	1151	50	138	160	118	9
RTOR Reduction (vph)	0	0	2	0	0	0	98	0
Lane Group Flow (vph)	0	239	1199	0	0	310	17	0
Confl. Peds. (#/hr)	1	9		11	2	11	7	1
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		44.8	44.8			20.9	20.9	
Effective Green, g (s)		44.8	44.8			20.9	20.9	
Actuated g/C Ratio		0.32	0.32			0.15	0.15	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		210	1049			476	200	
v/s Ratio Prot		0.11	c0.37			c0.10	0.01	
v/s Ratio Perm		0.25						
v/c Ratio		1.14	1.14			0.65	0.09	
Uniform Delay, d1		40.0	47.6			56.1	51.3	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		104.3	75.9			3.9	0.3	
Delay (s)		144.3	123.5			60.1	51.7	
Level of Service		F	F			E	D	
Approach Delay (s)			127.0			57.8		
Approach LOS			F			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	10	27	190	27	64	11	53	342	25	8	13	42
Future Volume (vph)	10	27	190	27	64	11	53	342	25	8	13	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.99				1.00	1.00			1.00	1.00
Flpb, ped/bikes		0.99	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.99			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1630	3123				1644	3248			1652	1652
Flt Permitted		0.32	1.00				0.44	1.00			0.95	0.95
Satd. Flow (perm)		544	3123				761	3248			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	29	207	29	70	12	58	372	27	9	14	46
RTOR Reduction (vph)	0	0	16	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	40	290	0	0	0	70	407	0	0	14	46
Confl. Peds. (#/hr)	4	17		1	5	1	5		4	17	3	4
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		34.0	34.0				34.0	34.0			16.0	16.0
Effective Green, g (s)		34.0	34.0				34.0	34.0			16.0	16.0
Actuated g/C Ratio		0.19	0.19				0.19	0.19			0.09	0.09
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		102	589				143	613			146	146
v/s Ratio Prot			0.09					c0.13			0.01	0.03
v/s Ratio Perm		0.07					0.09					
v/c Ratio		0.39	0.49				0.49	0.66			0.10	0.32
Uniform Delay, d1		63.9	65.3				65.2	67.7			75.4	76.9
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		2.5	0.6				2.6	2.7			0.3	1.2
Delay (s)		66.4	65.9				67.9	70.4			75.6	78.1
Level of Service		E	E				E	E			E	E
Approach Delay (s)			66.0					70.0				
Approach LOS			E					E				

Intersection Summary			
HCM 2000 Control Delay	82.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	145.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL2	SBL	SBT	SBR	SBR2	SEL	SET	SER	SER2	NWL
Lane Configurations												
Traffic Volume (vph)	202	5	14	212	707	95	1	28	935	236	30	26
Future Volume (vph)	202	5	14	212	707	95	1	28	935	236	30	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Lane Util. Factor	1.00	1.00		1.00	0.95	1.00		1.00	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.97		1.00	1.00	0.98		1.00	1.00	0.98	0.99	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	0.85	1.00
Flt Protected	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	1.00	0.95
Satd. Flow (prot)	1739	1437		1652	3303	1448		1645	3151	1322	1456	1651
Flt Permitted	1.00	1.00		0.95	1.00	1.00		0.53	1.00	1.00	1.00	0.07
Satd. Flow (perm)	1739	1437		1652	3303	1448		912	3151	1322	1456	130
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	220	5	15	230	768	103	1	30	1016	257	33	28
RTOR Reduction (vph)	0	0	0	0	0	75	0	0	0	0	23	0
Lane Group Flow (vph)	220	5	0	245	768	29	0	30	1042	231	10	28
Confl. Peds. (#/hr)		6	6	1		3	4	6		5	3	3
Turn Type	NA	Perm	Prot	Prot	NA	Perm		Perm	NA	Perm	Perm	Perm
Protected Phases	6		5	5	2				10			
Permitted Phases		6				2		10		10	10	14
Actuated Green, G (s)	34.7	34.7		29.8	48.7	48.7		53.6	53.6	53.6	53.6	53.6
Effective Green, g (s)	34.7	34.7		29.8	48.7	48.7		53.6	53.6	53.6	53.6	53.6
Actuated g/C Ratio	0.19	0.19		0.17	0.27	0.27		0.30	0.30	0.30	0.30	0.30
Clearance Time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	335	277		273	893	391		271	938	393	433	38
v/s Ratio Prot	0.13			c0.15	c0.23				c0.33			
v/s Ratio Perm		0.00				0.02		0.03		0.17	0.01	0.22
v/c Ratio	0.66	0.02		0.90	0.86	0.07		0.11	1.11	0.59	0.02	0.74
Uniform Delay, d1	67.1	58.8		73.6	62.4	48.9		45.9	63.2	53.8	44.7	56.9
Progression Factor	1.00	1.00		1.29	0.78	1.68		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.7	0.1		22.3	7.7	0.3		0.2	64.7	2.2	0.0	53.2
Delay (s)	76.8	59.0		117.1	56.1	82.1		46.1	127.9	56.0	44.7	110.1
Level of Service	E	E		F	E	F		D	F	E	D	F
Approach Delay (s)	76.7				71.9				111.6			
Approach LOS	E				E				F			

Intersection Summary

Movement	NWT	NWR	NWR2
Lane Configurations			
Traffic Volume (vph)	210	143	19
Future Volume (vph)	210	143	19
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.6	7.6	
Lane Util. Factor	0.91	0.91	
Frpb, ped/bikes	0.99	0.97	
Flpb, ped/bikes	1.00	1.00	
Frt	0.97	0.85	
Flt Protected	1.00	1.00	
Satd. Flow (prot)	3058	1298	
Flt Permitted	1.00	1.00	
Satd. Flow (perm)	3058	1298	
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	228	155	21
RTOR Reduction (vph)	0	86	0
Lane Group Flow (vph)	281	37	0
Confl. Peds. (#/hr)		17	6
Turn Type	NA	Perm	
Protected Phases	14		
Permitted Phases		14	
Actuated Green, G (s)	53.6	53.6	
Effective Green, g (s)	53.6	53.6	
Actuated g/C Ratio	0.30	0.30	
Clearance Time (s)	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	
Lane Grp Cap (vph)	910	386	
v/s Ratio Prot	0.09		
v/s Ratio Perm		0.03	
v/c Ratio	0.31	0.09	
Uniform Delay, d1	48.9	45.7	
Progression Factor	1.00	1.00	
Incremental Delay, d2	0.2	0.1	
Delay (s)	49.1	45.8	
Level of Service	D	D	
Approach Delay (s)	52.1		
Approach LOS	D		

Intersection Summary

Existing Conditions

Afternoon Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1494	7	0	1414	0	1	0	17	352	8	173
Future Volume (veh/h)	0	1494	7	0	1414	0	1	0	17	352	8	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1624	8	0	1537	0	1	0	18	290	139	188
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2881	14	0	1952	0	3	0	57	413	167	226
Arrive On Green	0.00	0.55	0.55	0.00	0.55	0.00	0.04	0.00	0.04	0.23	0.23	0.23
Sat Flow, veh/h	0	5412	26	0	3741	0	84	0	1506	1781	720	974
Grp Volume(v), veh/h	0	1054	578	0	1537	0	19	0	0	290	0	327
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1590	0	0	1781	0	1694
Q Serve(g_s), s	0.0	18.2	18.2	0.0	30.9	0.0	1.0	0.0	0.0	13.4	0.0	16.5
Cycle Q Clear(g_c), s	0.0	18.2	18.2	0.0	30.9	0.0	1.0	0.0	0.0	13.4	0.0	16.5
Prop In Lane	0.00		0.01	0.00		0.00	0.05		0.95	1.00		0.57
Lane Grp Cap(c), veh/h	0	1870	1025	0	1952	0	60	0	0	413	0	392
V/C Ratio(X)	0.00	0.56	0.56	0.00	0.79	0.00	0.32	0.00	0.00	0.70	0.00	0.83
Avail Cap(c_a), veh/h	0	1870	1025	0	1952	0	159	0	0	590	0	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.2	13.2	0.0	16.1	0.0	42.2	0.0	0.0	31.7	0.0	32.9
Incr Delay (d2), s/veh	0.0	1.2	2.2	0.0	3.3	0.0	3.0	0.0	0.0	2.2	0.0	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	10.5	11.7	0.0	17.2	0.0	0.8	0.0	0.0	9.7	0.0	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.5	15.5	0.0	19.4	0.0	45.1	0.0	0.0	33.9	0.0	40.2
LnGrp LOS	A	B	B	A	B	A	D	A	A	C	A	D
Approach Vol, veh/h		1632			1537			19			617	
Approach Delay, s/veh		14.8			19.4			45.1			37.2	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	54.5	26.1	54.5	9.4
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	20.2	18.5	32.9	3.0
Green Ext Time (p_c), s	9.0	2.2	1.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1494	7	0	1414	0	1	0	17	352	8	173
Future Volume (veh/h)	0	1494	7	0	1414	0	1	0	17	352	8	173
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1624	8	0	1537	0	1	0	18	290	139	188
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2881	14	0	1952	0	3	0	57	413	167	226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.55	0.55	0.00	0.55	0.00	0.04	0.00	0.04	0.23	0.23	0.23
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	14.5	15.5	0.0	19.4	0.0	45.1	0.0	0.0	33.9	0.0	40.2
Ln Grp LOS	A	B	B	A	B	A	D	A	A	C	A	D
Approach Vol, veh/h		1632			1537			19			617	
Approach Delay, s/veh		14.8			19.4			45.1			37.2	
Approach LOS		B			B			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		54.5	9.4	26.1		54.5		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		20.2	3.0	18.5		32.9		
Green Ext Time (g_e), s		9.0	0.0	2.2		1.6		
Prob of Phs Call (p_c)		1.00	0.39	1.00		1.00		
Prob of Max Out (p_x)		0.59	0.77	0.16		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	84	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5412	0	720		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		26	1506	974		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	19	290	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1590	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	1.0	13.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	1.0	13.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	49.4	0.0	0.0	0.0	49.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.05	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	60	413	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.32	0.70	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	159	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	42.2	31.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.0	2.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	45.1	33.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.4	5.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.68	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.8	9.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.08	1.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1054	0	0	0	1537	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	18.2	0.0	0.0	0.0	30.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.2	0.0	0.0	0.0	30.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1870	0	0	0	1952	0	0
V/C Ratio (X)	0.00	0.56	0.00	0.00	0.00	0.79	0.00	0.00
Avail Cap (c_a), veh/h	0	1870	0	0	0	1952	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.2	0.0	0.0	0.0	16.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	3.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.5	0.0	0.0	0.0	19.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	0.0	0.0	10.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.9	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.65	1.00	1.00	0.00	1.48	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	10.5	0.0	0.0	0.0	17.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.00	0.00	2.45	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	578	0	327	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1694	0	0	0	0
Q Serve Time (g_s), s	0.0	18.2	0.0	16.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.2	0.0	16.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.95	0.57	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1025	0	392	0	0	0	0
V/C Ratio (X)	0.00	0.56	0.00	0.83	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1025	0	561	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.2	0.0	32.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.2	0.0	7.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.5	0.0	40.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	6.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.61	1.00	1.61	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	11.7	0.0	11.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.50	0.00	1.24	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1076	71	86	1582	67	195	323	133	33	274	260
Future Volume (veh/h)	93	1076	71	86	1582	67	195	323	133	33	274	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	1170	77	93	1720	73	212	351	145	36	298	283
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	2002	880	236	2002	880	230	582	488	216	582	488
Arrive On Green	0.56	0.56	0.56	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	263	3554	1563	446	3554	1563	830	1870	1568	898	1870	1568
Grp Volume(v), veh/h	101	1170	77	93	1720	73	212	351	145	36	298	283
Grp Sat Flow(s),veh/h/ln	263	1777	1563	446	1777	1563	830	1870	1568	898	1870	1568
Q Serve(g_s), s	24.5	19.3	2.0	11.4	0.0	0.0	16.2	14.3	6.3	3.2	11.8	13.7
Cycle Q Clear(g_c), s	24.5	19.3	2.0	30.6	0.0	0.0	28.0	14.3	6.3	17.5	11.8	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	2002	880	236	2002	880	230	582	488	216	582	488
V/C Ratio(X)	0.44	0.58	0.09	0.39	0.86	0.08	0.92	0.60	0.30	0.17	0.51	0.58
Avail Cap(c_a), veh/h	228	2002	880	236	2002	880	230	582	488	216	582	488
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.44	0.44	0.44	0.54	0.54	0.54	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	12.8	9.0	5.8	0.0	0.0	39.3	26.3	23.5	33.7	25.4	26.1
Incr Delay (d2), s/veh	6.1	1.3	0.2	2.2	2.3	0.1	25.5	1.0	0.2	0.4	0.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	11.3	1.2	1.2	1.2	0.0	9.2	9.1	4.0	1.2	8.7	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	14.0	9.2	8.0	2.3	0.1	64.7	27.2	23.7	34.1	26.2	27.8
LnGrp LOS	C	B	A	A	A	A	E	C	C	C	C	C
Approach Vol, veh/h		1348			1886			708			617	
Approach Delay, s/veh		14.2			2.5			37.7			27.4	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	56.2	33.8	56.2	33.8
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 51	28.0	* 51	28.0
Max Q Clear Time (g_c+I1), s	26.5	30.0	32.6	19.5
Green Ext Time (p_c), s	12.3	0.0	12.9	1.9

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1076	71	86	1582	67	195	323	133	33	274	260
Future Volume (veh/h)	93	1076	71	86	1582	67	195	323	133	33	274	260
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	101	1170	77	93	1720	73	212	351	145	36	298	283
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	228	2002	880	236	2002	880	230	582	488	216	582	488
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.56	0.56	0.56	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	20.0	14.0	9.2	8.0	2.3	0.1	64.7	27.2	23.7	34.1	26.2	27.8
Ln Grp LOS	C	B	A	A	A	A	E	C	C	C	C	C
Approach Vol, veh/h		1348			1886			708			617	
Approach Delay, s/veh		14.2			2.5			37.7			27.4	
Approach LOS		B			A			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		56.2		33.8		56.2		33.8
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 51		28.0		* 51		28.0
Max Allow Headway (MAH), s		5.6		4.9		5.2		4.6
Max Q Clear (g_c+I1), s		26.5		30.0		32.6		19.5
Green Ext Time (g_e), s		12.3		0.0		12.9		1.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.34
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		263		830		446		898
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1563		1568		1563		1568
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	101	0	212	0	93	0	36
Grp Sat Flow (s), veh/h/ln	0	263	0	830	0	446	0	898
Q Serve Time (g_s), s	0.0	24.5	0.0	16.2	0.0	11.4	0.0	3.2
Cycle Q Clear Time (g_c), s	0.0	24.5	0.0	28.0	0.0	30.6	0.0	17.5
Perm LT Sat Flow (s_l), veh/h/ln	0	263	0	830	0	446	0	898
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	50.7	0.0	28.0	0.0	50.7	0.0	28.0
Perm LT Serve Time (g_u), s	0.0	50.7	0.0	16.2	0.0	31.4	0.0	13.7
Perm LT Q Serve Time (g_ps), s	0.0	24.5	0.0	16.2	0.0	11.4	0.0	3.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	228	0	230	0	236	0	216
V/C Ratio (X)	0.00	0.44	0.00	0.92	0.00	0.39	0.00	0.17
Avail Cap (c_a), veh/h	0	228	0	230	0	236	0	216
Upstream Filter (I)	0.00	1.00	0.00	0.54	0.00	0.44	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.9	0.0	39.3	0.0	5.8	0.0	33.7
Incr Delay (d2), s/veh	0.0	6.1	0.0	25.5	0.0	2.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.0	0.0	64.7	0.0	8.0	0.0	34.1
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	4.6	0.0	0.5	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	1.6	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.48	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.9	0.0	9.2	0.0	1.2	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.60	0.00	3.60	0.00	0.22	0.00	0.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1170	0	351	0	1720	0	298
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	19.3	0.0	14.3	0.0	0.0	0.0	11.8
Cycle Q Clear Time (g_c), s	0.0	19.3	0.0	14.3	0.0	0.0	0.0	11.8
Lane Grp Cap (c), veh/h	0	2002	0	582	0	2002	0	582
V/C Ratio (X)	0.00	0.58	0.00	0.60	0.00	0.86	0.00	0.51
Avail Cap (c_a), veh/h	0	2002	0	582	0	2002	0	582
Upstream Filter (I)	0.00	1.00	0.00	0.54	0.00	0.44	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.8	0.0	26.3	0.0	0.0	0.0	25.4
Incr Delay (d2), s/veh	0.0	1.3	0.0	1.0	0.0	2.3	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.0	0.0	27.2	0.0	2.3	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	6.0	0.0	0.0	0.0	4.9
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.6	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.62	0.00	1.49	0.00	1.80	0.00	1.73
%ile Back of Q (95%), veh/ln	0.0	11.3	0.0	9.1	0.0	1.2	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	2.43	0.00	0.19	0.00	0.10	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	77	0	145	0	73	0	283
Grp Sat Flow (s), veh/h/ln	0	1563	0	1568	0	1563	0	1568
Q Serve Time (g_s), s	0.0	2.0	0.0	6.3	0.0	0.0	0.0	13.7
Cycle Q Clear Time (g_c), s	0.0	2.0	0.0	6.3	0.0	0.0	0.0	13.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	880	0	488	0	880	0	488
V/C Ratio (X)	0.00	0.09	0.00	0.30	0.00	0.08	0.00	0.58
Avail Cap (c_a), veh/h	0	880	0	488	0	880	0	488
Upstream Filter (I)	0.00	1.00	0.00	0.54	0.00	0.44	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.0	0.0	23.5	0.0	0.0	0.0	26.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.1	0.0	1.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.2	0.0	23.7	0.0	0.1	0.0	27.8
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	2.2	0.0	0.0	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.73
%ile Back of Q (95%), veh/ln	0.0	1.2	0.0	4.0	0.0	0.0	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	1.08	0.00	0.01	0.00	2.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1121	0	0	1117	9	590	66	236	5	0	21
Future Volume (veh/h)	22	1121	0	0	1117	9	590	66	236	5	0	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1218	0	0	1214	10	485	290	257	5	0	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	189	1775	0	0	1775	787	477	244	216	16	0	73
Arrive On Green	1.00	1.00	0.00	0.00	0.50	0.50	0.27	0.27	0.27	0.06	0.00	0.06
Sat Flow, veh/h	456	3647	0	0	3647	1576	1781	911	807	284	0	1307
Grp Volume(v), veh/h	24	1218	0	0	1214	10	485	0	547	28	0	0
Grp Sat Flow(s),veh/h/ln	456	1777	0	0	1777	1576	1781	0	1718	1591	0	0
Q Serve(g_s), s	2.8	0.1	0.0	0.0	23.4	0.3	24.1	0.0	24.1	1.5	0.0	0.0
Cycle Q Clear(g_c), s	26.1	0.1	0.0	0.0	23.4	0.3	24.1	0.0	24.1	1.5	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.47	0.18		0.82
Lane Grp Cap(c), veh/h	189	1775	0	0	1775	787	477	0	460	89	0	0
V/C Ratio(X)	0.13	0.69	0.00	0.00	0.68	0.01	1.02	0.00	1.19	0.31	0.00	0.00
Avail Cap(c_a), veh/h	189	1775	0	0	1775	787	477	0	460	177	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.00	0.00	0.17	0.17	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.8	0.0	0.0	0.0	17.1	11.3	33.0	0.0	33.0	40.8	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.7	0.0	0.0	0.4	0.0	45.5	0.0	105.1	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	0.8	0.0	0.0	10.5	0.2	22.5	0.0	33.8	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.9	1.7	0.0	0.0	17.5	11.3	78.5	0.0	138.1	42.8	0.0	0.0
LnGrp LOS	A	A	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1242			1224			1032			28	
Approach Delay, s/veh		1.9			17.4			110.1			42.8	
Approach LOS		A			B			F			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.1	10.4	50.1	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	28.1	3.5	25.4	26.1
Green Ext Time (p_c), s	8.8	0.0	10.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1121	0	0	1117	9	590	66	236	5	0	21
Future Volume (veh/h)	22	1121	0	0	1117	9	590	66	236	5	0	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	1218	0	0	1214	10	485	290	257	5	0	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	189	1775	0	0	1775	787	477	244	216	16	0	73
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.50	0.50	0.27	0.27	0.27	0.06	0.00	0.06
Unsig. Movement Delay												
Ln Grp Delay, s/veh	7.9	1.7	0.0	0.0	17.5	11.3	78.5	0.0	138.1	42.8	0.0	0.0
Ln Grp LOS	A	A	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1242			1224			1032			28	
Approach Delay, s/veh		1.9			17.4			110.1			42.8	
Approach LOS		A			B			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		50.1	29.5	10.4		50.1		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.9	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		28.1	26.1	3.5		25.4		
Green Ext Time (g_e), s		8.8	0.0	0.0		10.3		
Prob of Phs Call (p_c)		1.00	1.00	0.55		1.00		
Prob of Max Out (p_x)		0.00	1.00	0.46		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		456	1781	284		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	911	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	807	1307		1576		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	24	485	28	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	456	1781	1591	0	0	0	0
Q Serve Time (g_s), s	0.0	2.8	24.1	1.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	26.1	24.1	1.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	456	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	21.6	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	45.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.18	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	189	477	89	0	0	0	0
V/C Ratio (X)	0.00	0.13	1.02	0.31	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	189	477	177	0	0	0	0
Upstream Filter (I)	0.00	0.79	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.8	33.0	40.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	45.5	2.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.9	78.5	42.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	9.7	0.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	6.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.43	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.4	22.5	1.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	1.73	0.07	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1218	0	0	0	1214	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.1	0.0	0.0	0.0	23.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.0	0.0	23.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1775	0	0	0	1775	0	0
V/C Ratio (X)	0.00	0.69	0.00	0.00	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	1775	0	0	0	1775	0	0
Upstream Filter (I)	0.00	0.79	0.00	0.00	0.00	0.17	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	17.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.7	0.0	0.0	0.0	17.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.00	0.00	1.23	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.8	0.0	0.0	0.0	10.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	547	0	0	10	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1718	0	0	1576	0	0
Q Serve Time (g_s), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.47	0.82	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	460	0	0	787	0	0
V/C Ratio (X)	0.00	0.00	1.19	0.00	0.00	0.01	0.00	0.00
Avail Cap (c_a), veh/h	0	0	460	0	0	787	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.17	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.0	0.0	0.0	11.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	105.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	138.1	0.0	0.0	11.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.4	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.48	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	33.8	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.60	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	21.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	649	296	195	667	107	290	863	91	56	568	65
Future Volume (veh/h)	265	649	296	195	667	107	290	863	91	56	568	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.90	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	288	705	322	212	725	116	315	938	99	61	617	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	550	653	216	822	132	383	691	528	163	963	111
Arrive On Green	0.11	0.29	0.29	0.09	0.27	0.27	0.13	0.37	0.37	0.06	0.30	0.30
Sat Flow, veh/h	1781	1870	1548	1781	3055	489	1781	1870	1429	1781	3183	365
Grp Volume(v), veh/h	288	705	322	212	421	420	315	938	99	61	344	344
Grp Sat Flow(s),veh/h/ln	1781	1870	1548	1781	1777	1767	1781	1870	1429	1781	1777	1771
Q Serve(g_s), s	13.5	35.3	18.3	10.4	27.3	27.3	14.3	44.3	5.6	2.7	20.1	20.2
Cycle Q Clear(g_c), s	13.5	35.3	18.3	10.4	27.3	27.3	14.3	44.3	5.6	2.7	20.1	20.2
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	288	550	653	216	478	476	383	691	528	163	537	536
V/C Ratio(X)	1.00	1.28	0.49	0.98	0.88	0.88	0.82	1.36	0.19	0.37	0.64	0.64
Avail Cap(c_a), veh/h	288	550	653	216	478	476	383	691	528	208	537	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.45	0.45	0.45	0.46	0.46	0.46	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	42.4	25.6	32.5	42.0	42.0	26.1	37.8	25.6	30.9	36.2	36.2
Incr Delay (d2), s/veh	35.9	133.0	1.2	36.8	10.7	10.8	13.5	170.0	0.8	1.4	5.7	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.1	49.7	9.7	9.4	17.0	17.0	11.8	77.1	3.6	2.2	14.5	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.5	175.3	26.8	69.3	52.7	52.8	39.5	207.8	26.4	32.3	41.9	42.1
LnGrp LOS	F	F	C	E	D	D	D	F	C	C	D	D
Approach Vol, veh/h		1315			1053			1352			749	
Approach Delay, s/veh		115.6			56.1			155.3			41.2	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	41.0	21.0	42.0	19.0	38.0	13.0	50.0
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 11	* 35	15.0	* 36	* 14	* 32	10.0	* 41
Max Q Clear Time (g_c+I1), s	12.4	37.3	16.3	22.2	15.5	29.3	4.7	46.3
Green Ext Time (p_c), s	0.0	0.0	0.0	3.6	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	101.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	649	296	195	667	107	290	863	91	56	568	65
Future Volume (veh/h)	265	649	296	195	667	107	290	863	91	56	568	65
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.97	0.99		0.90	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	288	705	322	212	725	116	315	938	99	61	617	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	288	550	653	216	822	132	383	691	528	163	963	111
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.29	0.29	0.09	0.27	0.27	0.13	0.37	0.37	0.06	0.30	0.30
Unsig. Movement Delay												
Ln Grp Delay, s/veh	68.5	175.3	26.8	69.3	52.7	52.8	39.5	207.8	26.4	32.3	41.9	42.1
Ln Grp LOS	F	F	C	E	D	D	D	F	C	C	D	D
Approach Vol, veh/h		1315			1053			1352			749	
Approach Delay, s/veh		115.6			56.1			155.3			41.2	
Approach LOS		F			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	16.0	41.0	21.0	42.0	19.0	38.0	13.0	50.0
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 11	* 35	15.0	* 36	* 14	* 32	10.0	* 41
Max Allow Headway (MAH), s	3.7	4.7	3.8	5.2	3.7	5.1	3.8	5.0
Max Q Clear (g_c+l1), s	12.4	37.3	16.3	22.2	15.5	29.3	4.7	46.3
Green Ext Time (g_e), s	0.0	0.0	0.0	3.6	0.0	1.4	0.0	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.87	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.15	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1870	3183	3055	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1548	365	489	1429

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	212	0	315	0	288	0	61	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	10.4	0.0	14.3	0.0	13.5	0.0	2.7	0.0
Cycle Q Clear Time (g_c), s	10.4	0.0	14.3	0.0	13.5	0.0	2.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	549	0	747	0	654	0	544	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	32.3	0.0	38.3	0.0	32.3	0.0	36.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	16.1	0.0	5.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	16.1	0.0	5.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	216	0	383	0	288	0	163	0
V/C Ratio (X)	0.98	0.00	0.82	0.00	1.00	0.00	0.37	0.00
Avail Cap (c_a), veh/h	216	0	383	0	288	0	208	0
Upstream Filter (I)	0.46	0.00	1.00	0.00	0.45	0.00	1.00	0.00
Uniform Delay (d1), s/veh	32.5	0.0	26.1	0.0	32.6	0.0	30.9	0.0
Incr Delay (d2), s/veh	36.8	0.0	13.5	0.0	35.9	0.0	1.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.3	0.0	39.5	0.0	68.5	0.0	32.3	0.0
1st-Term Q (Q1), veh/ln	4.3	0.0	5.9	0.0	5.9	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	2.2	0.0	1.4	0.0	2.9	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.43	0.00	1.61	0.00	1.37	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	9.4	0.0	11.8	0.0	12.1	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	1.49	0.00	4.15	0.00	1.10	0.00	0.43	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	705	0	344	0	421	0	938
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	35.3	0.0	20.1	0.0	27.3	0.0	44.3
Cycle Q Clear Time (g_c), s	0.0	35.3	0.0	20.1	0.0	27.3	0.0	44.3
Lane Grp Cap (c), veh/h	0	550	0	537	0	478	0	691
V/C Ratio (X)	0.00	1.28	0.00	0.64	0.00	0.88	0.00	1.36
Avail Cap (c_a), veh/h	0	550	0	537	0	478	0	691
Upstream Filter (I)	0.00	0.45	0.00	1.00	0.00	0.46	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.4	0.0	36.2	0.0	42.0	0.0	37.8
Incr Delay (d2), s/veh	0.0	133.0	0.0	5.7	0.0	10.7	0.0	170.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	175.3	0.0	41.9	0.0	52.7	0.0	207.8
1st-Term Q (Q1), veh/ln	0.0	15.7	0.0	8.6	0.0	11.6	0.0	19.6
2nd-Term Q (Q2), veh/ln	0.0	20.3	0.0	0.9	0.0	1.4	0.0	32.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.38	0.00	1.53	0.00	1.31	0.00	1.48
%ile Back of Q (95%), veh/ln	0.0	49.7	0.0	14.5	0.0	17.0	0.0	77.1
%ile Storage Ratio (RQ%)	0.00	0.57	0.00	2.87	0.00	0.17	0.00	27.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	38.7	0.0	0.0	0.0	0.0	0.0	61.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	322	0	344	0	420	0	99
Grp Sat Flow (s), veh/h/ln	0	1548	0	1771	0	1767	0	1429
Q Serve Time (g_s), s	0.0	18.3	0.0	20.2	0.0	27.3	0.0	5.6
Cycle Q Clear Time (g_c), s	0.0	18.3	0.0	20.2	0.0	27.3	0.0	5.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.21	0.00	0.28	0.00	1.00
Lane Grp Cap (c), veh/h	0	653	0	536	0	476	0	528
V/C Ratio (X)	0.00	0.49	0.00	0.64	0.00	0.88	0.00	0.19
Avail Cap (c_a), veh/h	0	653	0	536	0	476	0	528
Upstream Filter (I)	0.00	0.45	0.00	1.00	0.00	0.46	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.6	0.0	36.2	0.0	42.0	0.0	25.6
Incr Delay (d2), s/veh	0.0	1.2	0.0	5.8	0.0	10.8	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.8	0.0	42.1	0.0	52.8	0.0	26.4
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	8.6	0.0	11.6	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.9	0.0	1.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.42	0.00	1.53	0.00	1.31	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.7	0.0	14.5	0.0	17.0	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	2.88	0.00	0.17	0.00	1.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	101.1
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	573	73	88	622	82	117	882	159	90	690	114
Future Volume (veh/h)	103	573	73	88	622	82	117	882	159	90	690	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	112	623	79	96	676	89	127	959	173	98	750	124
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	860	708	222	860	708	222	1481	636	180	1264	209
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	702	1870	1540	744	1870	1540	631	3554	1526	496	3033	501
Grp Volume(v), veh/h	112	623	79	96	676	89	127	959	173	98	439	435
Grp Sat Flow(s),veh/h/ln	702	1870	1540	744	1870	1540	631	1777	1526	496	1777	1757
Q Serve(g_s), s	13.9	24.3	2.6	10.8	27.5	3.0	17.6	19.4	6.7	17.7	17.2	17.3
Cycle Q Clear(g_c), s	41.4	24.3	2.6	35.1	27.5	3.0	34.8	19.4	6.7	37.1	17.2	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	188	860	708	222	860	708	222	1481	636	180	740	732
V/C Ratio(X)	0.59	0.72	0.11	0.43	0.79	0.13	0.57	0.65	0.27	0.55	0.59	0.59
Avail Cap(c_a), veh/h	188	860	708	222	860	708	222	1481	636	180	740	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	19.7	13.8	33.9	20.5	13.9	33.8	21.0	17.3	35.8	20.3	20.3
Incr Delay (d2), s/veh	1.3	0.5	0.0	6.1	7.1	0.4	2.4	0.7	0.2	3.4	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.2	11.1	1.3	4.0	18.3	1.9	4.9	11.2	4.0	4.0	11.1	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	20.2	13.9	39.9	27.7	14.3	36.2	21.6	17.4	39.2	21.6	21.6
LnGrp LOS	D	C	B	D	C	B	D	C	B	D	C	C
Approach Vol, veh/h		814			861			1259			972	
Approach Delay, s/veh		22.2			27.7			22.5			23.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	47.0	43.0	47.0	43.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	43.4	36.8	37.1	39.1
Green Ext Time (p_c), s	0.0	0.5	2.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	573	73	88	622	82	117	882	159	90	690	114
Future Volume (veh/h)	103	573	73	88	622	82	117	882	159	90	690	114
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	112	623	79	96	676	89	127	959	173	98	750	124
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	188	860	708	222	860	708	222	1481	636	180	1264	209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.42	0.42	0.42	0.42	0.42	0.42
Unsig. Movement Delay												
Ln Grp Delay, s/veh	39.5	20.2	13.9	39.9	27.7	14.3	36.2	21.6	17.4	39.2	21.6	21.6
Ln Grp LOS	D	C	B	D	C	B	D	C	B	D	C	C
Approach Vol, veh/h		814			861			1259			972	
Approach Delay, s/veh		22.2			27.7			22.5			23.4	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		47.0		43.0		47.0		43.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.1		5.1		5.0		5.4
Max Q Clear (g_c+I1), s		43.4		36.8		37.1		39.1
Green Ext Time (g_e), s		0.0		0.5		2.1		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		702		631		744		496
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		3033
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1540		1526		1540		501
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	112	0	127	0	96	0	98
Grp Sat Flow (s), veh/h/ln	0	702	0	631	0	744	0	496
Q Serve Time (g_s), s	0.0	13.9	0.0	17.6	0.0	10.8	0.0	17.7
Cycle Q Clear Time (g_c), s	0.0	41.4	0.0	34.8	0.0	35.1	0.0	37.1
Perm LT Sat Flow (s_l), veh/h/ln	0	702	0	631	0	744	0	496
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.4	0.0	37.5	0.0	41.4	0.0	37.5
Perm LT Serve Time (g_u), s	0.0	13.9	0.0	20.2	0.0	17.1	0.0	18.1
Perm LT Q Serve Time (g_ps), s	0.0	13.9	0.0	17.6	0.0	10.8	0.0	17.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	188	0	222	0	222	0	180
V/C Ratio (X)	0.00	0.59	0.00	0.57	0.00	0.43	0.00	0.55
Avail Cap (c_a), veh/h	0	188	0	222	0	222	0	180
Upstream Filter (I)	0.00	0.09	0.00	0.68	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	38.3	0.0	33.8	0.0	33.9	0.0	35.8
Incr Delay (d2), s/veh	0.0	1.3	0.0	2.4	0.0	6.1	0.0	3.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.5	0.0	36.2	0.0	39.9	0.0	39.2
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	2.6	0.0	1.9	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.32	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.2	0.0	4.9	0.0	4.0	0.0	4.0
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	1.76	0.00	0.76	0.00	1.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	623	0	959	0	676	0	439
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	24.3	0.0	19.4	0.0	27.5	0.0	17.2
Cycle Q Clear Time (g_c), s	0.0	24.3	0.0	19.4	0.0	27.5	0.0	17.2
Lane Grp Cap (c), veh/h	0	860	0	1481	0	860	0	740
V/C Ratio (X)	0.00	0.72	0.00	0.65	0.00	0.79	0.00	0.59
Avail Cap (c_a), veh/h	0	860	0	1481	0	860	0	740
Upstream Filter (I)	0.00	0.09	0.00	0.68	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.7	0.0	21.0	0.0	20.5	0.0	20.3
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.7	0.0	7.1	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.2	0.0	21.6	0.0	27.7	0.0	21.6
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	7.4	0.0	10.8	0.0	6.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	1.7	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.16	0.00	1.49	0.00	1.46	0.00	1.63
%ile Back of Q (95%), veh/ln	0.0	11.1	0.0	11.2	0.0	18.3	0.0	11.1
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.23	0.00	1.29	0.00	0.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	79	0	173	0	89	0	435
Grp Sat Flow (s), veh/h/ln	0	1540	0	1526	0	1540	0	1757
Q Serve Time (g_s), s	0.0	2.6	0.0	6.7	0.0	3.0	0.0	17.3
Cycle Q Clear Time (g_c), s	0.0	2.6	0.0	6.7	0.0	3.0	0.0	17.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.29
Lane Grp Cap (c), veh/h	0	708	0	636	0	708	0	732
V/C Ratio (X)	0.00	0.11	0.00	0.27	0.00	0.13	0.00	0.59
Avail Cap (c_a), veh/h	0	708	0	636	0	708	0	732
Upstream Filter (I)	0.00	0.09	0.00	0.68	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.8	0.0	17.3	0.0	13.9	0.0	20.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.4	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.9	0.0	17.4	0.0	14.3	0.0	21.6
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	2.2	0.0	1.0	0.0	6.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	0.00	1.80	0.00	1.80	0.00	1.63
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	4.0	0.0	1.9	0.0	11.0
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.92	0.00	0.47	0.00	0.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.8
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	34	26	218	286	49
Future Vol, veh/h	12	34	26	218	286	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	37	28	237	311	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	513	338	364	0	-	0
Stage 1	338	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	506	703	1193	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	494	703	1193	-	-	-
Mov Cap-2 Maneuver	570	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1193	-	663	-	-
HCM Lane V/C Ratio	0.024	-	0.075	-	-
HCM Control Delay (s)	8.1	-	10.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	10	80	152	19	297
Future Vol, veh/h	38	10	80	152	19	297
Conflicting Peds, #/hr	12	5	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	11	87	165	21	323

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	484	112	0	0	272	0
Stage 1	107	-	-	-	-	-
Stage 2	377	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	542	941	-	-	1291	-
Stage 1	917	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	519	922	-	-	1271	-
Mov Cap-2 Maneuver	575	-	-	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	676	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	624	1271	-
HCM Lane V/C Ratio	-	-	0.084	0.016	-
HCM Control Delay (s)	-	-	11.3	7.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	48	23	42	95	300	23	755	42	161	546	19
Future Volume (veh/h)	124	48	23	42	95	300	23	755	42	161	546	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.97		0.97	0.99		0.90	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	52	25	46	103	326	25	821	46	175	593	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	457	220	542	149	472	391	1752	706	261	1718	61
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.16	0.16	0.16	0.49	0.49	0.49
Sat Flow, veh/h	957	1180	567	1288	385	1220	799	3554	1432	637	3486	123
Grp Volume(v), veh/h	135	0	77	46	0	429	25	821	46	175	302	312
Grp Sat Flow(s),veh/h/ln	957	0	1747	1288	0	1605	799	1777	1432	637	1777	1833
Q Serve(g_s), s	12.4	0.0	2.5	2.1	0.0	20.1	2.5	18.8	2.4	24.4	9.3	9.4
Cycle Q Clear(g_c), s	32.5	0.0	2.5	4.7	0.0	20.1	11.8	18.8	2.4	43.3	9.3	9.4
Prop In Lane	1.00		0.32	1.00		0.76	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	236	0	676	542	0	621	391	1752	706	261	876	903
V/C Ratio(X)	0.57	0.00	0.11	0.08	0.00	0.69	0.06	0.47	0.07	0.67	0.34	0.35
Avail Cap(c_a), veh/h	272	0	741	590	0	681	391	1752	706	261	876	903
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	0.0	17.7	19.2	0.0	23.1	28.2	27.0	20.1	31.8	13.9	13.9
Incr Delay (d2), s/veh	2.2	0.0	0.1	0.1	0.0	2.7	0.3	0.9	0.2	13.0	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.4	0.0	1.9	1.2	0.0	12.5	1.0	13.9	1.4	8.0	6.7	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	0.0	17.8	19.3	0.0	25.7	28.5	27.9	20.3	44.8	15.0	15.0
LnGrp LOS	D	A	B	B	A	C	C	C	C	D	B	B
Approach Vol, veh/h		212			475			892			789	
Approach Delay, s/veh		31.2			25.1			27.5			21.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	49.4	40.6	49.4	40.6
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	45.3	34.5	20.8	22.1
Green Ext Time (p_c), s	0.0	0.3	5.9	3.0

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	48	23	42	95	300	23	755	42	161	546	19
Future Volume (veh/h)	124	48	23	42	95	300	23	755	42	161	546	19
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	0.97		0.97	0.99		0.90	1.00		0.90
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	52	25	46	103	326	25	821	46	175	593	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	236	457	220	542	149	472	391	1752	706	261	1718	61
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.16	0.16	0.16	0.49	0.49	0.49
Unsig. Movement Delay												
Ln Grp Delay, s/veh	38.8	0.0	17.8	19.3	0.0	25.7	28.5	27.9	20.3	44.8	15.0	15.0
Ln Grp LOS	D	A	B	B	A	C	C	C	C	D	B	B
Approach Vol, veh/h		212			475			892			789	
Approach Delay, s/veh		31.2			25.1			27.5			21.6	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		49.4		40.6		49.4		40.6
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.5		5.2		5.1		5.5
Max Q Clear (g_c+I1), s		45.3		34.5		20.8		22.1
Green Ext Time (g_e), s		0.0		0.3		5.9		3.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.08
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		637		957		799		1288
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3486		1180		3554		385
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		123		567		1432		1220
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	175	0	135	0	25	0	46
Grp Sat Flow (s), veh/h/ln	0	637	0	957	0	799	0	1288
Q Serve Time (g_s), s	0.0	24.4	0.0	12.4	0.0	2.5	0.0	2.1
Cycle Q Clear Time (g_c), s	0.0	43.3	0.0	32.5	0.0	11.8	0.0	4.7
Perm LT Sat Flow (s_l), veh/h/ln	0	637	0	957	0	799	0	1288
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	44.4	0.0	34.8	0.0	44.4	0.0	34.8
Perm LT Serve Time (g_u), s	0.0	25.5	0.0	14.7	0.0	35.0	0.0	32.3
Perm LT Q Serve Time (g_ps), s	0.0	24.4	0.0	12.4	0.0	2.5	0.0	2.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	261	0	236	0	391	0	542
V/C Ratio (X)	0.00	0.67	0.00	0.57	0.00	0.06	0.00	0.08
Avail Cap (c_a), veh/h	0	261	0	272	0	391	0	590
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.97	0.00	1.00
Uniform Delay (d1), s/veh	0.0	31.8	0.0	36.7	0.0	28.2	0.0	19.2
Incr Delay (d2), s/veh	0.0	13.0	0.0	2.2	0.0	0.3	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.8	0.0	38.8	0.0	28.5	0.0	19.3
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	2.9	0.0	0.5	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	5.4	0.0	1.0	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	1.35	0.00	3.44	0.00	0.26	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	302	0	0	0	821	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	9.3	0.0	0.0	0.0	18.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.3	0.0	0.0	0.0	18.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	876	0	0	0	1752	0	0
V/C Ratio (X)	0.00	0.34	0.00	0.00	0.00	0.47	0.00	0.00
Avail Cap (c_a), veh/h	0	876	0	0	0	1752	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.97	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.9	0.0	0.0	0.0	27.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.0	0.0	0.0	0.0	27.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	0.0	0.0	8.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.54	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.7	0.0	0.0	0.0	13.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.00	0.00	1.15	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	312	0	77	0	46	0	429
Grp Sat Flow (s), veh/h/ln	0	1833	0	1747	0	1432	0	1605
Q Serve Time (g_s), s	0.0	9.4	0.0	2.5	0.0	2.4	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	9.4	0.0	2.5	0.0	2.4	0.0	20.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.07	0.00	0.32	0.00	1.00	0.00	0.76
Lane Grp Cap (c), veh/h	0	903	0	676	0	706	0	621
V/C Ratio (X)	0.00	0.35	0.00	0.11	0.00	0.07	0.00	0.69
Avail Cap (c_a), veh/h	0	903	0	741	0	706	0	681
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.97	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.9	0.0	17.7	0.0	20.1	0.0	23.1
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.1	0.0	0.2	0.0	2.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.0	0.0	17.8	0.0	20.3	0.0	25.7
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	1.0	0.0	0.8	0.0	7.4
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.58
%ile Back of Q (95%), veh/ln	0.0	7.0	0.0	1.9	0.0	1.4	0.0	12.5
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.17	0.00	0.37	0.00	0.94
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	53	187	378	4	9	47
Future Vol, veh/h	53	187	378	4	9	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	203	411	4	10	51
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	9.5	12.2	8.5
HCM LOS	A	B	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	16%
Vol Thru, %	0%	100%	99%	0%
Vol Right, %	0%	0%	1%	84%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	53	187	382	56
LT Vol	53	0	0	9
Through Vol	0	187	378	0
RT Vol	0	0	4	47
Lane Flow Rate	58	203	415	61
Geometry Grp	7	7	5	2
Degree of Util (X)	0.088	0.281	0.515	0.084
Departure Headway (Hd)	5.486	4.983	4.468	4.963
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	654	722	810	721
Service Time	3.213	2.709	2.49	3.003
HCM Lane V/C Ratio	0.089	0.281	0.512	0.085
HCM Control Delay	8.7	9.7	12.2	8.5
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.3	1.2	3	0.3

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	85	138	51	7	25
Future Vol, veh/h	54	85	138	51	7	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	92	150	55	8	27
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.2	8.4	7.5
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	22%
Vol Thru, %	0%	100%	73%	0%
Vol Right, %	0%	0%	27%	78%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	54	85	189	32
LT Vol	54	0	0	7
Through Vol	0	85	138	0
RT Vol	0	0	51	25
Lane Flow Rate	59	92	205	35
Geometry Grp	7	7	5	2
Degree of Util (X)	0.085	0.121	0.231	0.042
Departure Headway (Hd)	5.199	4.698	4.042	4.301
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	687	759	877	838
Service Time	2.95	2.449	2.119	2.301
HCM Lane V/C Ratio	0.086	0.121	0.234	0.042
HCM Control Delay	8.4	8.1	8.4	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.9	0.1

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	18	71	42	40	1	133	8	16	3	19	35
Future Vol, veh/h	2	18	71	42	40	1	133	8	16	3	19	35
Conflicting Peds, #/hr	23	0	35	35	0	23	12	0	26	26	0	12
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	20	77	46	43	1	145	9	17	3	21	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	67	0	0	132	0	0	236	218	81	261	295	79
Stage 1	-	-	-	-	-	-	59	59	-	159	159	-
Stage 2	-	-	-	-	-	-	177	159	-	102	136	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1535	-	-	1453	-	-	718	680	979	692	616	981
Stage 1	-	-	-	-	-	-	953	846	-	843	766	-
Stage 2	-	-	-	-	-	-	825	766	-	904	784	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1507	-	-	1413	-	-	629	627	932	630	568	954
Mov Cap-2 Maneuver	-	-	-	-	-	-	629	627	-	630	568	-
Stage 1	-	-	-	-	-	-	925	821	-	827	728	-
Stage 2	-	-	-	-	-	-	737	728	-	859	761	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.9	12	10.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	629	932	1507	-	-	1413	-	-	770
HCM Lane V/C Ratio	0.23	0.019	0.001	-	-	0.032	-	-	0.076
HCM Control Delay (s)	12.4	8.9	7.4	-	-	7.6	-	-	10.1
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.9	0.1	0	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	18	141	57	28	144
Future Vol, veh/h	35	18	141	57	28	144
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	20	153	62	30	157

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	401	184	0	0	215	0
Stage 1	184	-	-	-	-	-
Stage 2	217	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	605	858	-	-	1355	-
Stage 1	848	-	-	-	-	-
Stage 2	819	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	592	858	-	-	1355	-
Mov Cap-2 Maneuver	645	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	704	1355	-
HCM Lane V/C Ratio	-	-	0.082	0.022	-
HCM Control Delay (s)	-	-	10.6	7.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	412	107	30	379	51	89	494	55	42	315	52
Future Volume (veh/h)	114	412	107	30	379	51	89	494	55	42	315	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	448	116	33	412	55	97	537	60	46	342	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	1586	693	50	1383	603	122	594	497	59	529	441
Arrive On Green	0.08	0.45	0.45	0.03	0.39	0.39	0.07	0.32	0.32	0.03	0.28	0.28
Sat Flow, veh/h	1781	3554	1553	1781	3554	1548	1781	1870	1564	1781	1870	1562
Grp Volume(v), veh/h	124	448	116	33	412	55	97	537	60	46	342	57
Grp Sat Flow(s),veh/h/ln	1781	1777	1553	1781	1777	1548	1781	1870	1564	1781	1870	1562
Q Serve(g_s), s	8.2	9.6	5.4	2.2	9.6	2.7	6.4	33.0	3.3	3.1	19.3	3.3
Cycle Q Clear(g_c), s	8.2	9.6	5.4	2.2	9.6	2.7	6.4	33.0	3.3	3.1	19.3	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	1586	693	50	1383	603	122	594	497	59	529	441
V/C Ratio(X)	0.82	0.28	0.17	0.67	0.30	0.09	0.80	0.90	0.12	0.78	0.65	0.13
Avail Cap(c_a), veh/h	238	1586	693	102	1383	603	208	779	652	134	701	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	54.0	21.1	19.9	57.8	25.3	23.2	55.1	39.2	29.0	57.6	37.8	32.0
Incr Delay (d2), s/veh	11.9	0.4	0.5	14.3	0.6	0.3	11.2	11.5	0.1	16.9	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.4	7.2	3.6	2.1	7.3	1.9	5.8	23.4	2.2	3.0	13.4	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.9	21.5	20.4	72.1	25.9	23.5	66.3	50.7	29.2	74.5	38.9	32.2
LnGrp LOS	E	C	C	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		688			500			694			445	
Approach Delay, s/veh		29.3			28.7			51.0			41.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	51.7	13.2	38.9	9.3	58.5	9.0	43.1
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	16.0	* 24	14.0	* 45	6.9	* 33	9.0	* 50
Max Q Clear Time (g_c+I1), s	10.2	11.6	8.4	21.3	4.2	11.6	5.1	35.0
Green Ext Time (p_c), s	0.1	2.1	0.1	2.2	0.0	3.1	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	412	107	30	379	51	89	494	55	42	315	52
Future Volume (veh/h)	114	412	107	30	379	51	89	494	55	42	315	52
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	448	116	33	412	55	97	537	60	46	342	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	151	1586	693	50	1383	603	122	594	497	59	529	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.45	0.45	0.03	0.39	0.39	0.07	0.32	0.32	0.03	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	65.9	21.5	20.4	72.1	25.9	23.5	66.3	50.7	29.2	74.5	38.9	32.2
Ln Grp LOS	E	C	C	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		688			500			694			445	
Approach Delay, s/veh		29.3			28.7			51.0			41.7	
Approach LOS		C			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.2	51.7	13.2	38.9	9.3	58.5	9.0	43.1
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	16.0	* 24	14.0	* 45	6.9	* 33	9.0	* 50
Max Allow Headway (MAH), s	3.7	4.9	3.8	5.0	3.7	4.8	3.8	5.0
Max Q Clear (g_c+l1), s	10.2	11.6	8.4	21.3	4.2	11.6	5.1	35.0
Green Ext Time (g_e), s	0.1	2.1	0.1	2.2	0.0	3.1	0.0	3.1
Prob of Phs Call (p_c)	0.98	1.00	0.96	1.00	0.67	1.00	0.78	1.00
Prob of Max Out (p_x)	0.13	0.00	0.14	0.00	1.00	0.00	0.80	0.11

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	1870	3554	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1548	1562	1553	1564

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	124	0	97	0	33	0	46	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	8.2	0.0	6.4	0.0	2.2	0.0	3.1	0.0
Cycle Q Clear Time (g_c), s	8.2	0.0	6.4	0.0	2.2	0.0	3.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	151	0	122	0	50	0	59	0
V/C Ratio (X)	0.82	0.00	0.80	0.00	0.67	0.00	0.78	0.00
Avail Cap (c_a), veh/h	238	0	208	0	102	0	134	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.87	0.00
Uniform Delay (d1), s/veh	54.0	0.0	55.1	0.0	57.8	0.0	57.6	0.0
Incr Delay (d2), s/veh	11.9	0.0	11.2	0.0	14.3	0.0	16.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	65.9	0.0	66.3	0.0	72.1	0.0	74.5	0.0
1st-Term Q (Q1), veh/ln	3.6	0.0	2.9	0.0	1.0	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.4	0.0	0.2	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.4	0.0	5.8	0.0	2.1	0.0	3.0	0.0
%ile Storage Ratio (RQ%)	0.88	0.00	1.19	0.00	0.27	0.00	0.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	412	0	342	0	448	0	537
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	9.6	0.0	19.3	0.0	9.6	0.0	33.0
Cycle Q Clear Time (g_c), s	0.0	9.6	0.0	19.3	0.0	9.6	0.0	33.0
Lane Grp Cap (c), veh/h	0	1383	0	529	0	1586	0	594
V/C Ratio (X)	0.00	0.30	0.00	0.65	0.00	0.28	0.00	0.90
Avail Cap (c_a), veh/h	0	1383	0	701	0	1586	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.87	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.3	0.0	37.8	0.0	21.1	0.0	39.2
Incr Delay (d2), s/veh	0.0	0.6	0.0	1.2	0.0	0.4	0.0	11.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.9	0.0	38.9	0.0	21.5	0.0	50.7
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	8.7	0.0	3.9	0.0	14.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	0.1	0.0	1.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.51	0.00	1.80	0.00	1.40
%ile Back of Q (95%), veh/ln	0.0	7.3	0.0	13.4	0.0	7.2	0.0	23.4
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.28	0.00	0.22	0.00	1.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	55	0	57	0	116	0	60
Grp Sat Flow (s), veh/h/ln	0	1548	0	1562	0	1553	0	1564
Q Serve Time (g_s), s	0.0	2.7	0.0	3.3	0.0	5.4	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	3.3	0.0	5.4	0.0	3.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	603	0	441	0	693	0	497
V/C Ratio (X)	0.00	0.09	0.00	0.13	0.00	0.17	0.00	0.12
Avail Cap (c_a), veh/h	0	603	0	586	0	693	0	652
Upstream Filter (I)	0.00	1.00	0.00	0.87	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.2	0.0	32.0	0.0	19.9	0.0	29.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.0	0.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.5	0.0	32.2	0.0	20.4	0.0	29.2
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	1.2	0.0	1.9	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.9	0.0	2.2	0.0	3.6	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.52	0.00	0.92	0.00	0.32
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	38.0
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	14	70	22	222	219	0	0	247	71
Future Volume (veh/h)	0	0	0	14	70	22	222	219	0	0	247	71
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.90	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				15	76	24	241	238	0	0	268	77
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				65	350	163	821	2850	0	0	967	278
Arrive On Green				0.11	0.11	0.11	0.11	1.00	0.00	0.00	0.69	0.69
Sat Flow, veh/h				567	3052	1423	1781	3647	0	0	1394	400
Grp Volume(v), veh/h				49	42	24	241	238	0	0	0	345
Grp Sat Flow(s),veh/h/ln				1842	1777	1423	1781	1777	0	0	0	1794
Q Serve(g_s), s				2.9	2.6	1.8	4.5	0.0	0.0	0.0	0.0	8.8
Cycle Q Clear(g_c), s				2.9	2.6	1.8	4.5	0.0	0.0	0.0	0.0	8.8
Prop In Lane				0.31		1.00	1.00		0.00	0.00		0.22
Lane Grp Cap(c), veh/h				211	204	163	821	2850	0	0	0	1244
V/C Ratio(X)				0.23	0.21	0.15	0.29	0.08	0.00	0.00	0.00	0.28
Avail Cap(c_a), veh/h				322	311	249	1103	2850	0	0	0	1244
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.98	0.98	0.98	0.99	0.99	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				48.3	48.2	47.8	3.9	0.0	0.0	0.0	0.0	7.0
Incr Delay (d2), s/veh				0.5	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				2.4	2.1	1.2	2.1	0.0	0.0	0.0	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				48.8	48.7	48.2	4.1	0.1	0.0	0.0	0.0	7.5
LnGrp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					115			479			345	
Approach Delay, s/veh					48.6			2.1			7.5	
Approach LOS					D			A			A	

Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	13.0	88.2		18.8		101.2	
Change Period (Y+Rc), s	* 5	* 5		* 5		* 5	
Max Green Setting (Gmax), s	* 27	* 57		* 21		* 89	
Max Q Clear Time (g_c+I1), s	6.5	10.8		4.9		2.0	
Green Ext Time (p_c), s	0.6	3.4		0.4		2.4	

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	14	70	22	222	219	0	0	247	71
Future Volume (veh/h)	0	0	0	14	70	22	222	219	0	0	247	71
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.90	1.00		1.00	1.00		0.99
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				15	76	24	241	238	0	0	268	77
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Opposing Right Turn Influence				Yes			Yes			No		
Cap, veh/h				65	350	163	821	2850	0	0	967	278
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Prop Arrive On Green				0.11	0.11	0.11	0.11	1.00	0.00	0.00	0.69	0.69
Unsig. Movement Delay												
Ln Grp Delay, s/veh				48.8	48.7	48.2	4.1	0.1	0.0	0.0	0.0	7.5
Ln Grp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					115			479			345	
Approach Delay, s/veh					48.6			2.1			7.5	
Approach LOS					D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	1.2	8.0		11.0		4.0		
Phs Duration (G+Y+Rc), s	13.0	88.2		18.8		101.2		
Change Period (Y+Rc), s	* 5	* 5		* 5		* 5		
Max Green (Gmax), s	* 27	* 57		* 21		* 89		
Max Allow Headway (MAH), s	3.8	6.2		4.9		6.1		
Max Q Clear (g_c+l1), s	6.5	10.8		4.9		2.0		
Green Ext Time (g_e), s	0.6	3.4		0.4		2.4		
Prob of Phs Call (p_c)	1.00	1.00		0.99		1.00		
Prob of Max Out (p_x)	0.00	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		567				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1394		3052		3647		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		400		1423		0		

Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Pr/Pm)			L+T				

Lanes in Grp	1	0	0	1	0	0	0	0
Grp Vol (v), veh/h	241	0	0	49	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1842	0	0	0	0
Q Serve Time (g_s), s	4.5	0.0	0.0	2.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	4.5	0.0	0.0	2.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1035	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	85.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	74.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	83.2	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	821	0	0	211	0	0	0	0
V/C Ratio (X)	0.29	0.00	0.00	0.23	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	1103	0	0	322	0	0	0	0
Upstream Filter (I)	0.99	0.00	0.00	0.98	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	3.9	0.0	0.0	48.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	4.1	0.0	0.0	48.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	1.1	0.0	0.0	1.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	0.00	1.80	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	2.1	0.0	0.0	2.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.76	0.00	0.00	0.13	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment				T		T		
Lanes in Grp	0	0	0	1	0	2	0	0
Grp Vol (v), veh/h	0	0	0	42	0	238	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	204	0	2850	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.21	0.00	0.08	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	311	0	2850	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.98	0.00	0.99	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	48.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	48.7	0.0	0.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.12	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	345	0	24	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1794	0	1423	0	0	0	0
Q Serve Time (g_s), s	0.0	8.8	0.0	1.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.8	0.0	1.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.22	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1244	0	163	0	0	0	0
V/C Ratio (X)	0.00	0.28	0.00	0.15	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1244	0	249	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.98	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.0	0.0	47.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.5	0.0	48.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	0.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	5.8	0.0	1.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.64	0.00	0.07	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	34	891	569	35
Future Volume (veh/h)	0	0	34	891	569	35
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.93
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			37	968	618	38
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			84	3352	2838	174
Arrive On Green			0.05	0.94	1.00	1.00
Sat Flow, veh/h			1781	3647	3477	208
Grp Volume(v), veh/h			37	968	324	332
Grp Sat Flow(s),veh/h/ln			1781	1777	1777	1815
Q Serve(g_s), s			1.8	1.9	0.0	0.0
Cycle Q Clear(g_c), s			1.8	1.9	0.0	0.0
Prop In Lane			1.00			0.11
Lane Grp Cap(c), veh/h			84	3352	1490	1522
V/C Ratio(X)			0.44	0.29	0.22	0.22
Avail Cap(c_a), veh/h			491	3352	1490	1522
HCM Platoon Ratio			1.00	1.00	2.00	2.00
Upstream Filter(I)			0.89	0.89	0.96	0.96
Uniform Delay (d), s/veh			41.7	0.2	0.0	0.0
Incr Delay (d2), s/veh			3.2	0.2	0.3	0.3
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln			1.6	0.2	0.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			45.0	0.4	0.3	0.3
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				1005	656	
Approach Delay, s/veh				2.0	0.3	
Approach LOS				A	A	

Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		90.0			9.4	80.6
Change Period (Y+Rc), s		5.1			* 5.2	5.1
Max Green Setting (Gmax), s		84.9			* 25	54.9
Max Q Clear Time (g_c+I1), s		3.9			3.8	2.0
Green Ext Time (p_c), s		9.2			0.1	4.7

Intersection Summary	
HCM 6th Ctrl Delay	1.4
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	34	891	569	35
Future Volume (veh/h)	0	0	34	891	569	35
Number			5	2	6	16
Initial Q, veh			0	0	0	0
Ped-Bike Adj (A_pbT)			1.00			0.93
Parking Bus Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			37	968	618	38
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Opposing Right Turn Influence			Yes			
Cap, veh/h			84	3352	2838	174
HCM Platoon Ratio			1.00	1.00	2.00	2.00
Prop Arrive On Green			0.05	0.94	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh			45.0	0.4	0.3	0.3
Ln Grp LOS			D	A	A	A
Approach Vol, veh/h				1005	656	
Approach Delay, s/veh				2.0	0.3	
Approach LOS				A	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		
Case No		4.0			2.0	8.0		
Phs Duration (G+Y+Rc), s		90.0			9.4	80.6		
Change Period (Y+Rc), s		5.1			* 5.2	5.1		
Max Green (Gmax), s		84.9			* 25	54.9		
Max Allow Headway (MAH), s		5.2			3.8	5.3		
Max Q Clear (g_c+I1), s		3.9			3.8	2.0		
Green Ext Time (g_e), s		9.2			0.1	4.7		
Prob of Phs Call (p_c)		1.00			0.60	1.00		
Prob of Max Out (p_x)		0.00			0.00	0.00		
Left-Turn Movement Data								
Assigned Mvmt					5	1		
Mvmt Sat Flow, veh/h					1781	0		
Through Movement Data								
Assigned Mvmt		2				6		
Mvmt Sat Flow, veh/h		3647				3477		
Right-Turn Movement Data								
Assigned Mvmt		12				16		
Mvmt Sat Flow, veh/h		0				208		
Left Lane Group Data								
Assigned Mvmt	0	0	0	0	5	1	0	0
Lane Assignment					L (Prot)			

Lanes in Grp	0	0	0	0	1	0	0	0
Grp Vol (v), veh/h	0	0	0	0	37	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	75.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	84	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	491	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	41.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	45.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.79	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	968	0	0	0	324	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	3352	0	0	0	1490	0	0
V/C Ratio (X)	0.00	0.29	0.00	0.00	0.00	0.22	0.00	0.00
Avail Cap (c_a), veh/h	0	3352	0	0	0	1490	0	0
Upstream Filter (I)	0.00	0.89	0.00	0.00	0.00	0.96	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	0	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	332	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1815	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1522	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1522	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	1.4
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	12	1	0	12	1	0	470	1	0	232	0
Future Volume (veh/h)	0	12	1	0	12	1	0	470	1	0	232	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	13	1	0	13	1	0	511	1	0	252	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Cap, veh/h	0	37	3	0	37	3	0	3196	6	0	1643	0
Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.88	0.88	0.00	1.00	0.00
Sat Flow, veh/h	0	1715	132	0	1715	132	0	3732	7	0	1870	0
Grp Volume(v), veh/h	0	0	14	0	0	14	0	250	262	0	252	0
Grp Sat Flow(s),veh/h/ln	0	0	1847	0	0	1847	0	1777	1869	0	1870	0
Q Serve(g_s), s	0.0	0.0	0.9	0.0	0.0	0.9	0.0	2.4	2.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.9	0.0	0.0	0.9	0.0	2.4	2.4	0.0	0.0	0.0
Prop In Lane	0.00		0.07	0.00		0.07	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	40	0	0	40	0	1561	1642	0	1643	0
V/C Ratio(X)	0.00	0.00	0.35	0.00	0.00	0.35	0.00	0.16	0.16	0.00	0.15	0.00
Avail Cap(c_a), veh/h	0	0	108	0	0	108	0	1561	1642	0	1643	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.97	0.97	0.00	0.96	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.9	0.0	0.0	57.9	0.0	1.0	1.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	22.3	0.0	0.0	22.3	0.0	0.2	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.7	0.7	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	80.1	0.0	0.0	80.1	0.0	1.2	1.2	0.0	0.2	0.0
LnGrp LOS	A	A	F	A	A	F	A	A	A	A	A	A
Approach Vol, veh/h		14			14			512			252	
Approach Delay, s/veh		80.1			80.1			1.2			0.2	
Approach LOS		F			F			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.4	9.6	110.4	9.6
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	4.4	2.9	2.0	2.9
Green Ext Time (p_c), s	5.0	0.0	2.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	12	1	0	12	1	0	470	1	0	232	0
Future Volume (veh/h)	0	12	1	0	12	1	0	470	1	0	232	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	13	1	0	13	1	0	511	1	0	252	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	37	3	0	37	3	0	3196	6	0	1643	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.88	0.88	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	80.1	0.0	0.0	80.1	0.0	1.2	1.2	0.0	0.2	0.0
Ln Grp LOS	A	A	F	A	A	F	A	A	A	A	A	A
Approach Vol, veh/h		14			14			512			252	
Approach Delay, s/veh		80.1			80.1			1.2			0.2	
Approach LOS		F			F			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.4		9.6		110.4		9.6
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+l1), s		4.4		2.9		2.0		2.9
Green Ext Time (g_e), s		5.0		0.0		2.3		0.0
Prob of Phs Call (p_c)		1.00		0.37		1.00		0.37
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3732		1715		1870		1715
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		7		132		0		132
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.4	0.0	2.6	0.0	105.4	0.0	2.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	250	0	0	0	252	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1561	0	0	0	1643	0	0
V/C Ratio (X)	0.00	0.16	0.00	0.00	0.00	0.15	0.00	0.00
Avail Cap (c_a), veh/h	0	1561	0	0	0	1643	0	0
Upstream Filter (I)	0.00	0.97	0.00	0.00	0.00	0.96	0.00	0.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.2	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	262	0	14	0	0	0	14
Grp Sat Flow (s), veh/h/ln	0	1869	0	1847	0	0	0	1847
Q Serve Time (g_s), s	0.0	2.4	0.0	0.9	0.0	0.0	0.0	0.9
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	0.9	0.0	0.0	0.0	0.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.07
Lane Grp Cap (c), veh/h	0	1642	0	40	0	0	0	40
V/C Ratio (X)	0.00	0.16	0.00	0.35	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	1642	0	108	0	0	0	108
Upstream Filter (I)	0.00	0.97	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	57.9	0.0	0.0	0.0	57.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	22.3	0.0	0.0	0.0	22.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.2	0.0	80.1	0.0	0.0	0.0	80.1
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.7	0.0	1.2	0.0	0.0	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.03	0.00	0.00	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	402	91	117	0	122	0	259	115	35	222	0
Future Volume (veh/h)	61	402	91	117	0	122	0	259	115	35	222	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.83	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	66	437	99	127	0	133	0	282	125	38	241	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	543	558	217	214	0	158	0	1302	559	608	1176	0
Arrive On Green	0.16	0.16	0.16	0.12	0.00	0.12	0.00	0.54	0.54	0.05	0.63	0.00
Sat Flow, veh/h	3456	3554	1379	1781	0	1316	0	2486	1028	1781	1870	0
Grp Volume(v), veh/h	66	437	99	127	0	133	0	207	200	38	241	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1379	1781	0	1316	0	1777	1644	1781	1870	0
Q Serve(g_s), s	2.5	18.2	10.0	10.4	0.0	15.2	0.0	9.3	9.7	1.3	8.5	0.0
Cycle Q Clear(g_c), s	2.5	18.2	10.0	10.4	0.0	15.2	0.0	9.3	9.7	1.3	8.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.63	1.00		0.00
Lane Grp Cap(c), veh/h	543	558	217	214	0	158	0	967	894	608	1176	0
V/C Ratio(X)	0.12	0.78	0.46	0.59	0.00	0.84	0.00	0.21	0.22	0.06	0.20	0.00
Avail Cap(c_a), veh/h	785	808	313	596	0	440	0	967	894	643	1176	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	55.8	62.4	58.9	64.2	0.0	66.3	0.0	18.1	18.2	12.5	12.2	0.0
Incr Delay (d2), s/veh	0.1	4.1	2.1	2.6	0.0	11.2	0.0	0.5	0.6	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	13.2	6.5	8.4	0.0	9.4	0.0	7.2	7.0	1.0	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.9	66.5	61.1	66.8	0.0	77.5	0.0	18.6	18.8	12.5	12.6	0.0
LnGrp LOS	E	E	E	E	A	E	A	B	B	B	B	A
Approach Vol, veh/h		602			260			407			279	
Approach Delay, s/veh		64.4			72.3			18.7			12.6	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	2	4	5	6	8
Phs Duration (G+Y+Rc), s	101.8	29.2	13.0	88.8	23.0
Change Period (Y+Rc), s	* 5	* 5	* 5	* 5	4.5
Max Green Setting (Gmax), s	* 53	* 35	* 11	* 37	51.5
Max Q Clear Time (g_c+I1), s	10.5	20.2	3.3	11.7	17.2
Green Ext Time (p_c), s	3.0	4.0	0.0	4.7	1.3

Intersection Summary	
HCM 6th Ctrl Delay	44.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	402	91	117	0	122	0	259	115	35	222	0
Future Volume (veh/h)	61	402	91	117	0	122	0	259	115	35	222	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.87	1.00		0.83	1.00		0.97	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	66	437	99	127	0	133	0	282	125	38	241	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	543	558	217	214	0	158	0	1302	559	608	1176	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.16	0.16	0.12	0.00	0.12	0.00	0.54	0.54	0.05	0.63	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	55.9	66.5	61.1	66.8	0.0	77.5	0.0	18.6	18.8	12.5	12.6	0.0
Ln Grp LOS	E	E	E	E	A	E	A	B	B	B	B	A
Approach Vol, veh/h		602			260			407			279	
Approach Delay, s/veh		64.4			72.3			18.7			12.6	
Approach LOS		E			E			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	10.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		101.8	23.0	29.2	13.0	88.8		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 53	51.5	* 35	* 11	* 37		
Max Allow Headway (MAH), s		7.1	4.8	5.8	3.8	7.2		
Max Q Clear (g_c+I1), s		10.5	17.2	20.2	3.3	11.7		
Green Ext Time (g_e), s		3.0	1.3	4.0	0.0	4.7		
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.80	1.00		
Prob of Max Out (p_x)		0.00	0.00	0.18	0.00	0.04		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		2486		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1316	1379		1028		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L	LL (Pr/Pm)				

Lanes in Grp	0	0	1	2	1	0	0	0
Grp Vol (v), veh/h	0	0	127	66	38	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	10.4	2.5	1.3	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	10.4	2.5	1.3	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1781	1728	975	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	85.8	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	74.1	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	83.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	214	543	608	0	0	0
V/C Ratio (X)	0.00	0.00	0.59	0.12	0.06	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	596	785	643	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.99	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	64.2	55.8	12.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.6	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	66.8	55.9	12.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.7	1.1	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.75	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	8.4	2.0	1.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.53	1.02	0.41	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	241	0	437	0	207	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	8.5	0.0	18.2	0.0	9.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.5	0.0	18.2	0.0	9.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1176	0	558	0	967	0	0
V/C Ratio (X)	0.00	0.20	0.00	0.78	0.00	0.21	0.00	0.00
Avail Cap (c_a), veh/h	0	1176	0	808	0	967	0	0
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.2	0.0	62.4	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	4.1	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.6	0.0	66.5	0.0	18.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	8.2	0.0	3.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.56	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	6.6	0.0	13.2	0.0	7.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.17	0.00	0.56	0.00	0.54	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	133	99	0	200	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1316	1379	0	1644	0	0
Q Serve Time (g_s), s	0.0	0.0	15.2	10.0	0.0	9.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	15.2	10.0	0.0	9.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	0.63	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	158	217	0	894	0	0
V/C Ratio (X)	0.00	0.00	0.84	0.46	0.00	0.22	0.00	0.00
Avail Cap (c_a), veh/h	0	0	440	313	0	894	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	66.3	58.9	0.0	18.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	11.2	2.1	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	77.5	61.1	0.0	18.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	5.1	3.5	0.0	3.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.70	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	9.4	6.5	0.0	7.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.59	2.21	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.4
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	620	30	41	218	13	68
Future Vol, veh/h	620	30	41	218	13	68
Conflicting Peds, #/hr	0	70	70	0	18	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	40	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	674	33	45	237	14	74

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	777	0	1089	414
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	345	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	837	-	224	588
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	791	-	197	552
Mov Cap-2 Maneuver	-	-	-	-	313	-
Stage 1	-	-	-	-	408	-
Stage 2	-	-	-	-	666	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	13.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	492	-	-	791	-
HCM Lane V/C Ratio	0.179	-	-	0.056	-
HCM Control Delay (s)	13.9	-	-	9.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	415	83	66	212	168	48	590	111	119	417	28
Future Volume (veh/h)	108	415	83	66	212	168	48	590	111	119	417	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.84	0.93		0.83	0.83		0.78	0.96		0.76
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	451	90	72	230	183	52	641	121	129	453	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	1004	374	339	518	495	339	1307	575	362	1643	108
Arrive On Green	0.08	0.28	0.28	0.08	0.28	0.28	0.37	0.37	0.37	0.08	0.50	0.50
Sat Flow, veh/h	1781	3554	1324	1781	1870	1319	759	3554	1238	1781	3308	217
Grp Volume(v), veh/h	117	451	90	72	230	183	52	641	121	129	241	242
Grp Sat Flow(s),veh/h/ln	1781	1777	1324	1781	1870	1319	759	1777	1238	1781	1777	1749
Q Serve(g_s), s	5.4	12.5	6.3	3.3	12.2	12.4	5.6	16.7	7.2	5.0	9.5	9.7
Cycle Q Clear(g_c), s	5.4	12.5	6.3	3.3	12.2	12.4	5.6	16.7	7.2	5.0	9.5	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	364	1004	374	339	518	495	339	1307	575	362	882	868
V/C Ratio(X)	0.32	0.45	0.24	0.21	0.44	0.37	0.15	0.49	0.21	0.36	0.27	0.28
Avail Cap(c_a), veh/h	373	1036	386	359	552	519	339	1307	575	399	882	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94	0.98	0.98	0.98
Uniform Delay (d), s/veh	27.1	35.4	33.1	26.8	35.8	28.6	25.8	29.3	20.6	20.2	17.6	17.6
Incr Delay (d2), s/veh	0.5	0.3	0.3	0.3	0.6	0.5	0.9	1.2	0.8	0.6	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	9.3	3.7	2.6	9.5	7.2	2.0	11.6	4.0	3.8	7.3	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	35.7	33.5	27.2	36.4	29.1	26.7	30.5	21.4	20.8	18.3	18.4
LnGrp LOS	C	D	C	C	D	C	C	C	C	C	B	B
Approach Vol, veh/h		658			485			814			612	
Approach Delay, s/veh		33.9			32.3			28.9			18.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		65.4	15.4	39.2	15.5	49.9	14.7	39.9
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s		* 57	10.4	* 35	12.4	* 39	10.4	* 35
Max Q Clear Time (g_c+I1), s		11.7	7.4	14.4	7.0	18.7	5.3	14.5
Green Ext Time (p_c), s		3.3	0.1	2.1	0.1	5.4	0.1	3.3

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	415	83	66	212	168	48	590	111	119	417	28
Future Volume (veh/h)	108	415	83	66	212	168	48	590	111	119	417	28
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.93		0.84	0.93		0.83	0.83		0.78	0.96		0.76
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	451	90	72	230	183	52	641	121	129	453	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	364	1004	374	339	518	495	339	1307	575	362	1643	108
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.28	0.28	0.08	0.28	0.28	0.37	0.37	0.37	0.08	0.50	0.50
Unsig. Movement Delay												
Ln Grp Delay, s/veh	27.6	35.7	33.5	27.2	36.4	29.1	26.7	30.5	21.4	20.8	18.3	18.4
Ln Grp LOS	C	D	C	C	D	C	C	C	C	C	B	B
Approach Vol, veh/h		658			485			814			612	
Approach Delay, s/veh		33.9			32.3			28.9			18.9	
Approach LOS		C			C			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		4.0	1.1	3.0	1.2	5.3	1.1	3.0
Phs Duration (G+Y+Rc), s		65.4	15.4	39.2	15.5	49.9	14.7	39.9
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s		* 57	10.4	* 35	12.4	* 39	10.4	* 35
Max Allow Headway (MAH), s		5.3	3.8	4.9	3.8	5.2	3.8	5.1
Max Q Clear (g_c+l1), s		11.7	7.4	14.4	7.0	18.7	5.3	14.5
Green Ext Time (g_e), s		3.3	0.1	2.1	0.1	5.4	0.1	3.3
Prob of Phs Call (p_c)		1.00	0.98	1.00	0.99	1.00	0.91	1.00
Prob of Max Out (p_x)		0.00	1.00	0.00	0.22	0.00	0.21	0.02

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			1781		1781	759	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3308		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		217		1319		1238		1324

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		LL (Pr/Pm)		

Lanes in Grp	0	0	1	0	1	1	1	0
Grp Vol (v), veh/h	0	0	117	0	129	52	72	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	1781	759	1781	0
Q Serve Time (g_s), s	0.0	0.0	5.4	0.0	5.0	5.6	3.3	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	5.4	0.0	5.0	5.6	3.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	906	0	679	759	808	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	33.2	0.0	46.1	44.1	33.2	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	21.0	0.0	27.4	44.1	21.4	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.8	0.0	4.4	5.6	1.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	364	0	362	339	339	0
V/C Ratio (X)	0.00	0.00	0.32	0.00	0.36	0.15	0.21	0.00
Avail Cap (c_a), veh/h	0	0	373	0	399	339	359	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.98	0.94	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	27.1	0.0	20.2	25.8	26.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.0	0.6	0.9	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	27.6	0.0	20.8	26.7	27.2	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	2.3	0.0	2.1	1.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.80	0.00	1.80	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	4.3	0.0	3.8	2.0	2.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.80	0.00	0.88	0.34	0.48	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	2	0	2
Grp Vol (v), veh/h	0	241	0	230	0	641	0	451
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	9.5	0.0	12.2	0.0	16.7	0.0	12.5
Cycle Q Clear Time (g_c), s	0.0	9.5	0.0	12.2	0.0	16.7	0.0	12.5
Lane Grp Cap (c), veh/h	0	882	0	518	0	1307	0	1004
V/C Ratio (X)	0.00	0.27	0.00	0.44	0.00	0.49	0.00	0.45
Avail Cap (c_a), veh/h	0	882	0	552	0	1307	0	1036
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	0.94	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.6	0.0	35.8	0.0	29.3	0.0	35.4
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.6	0.0	1.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.3	0.0	36.4	0.0	30.5	0.0	35.7
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	5.6	0.0	7.1	0.0	5.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.69	0.00	1.59	0.00	1.70
%ile Back of Q (95%), veh/ln	0.0	7.3	0.0	9.5	0.0	11.6	0.0	9.3
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	0.71	0.00	0.84	0.00	1.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	242	0	183	0	121	0	90
Grp Sat Flow (s), veh/h/ln	0	1749	0	1319	0	1238	0	1324
Q Serve Time (g_s), s	0.0	9.7	0.0	12.4	0.0	7.2	0.0	6.3
Cycle Q Clear Time (g_c), s	0.0	9.7	0.0	12.4	0.0	7.2	0.0	6.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.9	0.0	9.1	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	868	0	495	0	575	0	374
V/C Ratio (X)	0.00	0.28	0.00	0.37	0.00	0.21	0.00	0.24
Avail Cap (c_a), veh/h	0	868	0	519	0	575	0	386
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	0.94	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.6	0.0	28.6	0.0	20.6	0.0	33.1
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.5	0.0	0.8	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.4	0.0	29.1	0.0	21.4	0.0	33.5
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	3.9	0.0	2.1	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.4	0.0	7.2	0.0	4.0	0.0	3.7
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	1.35	0.00	0.29	0.00	0.63
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	580	45	13	344	6	26
Future Vol, veh/h	580	45	13	344	6	26
Conflicting Peds, #/hr	0	87	87	0	0	11
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	630	49	14	374	7	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	766	0	1144	438
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	402	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	845	-	207	567
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	675	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	787	-	189	523
Mov Cap-2 Maneuver	-	-	-	-	307	-
Stage 1	-	-	-	-	403	-
Stage 2	-	-	-	-	660	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	462	-	-	787	-
HCM Lane V/C Ratio	0.075	-	-	0.018	-
HCM Control Delay (s)	13.4	-	-	9.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	514	7	4	302	87	2	0	5	80	0	97
Future Volume (veh/h)	71	514	7	4	302	87	2	0	5	80	0	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.95	0.97		0.93	0.94		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	559	8	4	328	95	2	0	5	87	0	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	546	2186	31	528	839	243	139	25	281	442	0	416
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	955	3584	51	833	1376	398	322	90	1030	1320	0	1522
Grp Volume(v), veh/h	77	277	290	4	0	423	7	0	0	87	0	105
Grp Sat Flow(s),veh/h/ln	955	1777	1858	833	0	1774	1441	0	0	1320	0	1522
Q Serve(g_s), s	4.0	6.5	6.5	0.2	0.0	11.0	0.0	0.0	0.0	4.2	0.0	4.8
Cycle Q Clear(g_c), s	15.0	6.5	6.5	6.7	0.0	11.0	0.3	0.0	0.0	4.5	0.0	4.8
Prop In Lane	1.00		0.03	1.00		0.22	0.29		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	546	1084	1133	528	0	1082	445	0	0	442	0	416
V/C Ratio(X)	0.14	0.26	0.26	0.01	0.00	0.39	0.02	0.00	0.00	0.20	0.00	0.25
Avail Cap(c_a), veh/h	546	1084	1133	528	0	1082	445	0	0	442	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.88	0.00	0.88	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.8	8.1	8.1	9.7	0.0	9.0	23.9	0.0	0.0	25.4	0.0	25.5
Incr Delay (d2), s/veh	0.5	0.6	0.5	0.0	0.0	0.9	0.1	0.0	0.0	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	4.1	4.3	0.1	0.0	6.8	0.2	0.0	0.0	2.6	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	8.7	8.7	9.7	0.0	9.9	23.9	0.0	0.0	25.6	0.0	25.8
LnGrp LOS	B	A	A	A	A	A	C	A	A	C	A	C
Approach Vol, veh/h		644			427			7			192	
Approach Delay, s/veh		9.2			9.9			23.9			25.7	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	13.0	6.8	17.0	2.3
Green Ext Time (p_c), s	4.8	0.8	6.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	514	7	4	302	87	2	0	5	80	0	97
Future Volume (veh/h)	71	514	7	4	302	87	2	0	5	80	0	97
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.95	0.99		0.95	0.97		0.93	0.94		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	559	8	4	328	95	2	0	5	87	0	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	546	2186	31	528	839	243	139	25	281	442	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	13.4	8.7	8.7	9.7	0.0	9.9	23.9	0.0	0.0	25.6	0.0	25.8
Ln Grp LOS	B	A	A	A	A	A	C	A	A	C	A	C
Approach Vol, veh/h		644			427			7			192	
Approach Delay, s/veh		9.2			9.9			23.9			25.7	
Approach LOS		A			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		5.0		6.3		5.8
Max Q Clear (g_c+l1), s		13.0		6.8		17.0		2.3
Green Ext Time (g_e), s		4.8		0.8		6.5		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.01		0.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		833		1320		955		322

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1376		0		3584		90

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		398		1522		51		1030

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	87	0	77	0	7
Grp Sat Flow (s), veh/h/ln	0	833	0	1320	0	955	0	1441
Q Serve Time (g_s), s	0.0	0.2	0.0	4.2	0.0	4.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	4.5	0.0	15.0	0.0	0.3
Perm LT Sat Flow (s_l), veh/h/ln	0	833	0	1320	0	955	0	1274
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1666	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	48.4	0.0	24.3	0.0	43.9	0.0	19.8
Perm LT Q Serve Time (g_ps), s	0.0	0.2	0.0	4.2	0.0	4.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.29
Lane Grp Cap (c), veh/h	0	528	0	442	0	546	0	445
V/C Ratio (X)	0.00	0.01	0.00	0.20	0.00	0.14	0.00	0.02
Avail Cap (c_a), veh/h	0	528	0	442	0	546	0	445
Upstream Filter (I)	0.00	0.88	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.7	0.0	25.4	0.0	12.8	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.7	0.0	25.6	0.0	13.4	0.0	23.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.4	0.0	0.8	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	2.6	0.0	1.6	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	1.76	0.00	0.27	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	277	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	423	0	105	0	290	0	0
Grp Sat Flow (s), veh/h/ln	0	1774	0	1522	0	1858	0	0
Q Serve Time (g_s), s	0.0	11.0	0.0	4.8	0.0	6.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.0	0.0	4.8	0.0	6.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.22	0.00	1.00	0.00	0.03	0.00	0.71
Lane Grp Cap (c), veh/h	0	1082	0	416	0	1133	0	0
V/C Ratio (X)	0.00	0.39	0.00	0.25	0.00	0.26	0.00	0.00
Avail Cap (c_a), veh/h	0	1082	0	416	0	1133	0	0
Upstream Filter (I)	0.00	0.88	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.0	0.0	25.5	0.0	8.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.3	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.9	0.0	25.8	0.0	8.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	1.7	0.0	2.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.8	0.0	3.2	0.0	4.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	2.15	0.00	0.49	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	395	182	116	885	750	227
Future Volume (veh/h)	395	182	116	885	750	227
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	429	198	126	962	815	247
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	535	245	153	2681	2257	973
Arrive On Green	0.15	0.15	0.09	0.75	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1533
Grp Volume(v), veh/h	429	198	126	962	815	247
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1533
Q Serve(g_s), s	14.4	14.5	8.4	10.9	0.0	0.0
Cycle Q Clear(g_c), s	14.4	14.5	8.4	10.9	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	535	245	153	2681	2257	973
V/C Ratio(X)	0.80	0.81	0.82	0.36	0.36	0.25
Avail Cap(c_a), veh/h	950	436	223	2681	2257	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.89	0.89	0.31	0.31	0.89	0.89
Uniform Delay (d), s/veh	48.9	49.0	54.0	5.0	0.0	0.0
Incr Delay (d2), s/veh	2.5	5.5	5.1	0.1	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.3	9.9	5.7	4.9	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.5	54.5	59.1	5.1	0.4	0.6
LnGrp LOS	D	D	E	A	A	A
Approach Vol, veh/h	627			1088	1062	
Approach Delay, s/veh	52.4			11.3	0.4	
Approach LOS	D			B	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.3	81.1		24.6		95.4
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	10.4	2.0		16.5		12.9
Green Ext Time (p_c), s	0.1	11.9		2.1		5.0

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	395	182	116	885	750	227
Future Volume (veh/h)	395	182	116	885	750	227
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	429	198	126	962	815	247
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	535	245	153	2681	2257	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.15	0.15	0.09	0.75	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	51.5	54.5	59.1	5.1	0.4	0.6
Ln Grp LOS	D	D	E	A	A	A
Approach Vol, veh/h	627			1088	1062	
Approach Delay, s/veh	52.4			11.3	0.4	
Approach LOS	D			B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	14.3	81.1		24.6		95.4		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.8		3.9		5.0		
Max Q Clear (g_c+I1), s	10.4	2.0		16.5		12.9		
Green Ext Time (g_e), s	0.1	11.9		2.1		5.0		
Prob of Phs Call (p_c)	0.99	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.40	0.40		0.01		0.37		
Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1533		1585		0		
Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	126	0	0	429	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	8.4	0.0	0.0	14.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	8.4	0.0	0.0	14.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	76.2	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	153	0	0	535	0	0	0	0
V/C Ratio (X)	0.82	0.00	0.00	0.80	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.31	0.00	0.00	0.89	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	54.0	0.0	0.0	48.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	5.1	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.1	0.0	0.0	51.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.7	0.0	0.0	6.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.46	1.00	0.00	1.61	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	5.7	0.0	0.0	10.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.69	0.00	0.00	2.38	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	815	0	0	0	962	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2257	0	0	0	2681	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.00	0.00	0.36	0.00	0.00
Avail Cap (c_a), veh/h	0	2257	0	0	0	2681	0	0
Upstream Filter (I)	0.00	0.89	0.00	0.00	0.00	0.31	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	0.0	0.0	5.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.51	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.2	0.0	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.11	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	247	0	198	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1533	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	973	0	245	0	0	0	0
V/C Ratio (X)	0.00	0.25	0.00	0.81	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	973	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.89	0.00	0.89	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	5.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	54.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.63	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	9.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.23	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		16.4						
HCM 6th LOS		B						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	162	41	1113	185	37	816
Future Volume (veh/h)	162	41	1113	185	37	816
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.90		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	45	1210	201	40	887
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	234	60	2020	334	55	2583
Arrive On Green	0.17	0.17	1.00	1.00	0.03	0.73
Sat Flow, veh/h	1344	344	3142	503	1781	3647
Grp Volume(v), veh/h	222	0	702	709	40	887
Grp Sat Flow(s),veh/h/ln	1695	0	1777	1775	1781	1777
Q Serve(g_s), s	14.9	0.0	0.0	0.0	2.7	10.9
Cycle Q Clear(g_c), s	14.9	0.0	0.0	0.0	2.7	10.9
Prop In Lane	0.79	0.20		0.28	1.00	
Lane Grp Cap(c), veh/h	295	0	1178	1176	55	2583
V/C Ratio(X)	0.75	0.00	0.60	0.60	0.73	0.34
Avail Cap(c_a), veh/h	325	0	1178	1176	223	2583
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.76	0.76	0.74	0.74
Uniform Delay (d), s/veh	47.1	0.0	0.0	0.0	57.7	6.0
Incr Delay (d2), s/veh	8.6	0.0	1.7	1.7	13.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.3	0.0	1.0	1.0	2.5	6.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	55.7	0.0	1.7	1.7	70.6	6.2
LnGrp LOS	E	A	A	A	E	A
Approach Vol, veh/h	222		1411			927
Approach Delay, s/veh	55.7		1.7			9.0
Approach LOS	E		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		94.1		25.9	7.7	86.4
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		12.9		16.9	4.7	2.0
Green Ext Time (p_c), s		7.1		0.3	0.0	32.2

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	162	41	1113	185	37	816
Future Volume (veh/h)	162	41	1113	185	37	816
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.90		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	45	1210	201	40	887
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	234	60	2020	334	55	2583
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.17	0.17	1.00	1.00	0.03	0.73
Unsig. Movement Delay						
Ln Grp Delay, s/veh	55.7	0.0	1.7	1.7	70.6	6.2
Ln Grp LOS	E	A	A	A	E	A
Approach Vol, veh/h	222		1411			927
Approach Delay, s/veh	55.7		1.7			9.0
Approach LOS	E		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		94.1		25.9	7.7	86.4		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+l1), s		12.9		16.9	4.7	2.0		
Green Ext Time (g_e), s		7.1		0.3	0.0	32.2		
Prob of Phs Call (p_c)		1.00		1.00	0.74	1.00		
Prob of Max Out (p_x)		0.70		0.22	0.00	0.31		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1344	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		8		3142		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		344		503		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	222	40	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1695	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	14.9	2.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.9	2.7	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	79.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.79	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	295	55	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.75	0.73	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	325	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.74	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	47.1	57.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.6	13.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	55.7	70.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.3	1.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.62	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	11.3	2.5	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.23	0.47	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	887	0	0	0	702	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2583	0	0	0	1178	0	0
V/C Ratio (X)	0.00	0.34	0.00	0.00	0.00	0.60	0.00	0.00
Avail Cap (c_a), veh/h	0	2583	0	0	0	1178	0	0
Upstream Filter (I)	0.00	0.74	0.00	0.00	0.00	0.76	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	1.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.2	0.0	0.0	0.0	1.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	6.2	0.0	0.0	0.0	1.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.00	0.00	0.26	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	709	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1775	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.20	0.00	0.28	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1176	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1176	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	45	11	42	46	19	10	67	27	2	51	9
Future Vol, veh/h	17	45	11	42	46	19	10	67	27	2	51	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	49	12	46	50	21	11	73	29	2	55	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	8.1	8	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	23%	39%	3%
Vol Thru, %	64%	62%	43%	82%
Vol Right, %	26%	15%	18%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	73	107	62
LT Vol	10	17	42	2
Through Vol	67	45	46	51
RT Vol	27	11	19	9
Lane Flow Rate	113	79	116	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.136	0.098	0.142	0.083
Departure Headway (Hd)	4.32	4.427	4.403	4.426
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	832	811	816	811
Service Time	2.337	2.445	2.419	2.443
HCM Lane V/C Ratio	0.136	0.097	0.142	0.083
HCM Control Delay	8	7.9	8.1	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.3	0.5	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	24	14	77	54	102	42	623	102	48	507	24
Future Volume (veh/h)	11	24	14	77	54	102	42	623	102	48	507	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.97		0.96	0.97		0.85	0.98		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	26	15	84	59	111	46	677	111	52	551	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	171	83	219	138	308	578	2016	330	471	2323	109
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	194	846	411	768	684	1522	809	2975	487	671	3429	161
Grp Volume(v), veh/h	53	0	0	143	0	111	46	404	384	52	285	292
Grp Sat Flow(s),veh/h/ln	1451	0	0	1451	0	1522	809	1777	1685	671	1777	1813
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	5.6	2.1	8.5	8.6	3.2	5.5	5.6
Cycle Q Clear(g_c), s	8.3	0.0	0.0	8.3	0.0	5.6	7.7	8.5	8.6	11.7	5.5	5.6
Prop In Lane	0.23		0.28	0.59		1.00	1.00		0.29	1.00		0.09
Lane Grp Cap(c), veh/h	343	0	0	357	0	308	578	1204	1142	471	1204	1229
V/C Ratio(X)	0.15	0.00	0.00	0.40	0.00	0.36	0.08	0.34	0.34	0.11	0.24	0.24
Avail Cap(c_a), veh/h	516	0	0	524	0	477	578	1204	1142	471	1204	1229
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.75	0.75	0.75	0.97	0.97	0.97
Uniform Delay (d), s/veh	29.5	0.0	0.0	31.7	0.0	30.9	7.0	6.1	6.1	8.5	5.6	5.6
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.7	0.0	0.7	0.2	0.6	0.6	0.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	0.0	5.1	0.0	3.8	0.6	5.0	4.8	0.9	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	0.0	0.0	32.4	0.0	31.6	7.2	6.6	6.7	9.0	6.0	6.0
LnGrp LOS	C	A	A	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		53			254			834			629	
Approach Delay, s/veh		29.8			32.1			6.7			6.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	66.0	24.0	66.0	24.0
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	13.7	10.3	10.6	10.3
Green Ext Time (p_c), s	4.3	1.1	6.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	24	14	77	54	102	42	623	102	48	507	24
Future Volume (veh/h)	11	24	14	77	54	102	42	623	102	48	507	24
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.96	0.97		0.96	0.97		0.85	0.98		0.87
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	26	15	84	59	111	46	677	111	52	551	26
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	88	171	83	219	138	308	578	2016	330	471	2323	109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.68	0.68	0.68	0.68	0.68	0.68
Unsig. Movement Delay												
Ln Grp Delay, s/veh	29.8	0.0	0.0	32.4	0.0	31.6	7.2	6.6	6.7	9.0	6.0	6.0
Ln Grp LOS	C	A	A	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		53			254			834			629	
Approach Delay, s/veh		29.8			32.1			6.7			6.3	
Approach LOS		C			C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		66.0		24.0		66.0		24.0
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.3		4.9		5.2		5.6
Max Q Clear (g_c+l1), s		13.7		10.3		10.6		10.3
Green Ext Time (g_e), s		4.3		1.1		6.1		0.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		671		768		809		194

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3429		684		2975		846

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		161		1522		487		411

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	52	0	143	0	46	0	53
Grp Sat Flow (s), veh/h/ln	0	671	0	1451	0	809	0	1451
Q Serve Time (g_s), s	0.0	3.2	0.0	0.0	0.0	2.1	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	8.3	0.0	7.7	0.0	8.3
Perm LT Sat Flow (s_l), veh/h/ln	0	671	0	1347	0	809	0	1204
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1287	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	61.0	0.0	18.2	0.0	61.0	0.0	18.2
Perm LT Serve Time (g_u), s	0.0	52.4	0.0	9.9	0.0	55.4	0.0	10.0
Perm LT Q Serve Time (g_ps), s	0.0	3.2	0.0	0.0	0.0	2.1	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	6.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	2.2
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.59	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	471	0	357	0	578	0	343
V/C Ratio (X)	0.00	0.11	0.00	0.40	0.00	0.08	0.00	0.15
Avail Cap (c_a), veh/h	0	471	0	524	0	578	0	516
Upstream Filter (I)	0.00	0.97	0.00	1.00	0.00	0.75	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.5	0.0	31.7	0.0	7.0	0.0	29.5
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.7	0.0	0.2	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.0	0.0	32.4	0.0	7.2	0.0	29.8
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	2.7	0.0	0.3	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.9	0.0	5.1	0.0	0.6	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.28	0.00	0.13	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	285	0	0	0	404	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	5.5	0.0	0.0	0.0	8.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.5	0.0	0.0	0.0	8.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	1204	0	0	0	1204	0	0
V/C Ratio (X)	0.00	0.24	0.00	0.00	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	1204	0	0	0	1204	0	0
Upstream Filter (I)	0.00	0.97	0.00	0.00	0.00	0.75	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.6	0.0	0.0	0.0	6.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.0	0.0	0.0	0.0	6.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	3.3	0.0	0.0	0.0	5.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.00	0.00	0.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	292	0	111	0	384	0	0
Grp Sat Flow (s), veh/h/ln	0	1813	0	1522	0	1685	0	0
Q Serve Time (g_s), s	0.0	5.6	0.0	5.6	0.0	8.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.6	0.0	5.6	0.0	8.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.09	0.00	1.00	0.00	0.29	0.00	0.28
Lane Grp Cap (c), veh/h	0	1229	0	308	0	1142	0	0
V/C Ratio (X)	0.00	0.24	0.00	0.36	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	1229	0	477	0	1142	0	0
Upstream Filter (I)	0.00	0.97	0.00	1.00	0.00	0.75	0.00	0.00
Uniform Delay (d1), s/veh	0.0	5.6	0.0	30.9	0.0	6.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.7	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.0	0.0	31.6	0.0	6.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	2.1	0.0	2.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	3.4	0.0	3.8	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.21	0.00	0.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	716	492	205	1177	0	0	0	0	382	2	128
Future Volume (veh/h)	0	716	492	205	1177	0	0	0	0	382	2	128
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	778	535	223	1279	0				278	194	139
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1322	894	263	2346	0				413	234	168
Arrive On Green	0.00	0.66	0.66	0.66	0.66	0.00				0.23	0.23	0.23
Sat Flow, veh/h	0	2096	1354	419	3647	0				1781	1010	724
Grp Volume(v), veh/h	0	689	624	223	1279	0				278	0	333
Grp Sat Flow(s),veh/h/ln	0	1777	1579	419	1777	0				1781	0	1733
Q Serve(g_s), s	0.0	19.4	20.0	39.4	17.2	0.0				12.8	0.0	16.4
Cycle Q Clear(g_c), s	0.0	19.4	20.0	59.4	17.2	0.0				12.8	0.0	16.4
Prop In Lane	0.00		0.86	1.00		0.00				1.00		0.42
Lane Grp Cap(c), veh/h	0	1173	1043	263	2346	0				413	0	402
V/C Ratio(X)	0.00	0.59	0.60	0.85	0.55	0.00				0.67	0.00	0.83
Avail Cap(c_a), veh/h	0	1173	1043	263	2346	0				653	0	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.74	0.74	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.5	8.6	28.8	8.1	0.0				31.5	0.0	32.9
Incr Delay (d2), s/veh	0.0	2.2	2.5	21.3	0.7	0.0				1.9	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	11.0	10.4	10.0	8.9	0.0				9.3	0.0	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.6	11.1	50.1	8.8	0.0				33.4	0.0	38.0
LnGrp LOS	A	B	B	D	A	A				C	A	D
Approach Vol, veh/h		1313			1502						611	
Approach Delay, s/veh		10.9			14.9						35.9	
Approach LOS		B			B						D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		64.1		25.9		64.1
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7
Max Green Setting (Gmax), s		* 47		33.0		* 47
Max Q Clear Time (g_c+I1), s		61.4		18.4		22.0
Green Ext Time (p_c), s		0.0		2.4		10.6

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	716	492	205	1177	0	0	0	0	382	2	128
Future Volume (veh/h)	0	716	492	205	1177	0	0	0	0	382	2	128
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	778	535	223	1279	0				278	194	139
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	1322	894	263	2346	0				413	234	168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.66	0.66	0.66	0.66	0.00				0.23	0.23	0.23
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	10.6	11.1	50.1	8.8	0.0				33.4	0.0	38.0
Ln Grp LOS	A	B	B	D	A	A				C	A	D
Approach Vol, veh/h		1313			1502						611	
Approach Delay, s/veh		10.9			14.9						35.9	
Approach LOS		B			B						D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		64.1		25.9		64.1		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		5.8		4.5		5.3		
Max Q Clear (g_c+I1), s		61.4		18.4		22.0		
Green Ext Time (g_e), s		0.0		2.4		10.6		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		0.06		0.28		

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		419		1781		0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1010		2096		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		724		1354		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	223	0	278	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	419	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	39.4	0.0	12.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	59.4	0.0	12.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	419	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	59.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	39.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	39.4	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	59.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	263	0	413	0	0	0	0
V/C Ratio (X)	0.00	0.85	0.00	0.67	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	263	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.74	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	28.8	0.0	31.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	21.3	0.0	1.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	50.1	0.0	33.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.9	0.0	5.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.56	0.00	1.70	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	10.0	0.0	9.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	0.49	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1279	0	0	0	689	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	17.2	0.0	0.0	0.0	19.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.2	0.0	0.0	0.0	19.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	2346	0	0	0	1173	0	0
V/C Ratio (X)	0.00	0.55	0.00	0.00	0.00	0.59	0.00	0.00
Avail Cap (c_a), veh/h	0	2346	0	0	0	1173	0	0
Upstream Filter (I)	0.00	0.74	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	0.0	0.0	8.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	2.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.8	0.0	0.0	0.0	10.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	0.0	0.0	6.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.60	0.00	1.00	0.00	1.63	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	0.0	0.0	11.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.69	0.00	0.00	0.00	0.59	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	333	0	624	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1733	0	1579	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	16.4	0.0	20.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.4	0.0	20.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.42	0.00	0.86	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	402	0	1043	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.83	0.00	0.60	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	636	0	1043	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	32.9	0.0	8.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.1	0.0	2.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	38.0	0.0	11.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.5	0.0	5.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.61	0.00	1.65	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	11.5	0.0	10.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.60	0.00	0.56	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	949	0	0	932	519	448	4	195	0	0	0
Future Volume (veh/h)	139	949	0	0	932	519	448	4	195	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	151	1032	0	0	1013	564	352	194	212			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	171	2157	0	0	2067	950	476	218	238			
Arrive On Green	1.00	1.00	0.00	0.00	0.20	0.20	0.27	0.27	0.27			
Sat Flow, veh/h	325	3647	0	0	3572	1564	1781	815	890			
Grp Volume(v), veh/h	151	1032	0	0	1013	564	352	0	406			
Grp Sat Flow(s),veh/h/ln	325	1777	0	0	1702	1564	1781	0	1705			
Q Serve(g_s), s	25.2	0.0	0.0	0.0	23.7	29.5	16.2	0.0	20.6			
Cycle Q Clear(g_c), s	54.6	0.0	0.0	0.0	23.7	29.5	16.2	0.0	20.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.52			
Lane Grp Cap(c), veh/h	171	2157	0	0	2067	950	476	0	456			
V/C Ratio(X)	0.88	0.48	0.00	0.00	0.49	0.59	0.74	0.00	0.89			
Avail Cap(c_a), veh/h	171	2157	0	0	2067	950	523	0	500			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.69	0.69	0.00	0.00	0.66	0.66	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.7	0.0	0.0	0.0	23.6	25.9	30.1	0.0	31.7			
Incr Delay (d2), s/veh	33.6	0.5	0.0	0.0	0.1	0.7	5.0	0.0	16.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	7.5	0.3	0.0	0.0	15.0	17.0	11.6	0.0	15.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.3	0.5	0.0	0.0	23.8	26.6	35.1	0.0	48.6			
LnGrp LOS	D	A	A	A	C	C	D	A	D			
Approach Vol, veh/h		1183			1577			758				
Approach Delay, s/veh		7.3			24.8			42.3				
Approach LOS		A			C			D				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	60.3	29.7	60.3
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	56.6	22.6	31.5
Green Ext Time (p_c), s	0.0	1.4	11.6

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	949	0	0	932	519	448	4	195	0	0	0
Future Volume (veh/h)	139	949	0	0	932	519	448	4	195	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	151	1032	0	0	1013	564	352	194	212			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	171	2157	0	0	2067	950	476	218	238			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.20	0.20	0.27	0.27	0.27			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	53.3	0.5	0.0	0.0	23.8	26.6	35.1	0.0	48.6			
Ln Grp LOS	D	A	A	A	C	C	D	A	D			
Approach Vol, veh/h		1183			1577			758				
Approach Delay, s/veh		7.3			24.8			42.3				
Approach LOS		A			C			D				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		60.3		29.7		60.3		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		6.0		4.5		5.3		
Max Q Clear (g_c+I1), s		56.6		22.6		31.5		
Green Ext Time (g_e), s		0.0		1.4		11.6		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		1.00		0.45		

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		325		1781		0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		815		3572		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		890		1564		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	151	0	352	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	325	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	25.2	0.0	16.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	54.6	0.0	16.2	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	325	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.6	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.2	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	25.2	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	54.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	171	0	476	0	0	0	0
V/C Ratio (X)	0.00	0.88	0.00	0.74	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	171	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.69	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.7	0.0	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	33.6	0.0	5.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	53.3	0.0	35.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	6.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	0.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.61	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.5	0.0	11.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.16	0.00	0.65	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1032	0	0	0	1013	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	23.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	23.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2157	0	0	0	2067	0	0
V/C Ratio (X)	0.00	0.48	0.00	0.00	0.00	0.49	0.00	0.00
Avail Cap (c_a), veh/h	0	2157	0	0	0	2067	0	0
Upstream Filter (I)	0.00	0.69	0.00	0.00	0.00	0.66	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	23.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.5	0.0	0.0	0.0	23.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.41	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	15.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.42	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	406	0	564	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1705	0	1564	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	20.6	0.0	29.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.6	0.0	29.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.52	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	456	0	950	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.89	0.00	0.59	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	500	0	950	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.66	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.7	0.0	25.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	16.9	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	48.6	0.0	26.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.0	0.0	12.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.52	0.00	1.38	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	15.3	0.0	17.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.86	0.00	0.48	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	825	175	159	1148	53	107	253	106	43	226	188
Future Volume (veh/h)	145	825	175	159	1148	53	107	253	106	43	226	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.97	0.98		0.95	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	158	897	190	173	1248	58	116	275	115	47	246	204
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	1542	326	329	1914	825	212	478	493	204	478	386
Arrive On Green	0.02	0.18	0.18	0.14	1.00	1.00	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1781	2898	613	1781	3554	1531	922	1870	1509	976	1870	1509
Grp Volume(v), veh/h	158	550	537	173	1248	58	116	275	115	47	246	204
Grp Sat Flow(s),veh/h/ln	1781	1777	1734	1781	1777	1531	922	1870	1509	976	1870	1509
Q Serve(g_s), s	3.5	25.6	25.6	4.0	0.0	0.0	11.1	11.5	5.0	4.0	10.1	10.5
Cycle Q Clear(g_c), s	3.5	25.6	25.6	4.0	0.0	0.0	21.2	11.5	5.0	15.5	10.1	10.5
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	946	923	329	1914	825	212	478	493	204	478	386
V/C Ratio(X)	0.38	0.58	0.58	0.53	0.65	0.07	0.55	0.58	0.23	0.23	0.51	0.53
Avail Cap(c_a), veh/h	501	946	923	407	1914	825	212	478	493	204	478	386
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	27.9	27.9	12.3	0.0	0.0	37.8	29.2	22.3	36.0	28.7	28.8
Incr Delay (d2), s/veh	0.5	2.2	2.3	1.3	1.7	0.2	9.8	5.0	1.1	2.6	3.9	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	17.9	17.6	2.4	0.8	0.1	5.5	9.6	3.4	1.9	8.6	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	30.1	30.2	13.6	1.7	0.2	47.6	34.2	23.4	38.6	32.6	34.0
LnGrp LOS	A	C	C	B	A	A	D	C	C	D	C	C
Approach Vol, veh/h		1245			1479			506			497	
Approach Delay, s/veh		27.4			3.1			34.8			33.7	
Approach LOS		C			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	53.5		28.0	9.1	52.9		28.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	10.0	* 44		* 23	10.0	* 44		* 23
Max Q Clear Time (g_c+I1), s	5.5	2.0		17.5	6.0	27.6		23.2
Green Ext Time (p_c), s	0.2	12.4		1.2	0.2	6.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	825	175	159	1148	53	107	253	106	43	226	188
Future Volume (veh/h)	145	825	175	159	1148	53	107	253	106	43	226	188
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.97	1.00		0.97	0.98		0.95	0.98		0.95
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	158	897	190	173	1248	58	116	275	115	47	246	204
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	413	1542	326	329	1914	825	212	478	493	204	478	386
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.18	0.18	0.14	1.00	1.00	0.26	0.26	0.26	0.26	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.0	30.1	30.2	13.6	1.7	0.2	47.6	34.2	23.4	38.6	32.6	34.0
Ln Grp LOS	A	C	C	B	A	A	D	C	C	D	C	C
Approach Vol, veh/h		1245			1479			506			497	
Approach Delay, s/veh		27.4			3.1			34.8			33.7	
Approach LOS		C			A			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	8.5	53.5		28.0	9.1	52.9		28.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	10.0	* 44		* 23	10.0	* 44		* 23
Max Allow Headway (MAH), s	3.8	5.1		4.8	3.8	5.2		5.0
Max Q Clear (g_c+I1), s	5.5	2.0		17.5	6.0	27.6		23.2
Green Ext Time (g_e), s	0.2	12.4		1.2	0.2	6.6		0.0
Prob of Phs Call (p_c)	0.98	1.00		1.00	0.99	1.00		1.00
Prob of Max Out (p_x)	0.52	0.00		0.00	0.84	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			976	1781			922

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		2898		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1531		1509		613		1509

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	158	0	0	47	173	0	0	116
Grp Sat Flow (s), veh/h/ln	1781	0	0	976	1781	0	0	922
Q Serve Time (g_s), s	3.5	0.0	0.0	4.0	4.0	0.0	0.0	11.1
Cycle Q Clear Time (g_c), s	3.5	0.0	0.0	15.5	4.0	0.0	0.0	21.2
Perm LT Sat Flow (s_l), veh/h/ln	419	0	0	976	519	0	0	922
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	47.9	0.0	0.0	23.0	47.9	0.0	0.0	23.0
Perm LT Serve Time (g_u), s	47.9	0.0	0.0	11.5	22.3	0.0	0.0	12.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	4.0	11.5	0.0	0.0	11.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	413	0	0	204	329	0	0	212
V/C Ratio (X)	0.38	0.00	0.00	0.23	0.53	0.00	0.00	0.55
Avail Cap (c_a), veh/h	501	0	0	204	407	0	0	212
Upstream Filter (I)	0.84	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	8.5	0.0	0.0	36.0	12.3	0.0	0.0	37.8
Incr Delay (d2), s/veh	0.5	0.0	0.0	2.6	1.3	0.0	0.0	9.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.0	0.0	0.0	38.6	13.6	0.0	0.0	47.6
1st-Term Q (Q1), veh/ln	1.3	0.0	0.0	0.9	1.2	0.0	0.0	2.5
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.80
%ile Back of Q (95%), veh/ln	2.4	0.0	0.0	1.9	2.4	0.0	0.0	5.5
%ile Storage Ratio (RQ%)	0.40	0.00	0.00	0.28	0.43	0.00	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1248	0	246	0	550	0	275
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	10.1	0.0	25.6	0.0	11.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.1	0.0	25.6	0.0	11.5
Lane Grp Cap (c), veh/h	0	1914	0	478	0	946	0	478
V/C Ratio (X)	0.00	0.65	0.00	0.51	0.00	0.58	0.00	0.58
Avail Cap (c_a), veh/h	0	1914	0	478	0	946	0	478
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.84	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.7	0.0	27.9	0.0	29.2
Incr Delay (d2), s/veh	0.0	1.7	0.0	3.9	0.0	2.2	0.0	5.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.7	0.0	32.6	0.0	30.1	0.0	34.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.4	0.0	12.0	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.5	0.0	0.6	0.0	0.7

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.74	0.00	1.42	0.00	1.69
%ile Back of Q (95%), veh/ln	0.0	0.8	0.0	8.6	0.0	17.9	0.0	9.6
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.32	0.00	0.50	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	204	0	537	0	115
Grp Sat Flow (s), veh/h/ln	0	1531	0	1509	0	1734	0	1509
Q Serve Time (g_s), s	0.0	0.0	0.0	10.5	0.0	25.6	0.0	5.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.5	0.0	25.6	0.0	5.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.35	0.00	1.00
Lane Grp Cap (c), veh/h	0	825	0	386	0	923	0	493
V/C Ratio (X)	0.00	0.07	0.00	0.53	0.00	0.58	0.00	0.23
Avail Cap (c_a), veh/h	0	825	0	386	0	923	0	493
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.84	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.8	0.0	27.9	0.0	22.3
Incr Delay (d2), s/veh	0.0	0.2	0.0	5.1	0.0	2.3	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.2	0.0	34.0	0.0	30.2	0.0	23.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.7	0.0	11.7	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.6	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.43	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	7.6	0.0	17.6	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	1.94	0.00	0.49	0.00	0.96
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	557	209	65	1005	107	154	537	73	94	408	130
Future Volume (veh/h)	106	557	209	65	1005	107	154	537	73	94	408	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.91	0.94		0.76	0.98		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	605	227	71	1092	116	167	584	79	102	443	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	856	674	189	1235	500	319	1019	137	310	1157	363
Arrive On Green	0.07	0.46	0.46	0.35	0.35	0.35	0.34	0.34	0.34	0.06	0.45	0.45
Sat Flow, veh/h	1781	1870	1473	651	3554	1437	778	3017	405	1781	2578	808
Grp Volume(v), veh/h	115	605	227	71	1092	116	167	342	321	102	303	281
Grp Sat Flow(s),veh/h/ln	1781	1870	1473	651	1777	1437	778	1777	1645	1781	1777	1608
Q Serve(g_s), s	4.7	31.1	11.9	11.8	34.7	6.9	21.9	19.0	19.2	4.2	13.6	14.0
Cycle Q Clear(g_c), s	4.7	31.1	11.9	29.6	34.7	6.9	22.5	19.0	19.2	4.2	13.6	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.50
Lane Grp Cap(c), veh/h	203	856	674	189	1235	500	319	600	556	310	798	722
V/C Ratio(X)	0.57	0.71	0.34	0.37	0.88	0.23	0.52	0.57	0.58	0.33	0.38	0.39
Avail Cap(c_a), veh/h	216	916	722	206	1324	535	319	600	556	314	798	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.57	0.57	0.57	0.45	0.45	0.45	0.98	0.98	0.98
Uniform Delay (d), s/veh	28.0	26.1	20.9	43.2	36.9	27.8	34.1	32.6	32.7	23.7	22.0	22.1
Incr Delay (d2), s/veh	3.0	2.3	0.3	0.7	4.2	0.1	2.8	1.8	2.0	0.6	1.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.9	20.3	7.4	3.5	20.5	4.3	6.6	11.5	10.9	3.3	9.8	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	28.4	21.1	44.0	41.1	27.9	36.8	34.4	34.7	24.3	23.3	23.6
LnGrp LOS	C	C	C	D	D	C	D	C	C	C	C	C
Approach Vol, veh/h		947			1279			830			686	
Approach Delay, s/veh		27.0			40.1			35.0			23.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	59.4	13.2	47.4	13.3	46.0	60.6
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 50	* 8.7	* 45	8.0	* 36	* 59
Max Q Clear Time (g_c+I1), s	16.0	6.7	36.7	6.2	24.5	33.1
Green Ext Time (p_c), s	3.9	0.0	5.0	0.0	4.1	5.4

Intersection Summary	
HCM 6th Ctrl Delay	32.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	557	209	65	1005	107	154	537	73	94	408	130
Future Volume (veh/h)	106	557	209	65	1005	107	154	537	73	94	408	130
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.93	0.99		0.91	0.94		0.76	0.98		0.89
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	605	227	71	1092	116	167	584	79	102	443	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	203	856	674	189	1235	500	319	1019	137	310	1157	363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.46	0.46	0.35	0.35	0.35	0.34	0.34	0.34	0.06	0.45	0.45
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.1	28.4	21.1	44.0	41.1	27.9	36.8	34.4	34.7	24.3	23.3	23.6
Ln Grp LOS	C	C	C	D	D	C	D	C	C	C	C	C
Approach Vol, veh/h		947			1279			830			686	
Approach Delay, s/veh		27.0			40.1			35.0			23.6	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		59.4	13.2	47.4	13.3	46.0		60.6
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 50	* 8.7	* 45	8.0	* 36		* 59
Max Allow Headway (MAH), s		5.3	3.8	5.2	3.8	5.3		5.0
Max Q Clear (g_c+I1), s		16.0	6.7	36.7	6.2	24.5		33.1
Green Ext Time (g_e), s		3.9	0.0	5.0	0.0	4.1		5.4
Prob of Phs Call (p_c)		1.00	0.98	1.00	0.97	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	0.81	1.00	0.00		0.04

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	651	1781	778		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2578		3554		3017		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		808		1437		405		1473

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L (Pr/Pm)		LL (Pr/Pm)	L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	115	71	102	167	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	651	1781	778	0	0
Q Serve Time (g_s), s	0.0	0.0	4.7	11.8	4.2	21.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	4.7	29.6	4.2	22.5	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	463	651	760	778	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	43.7	41.7	42.5	40.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	7.0	23.8	21.3	39.9	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	7.0	11.8	3.3	21.9	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	203	189	310	319	0	0
V/C Ratio (X)	0.00	0.00	0.57	0.37	0.33	0.52	0.00	0.00
Avail Cap (c_a), veh/h	0	0	216	206	314	319	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.57	0.98	0.45	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	28.0	43.2	23.7	34.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.0	0.7	0.6	2.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	31.1	44.0	24.3	36.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	2.0	1.9	1.8	4.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	0.1	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.80	1.80	1.80	1.53	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	3.9	3.5	3.3	6.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.65	0.44	0.92	0.80	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	303	0	1092	0	342	0	605
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	13.6	0.0	34.7	0.0	19.0	0.0	31.1
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	34.7	0.0	19.0	0.0	31.1
Lane Grp Cap (c), veh/h	0	798	0	1235	0	600	0	856
V/C Ratio (X)	0.00	0.38	0.00	0.88	0.00	0.57	0.00	0.71
Avail Cap (c_a), veh/h	0	798	0	1324	0	600	0	916
Upstream Filter (I)	0.00	0.98	0.00	0.57	0.00	0.45	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.0	0.0	36.9	0.0	32.6	0.0	26.1
Incr Delay (d2), s/veh	0.0	1.4	0.0	4.2	0.0	1.8	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.3	0.0	41.1	0.0	34.4	0.0	28.4
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	14.9	0.0	8.0	0.0	13.6
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.7	0.0	0.3	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.67	0.00	1.31	0.00	1.38	0.00	1.44
%ile Back of Q (95%), veh/ln	0.0	9.8	0.0	20.5	0.0	11.5	0.0	20.3
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.44	0.00	0.11	0.00	0.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	281	0	116	0	321	0	227
Grp Sat Flow (s), veh/h/ln	0	1608	0	1437	0	1645	0	1473
Q Serve Time (g_s), s	0.0	14.0	0.0	6.9	0.0	19.2	0.0	11.9
Cycle Q Clear Time (g_c), s	0.0	14.0	0.0	6.9	0.0	19.2	0.0	11.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.50	0.00	1.00	0.00	0.25	0.00	1.00
Lane Grp Cap (c), veh/h	0	722	0	500	0	556	0	674
V/C Ratio (X)	0.00	0.39	0.00	0.23	0.00	0.58	0.00	0.34
Avail Cap (c_a), veh/h	0	722	0	535	0	556	0	722
Upstream Filter (I)	0.00	0.98	0.00	0.57	0.00	0.45	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.1	0.0	27.8	0.0	32.7	0.0	20.9
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.1	0.0	2.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.6	0.0	27.9	0.0	34.7	0.0	21.1
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	2.4	0.0	7.6	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.69	0.00	1.80	0.00	1.39	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.3	0.0	4.3	0.0	10.9	0.0	7.4
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.91	0.00	0.10	0.00	1.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	32.6
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	577	33	102	814	143	186	679	131	263	565	162
Future Volume (veh/h)	66	577	33	102	814	143	186	679	131	263	565	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.92	0.99		0.92	1.00		0.90	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	627	36	111	885	155	202	738	142	286	614	176
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	751	583	156	1195	209	238	855	342	299	988	375
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.24	0.24	0.17	0.28	0.28
Sat Flow, veh/h	537	1870	1452	761	2976	521	1781	3554	1423	1781	3554	1351
Grp Volume(v), veh/h	72	627	36	111	528	512	202	738	142	286	614	176
Grp Sat Flow(s),veh/h/ln	537	1870	1452	761	1777	1720	1781	1777	1423	1781	1777	1351
Q Serve(g_s), s	11.9	27.2	1.4	9.0	22.8	22.8	10.0	17.9	7.6	14.3	13.6	9.7
Cycle Q Clear(g_c), s	34.7	27.2	1.4	36.2	22.8	22.8	10.0	17.9	7.6	14.3	13.6	9.7
Prop In Lane	1.00		1.00	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	751	583	156	714	691	238	855	342	299	988	375
V/C Ratio(X)	0.45	0.83	0.06	0.71	0.74	0.74	0.85	0.86	0.41	0.96	0.62	0.47
Avail Cap(c_a), veh/h	160	751	583	156	714	691	293	869	348	299	988	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	1.00	1.00	1.00	0.81	0.81	0.81	0.75	0.75	0.75
Uniform Delay (d), s/veh	37.7	24.2	16.5	41.9	22.9	22.9	38.1	32.8	28.8	37.1	28.4	27.0
Incr Delay (d2), s/veh	6.1	7.4	0.1	24.0	6.8	7.0	14.4	7.4	0.7	34.0	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.2	17.5	0.8	6.2	15.5	15.2	8.5	12.4	4.5	13.0	8.9	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	31.6	16.7	65.9	29.7	29.9	52.5	40.1	29.5	71.1	29.3	27.7
LnGrp LOS	D	C	B	E	C	C	D	D	C	E	C	C
Approach Vol, veh/h		735			1151			1082			1076	
Approach Delay, s/veh		32.1			33.3			41.0			40.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		42.2	17.6	30.2		42.2	21.0	26.8
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green Setting (Gmax), s		* 36	14.8	* 23		* 36	15.1	* 22
Max Q Clear Time (g_c+I1), s		38.2	12.0	15.6		36.7	16.3	19.9
Green Ext Time (p_c), s		0.0	0.1	2.6		0.0	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	577	33	102	814	143	186	679	131	263	565	162
Future Volume (veh/h)	66	577	33	102	814	143	186	679	131	263	565	162
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.92	0.99		0.92	1.00		0.90	1.00		0.85
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	627	36	111	885	155	202	738	142	286	614	176
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	160	751	583	156	1195	209	238	855	342	299	988	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.24	0.24	0.17	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	43.8	31.6	16.7	65.9	29.7	29.9	52.5	40.1	29.5	71.1	29.3	27.7
Ln Grp LOS	D	C	B	E	C	C	D	D	C	E	C	C
Approach Vol, veh/h		735			1151			1082			1076	
Approach Delay, s/veh		32.1			33.3			41.0			40.1	
Approach LOS		C			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		42.2	17.6	30.2		42.2	21.0	26.8
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 36	14.8	* 23		* 36	15.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.9		5.3	3.7	4.9
Max Q Clear (g_c+I1), s		38.2	12.0	15.6		36.7	16.3	19.9
Green Ext Time (g_e), s		0.0	0.1	2.6		0.0	0.0	1.1
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	0.66		0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		761	1781			537	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2976		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		521		1351		1452		1423

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	111	202	0	0	72	286	0
Grp Sat Flow (s), veh/h/ln	0	761	1781	0	0	537	1781	0
Q Serve Time (g_s), s	0.0	9.0	10.0	0.0	0.0	11.9	14.3	0.0
Cycle Q Clear Time (g_c), s	0.0	36.2	10.0	0.0	0.0	34.7	14.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	761	0	0	0	537	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	36.2	0.0	0.0	0.0	36.2	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	9.0	0.0	0.0	0.0	13.4	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	9.0	0.0	0.0	0.0	11.9	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	156	238	0	0	160	299	0
V/C Ratio (X)	0.00	0.71	0.85	0.00	0.00	0.45	0.96	0.00
Avail Cap (c_a), veh/h	0	156	293	0	0	160	299	0
Upstream Filter (I)	0.00	1.00	0.81	0.00	0.00	0.67	0.75	0.00
Uniform Delay (d1), s/veh	0.0	41.9	38.1	0.0	0.0	37.7	37.1	0.0
Incr Delay (d2), s/veh	0.0	24.0	14.4	0.0	0.0	6.1	34.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	65.9	52.5	0.0	0.0	43.8	71.1	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	4.2	0.0	0.0	1.5	6.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	1.0	0.0	0.0	0.3	2.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.65	0.00	0.00	1.80	1.48	0.00
%ile Back of Q (95%), veh/ln	0.0	6.2	8.5	0.0	0.0	3.2	13.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.91	2.15	0.00	0.00	0.47	2.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	528	0	614	0	627	0	738
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	22.8	0.0	13.6	0.0	27.2	0.0	17.9
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	13.6	0.0	27.2	0.0	17.9
Lane Grp Cap (c), veh/h	0	714	0	988	0	751	0	855
V/C Ratio (X)	0.00	0.74	0.00	0.62	0.00	0.83	0.00	0.86
Avail Cap (c_a), veh/h	0	714	0	988	0	751	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.75	0.00	0.67	0.00	0.81
Uniform Delay (d1), s/veh	0.0	22.9	0.0	28.4	0.0	24.2	0.0	32.8
Incr Delay (d2), s/veh	0.0	6.8	0.0	0.9	0.0	7.4	0.0	7.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.7	0.0	29.3	0.0	31.6	0.0	40.1
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	5.4	0.0	11.2	0.0	7.3
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.1	0.0	1.5	0.0	0.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.51	0.00	1.60	0.00	1.38	0.00	1.52
%ile Back of Q (95%), veh/ln	0.0	15.5	0.0	8.9	0.0	17.5	0.0	12.4
%ile Storage Ratio (RQ%)	0.00	0.44	0.00	0.20	0.00	0.38	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	512	0	176	0	36	0	142
Grp Sat Flow (s), veh/h/ln	0	1720	0	1351	0	1452	0	1423
Q Serve Time (g_s), s	0.0	22.8	0.0	9.7	0.0	1.4	0.0	7.6
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	9.7	0.0	1.4	0.0	7.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.30	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	691	0	375	0	583	0	342
V/C Ratio (X)	0.00	0.74	0.00	0.47	0.00	0.06	0.00	0.41
Avail Cap (c_a), veh/h	0	691	0	375	0	583	0	348
Upstream Filter (I)	0.00	1.00	0.00	0.75	0.00	0.67	0.00	0.81
Uniform Delay (d1), s/veh	0.0	22.9	0.0	27.0	0.0	16.5	0.0	28.8
Incr Delay (d2), s/veh	0.0	7.0	0.0	0.7	0.0	0.1	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.9	0.0	27.7	0.0	16.7	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	3.0	0.0	0.4	0.0	2.5
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	15.2	0.0	5.5	0.0	0.8	0.0	4.5
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.93	0.00	0.21	0.00	0.92
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	66	179	522	0	0	362
Future Vol, veh/h	66	179	522	0	0	362
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	195	567	0	0	393

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	764	567	0	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	356	522	-	0	0	-
Stage 1	567	-	-	0	0	-
Stage 2	817	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	356	522	-	-	-	-
Mov Cap-2 Maneuver	457	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	817	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	457	522	-
HCM Lane V/C Ratio	-	0.157	0.373	-
HCM Control Delay (s)	-	14.3	15.9	-
HCM Lane LOS	-	B	C	-
HCM 95th %tile Q(veh)	-	0.6	1.7	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	326	98	457	533	403	78	762	287	87	660	29
Future Volume (veh/h)	143	326	98	457	533	403	78	762	287	87	660	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	155	354	107	497	579	438	85	828	312	95	717	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	572	170	477	1121	498	310	1206	534	256	1210	536
Arrive On Green	0.08	0.21	0.21	0.19	0.32	0.32	0.07	0.34	0.34	0.07	0.34	0.34
Sat Flow, veh/h	1781	2694	802	1781	3554	1578	1781	3554	1574	1781	3554	1574
Grp Volume(v), veh/h	155	232	229	497	579	438	85	828	312	95	717	32
Grp Sat Flow(s),veh/h/ln	1781	1777	1719	1781	1777	1578	1781	1777	1574	1781	1777	1574
Q Serve(g_s), s	8.1	14.2	14.5	22.4	16.0	31.6	3.5	24.1	19.6	4.0	20.0	1.6
Cycle Q Clear(g_c), s	8.1	14.2	14.5	22.4	16.0	31.6	3.5	24.1	19.6	4.0	20.0	1.6
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	310	377	365	477	1121	498	310	1206	534	256	1210	536
V/C Ratio(X)	0.50	0.61	0.63	1.04	0.52	0.88	0.27	0.69	0.58	0.37	0.59	0.06
Avail Cap(c_a), veh/h	318	503	487	477	1356	602	317	1206	534	262	1210	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	0.41	0.41	0.41	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	32.7	42.8	43.0	32.1	33.6	38.9	23.8	34.1	32.7	25.0	32.7	26.6
Incr Delay (d2), s/veh	0.9	1.2	1.3	38.0	0.2	5.7	0.5	3.2	4.6	0.8	1.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.2	9.8	9.7	20.2	9.5	16.3	2.7	16.0	12.6	3.0	13.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	44.0	44.3	70.1	33.7	44.6	24.3	37.4	37.3	25.8	34.6	26.8
LnGrp LOS	C	D	D	F	C	D	C	D	D	C	C	C
Approach Vol, veh/h		616			1514			1225			844	
Approach Delay, s/veh		41.5			48.8			36.4			33.3	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	46.3	15.6	43.7	14.5	46.1	28.0	31.4
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	31.8	10.6	45.8	9.0	31.8	22.4	34.0
Max Q Clear Time (g_c+I1), s	5.5	22.0	10.1	33.6	6.0	26.1	24.4	16.5
Green Ext Time (p_c), s	0.0	3.3	0.0	4.3	0.0	3.1	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	326	98	457	533	403	78	762	287	87	660	29
Future Volume (veh/h)	143	326	98	457	533	403	78	762	287	87	660	29
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	155	354	107	497	579	438	85	828	312	95	717	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	310	572	170	477	1121	498	310	1206	534	256	1210	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.21	0.21	0.19	0.32	0.32	0.07	0.34	0.34	0.07	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	33.6	44.0	44.3	70.1	33.7	44.6	24.3	37.4	37.3	25.8	34.6	26.8
Ln Grp LOS	C	D	D	F	C	D	C	D	D	C	C	C
Approach Vol, veh/h		616			1514			1225			844	
Approach Delay, s/veh		41.5			48.8			36.4			33.3	
Approach LOS		D			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	14.4	46.3	15.6	43.7	14.5	46.1	28.0	31.4
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	31.8	10.6	45.8	9.0	31.8	22.4	34.0
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.7	3.7	5.1
Max Q Clear (g_c+l1), s	5.5	22.0	10.1	33.6	6.0	26.1	24.4	16.5
Green Ext Time (g_e), s	0.0	3.3	0.0	4.3	0.0	3.1	0.0	2.4
Prob of Phs Call (p_c)	0.94	1.00	0.99	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.29	1.00	0.00	1.00	0.03

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	3554	3554	2694

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1574	1578	1574	802

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	85	0	155	0	95	0	497	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.5	0.0	8.1	0.0	4.0	0.0	22.4	0.0
Cycle Q Clear Time (g_c), s	3.5	0.0	8.1	0.0	4.0	0.0	22.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	713	0	553	0	493	0	929	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	40.7	0.0	25.5	0.0	40.7	0.0	27.5	0.0
Perm LT Serve Time (g_u), s	20.9	0.0	21.9	0.0	16.6	0.0	10.9	0.0
Perm LT Q Serve Time (g_ps), s	2.7	0.0	1.4	0.0	5.7	0.0	10.9	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	310	0	310	0	256	0	477	0
V/C Ratio (X)	0.27	0.00	0.50	0.00	0.37	0.00	1.04	0.00
Avail Cap (c_a), veh/h	317	0	318	0	262	0	477	0
Upstream Filter (I)	1.00	0.00	0.75	0.00	0.89	0.00	0.41	0.00
Uniform Delay (d1), s/veh	23.8	0.0	32.7	0.0	25.0	0.0	32.1	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.9	0.0	0.8	0.0	38.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	24.3	0.0	33.6	0.0	25.8	0.0	70.1	0.0
1st-Term Q (Q1), veh/ln	1.5	0.0	3.4	0.0	1.6	0.0	10.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.1	0.0	5.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.76	0.00	1.80	0.00	1.30	0.00
%ile Back of Q (95%), veh/ln	2.7	0.0	6.2	0.0	3.0	0.0	20.2	0.0
%ile Storage Ratio (RQ%)	0.33	0.00	1.95	0.00	0.34	0.00	4.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	717	0	579	0	828	0	232
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	20.0	0.0	16.0	0.0	24.1	0.0	14.2
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	16.0	0.0	24.1	0.0	14.2
Lane Grp Cap (c), veh/h	0	1210	0	1121	0	1206	0	377
V/C Ratio (X)	0.00	0.59	0.00	0.52	0.00	0.69	0.00	0.61
Avail Cap (c_a), veh/h	0	1210	0	1356	0	1206	0	503
Upstream Filter (I)	0.00	0.89	0.00	0.41	0.00	1.00	0.00	0.75
Uniform Delay (d1), s/veh	0.0	32.7	0.0	33.6	0.0	34.1	0.0	42.8
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.2	0.0	3.2	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.6	0.0	33.7	0.0	37.4	0.0	44.0
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	6.7	0.0	10.1	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	0.00	1.40	0.00	1.50	0.00	1.57
%ile Back of Q (95%), veh/ln	0.0	13.2	0.0	9.5	0.0	16.0	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.29	0.00	1.28	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	32	0	438	0	312	0	229
Grp Sat Flow (s), veh/h/ln	0	1574	0	1578	0	1574	0	1719
Q Serve Time (g_s), s	0.0	1.6	0.0	31.6	0.0	19.6	0.0	14.5
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	31.6	0.0	19.6	0.0	14.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.47
Lane Grp Cap (c), veh/h	0	536	0	498	0	534	0	365
V/C Ratio (X)	0.00	0.06	0.00	0.88	0.00	0.58	0.00	0.63
Avail Cap (c_a), veh/h	0	536	0	602	0	534	0	487
Upstream Filter (I)	0.00	0.89	0.00	0.41	0.00	1.00	0.00	0.75
Uniform Delay (d1), s/veh	0.0	26.6	0.0	38.9	0.0	32.7	0.0	43.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	5.7	0.0	4.6	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.8	0.0	44.6	0.0	37.3	0.0	44.3
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	11.8	0.0	7.3	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.30	0.00	1.58	0.00	1.57
%ile Back of Q (95%), veh/ln	0.0	1.1	0.0	16.3	0.0	12.6	0.0	9.7
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	3.45	0.00	2.00	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		41.0						
HCM 6th LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	398	0	331	1	787	0	0	680	0
Future Volume (veh/h)	0	0	0	398	0	331	1	787	0	0	680	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	433	0	360	1	855	0	0	739	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Cap, veh/h	0	576	0	669	0	486	60	1867	0	0	1903	0
Arrive On Green	0.00	0.00	0.00	0.31	0.00	0.31	0.54	0.54	0.00	0.00	0.54	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1577	0	3571	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	433	0	360	459	397	0	0	739	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1577	1870	1617	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	13.3	0.0	12.3	0.0	9.1	0.0	0.0	7.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	13.3	0.0	12.3	9.1	9.1	0.0	0.0	7.3	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	576	0	669	0	486	1061	866	0	0	1903	0
V/C Ratio(X)	0.00	0.00	0.00	0.65	0.00	0.74	0.43	0.46	0.00	0.00	0.39	0.00
Avail Cap(c_a), veh/h	0	857	0	936	0	723	1061	866	0	0	1903	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.73	0.73	0.00	0.00	0.76	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	19.0	0.0	18.6	8.6	8.6	0.0	0.0	8.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	2.2	0.9	1.3	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	8.9	0.0	7.8	5.6	4.9	0.0	0.0	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	20.0	0.0	20.9	9.5	9.9	0.0	0.0	8.6	0.0
LnGrp LOS	A	A	A	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		0			793			856			739	
Approach Delay, s/veh		0.0			20.4			9.7			8.6	
Approach LOS					C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	37.0	23.0	37.0	23.0
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	23.1	27.5	23.1	27.5
Max Q Clear Time (g_c+I1), s	11.1	15.3	9.3	0.0
Green Ext Time (p_c), s	4.1	3.1	4.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	398	0	331	1	787	0	0	680	0
Future Volume (veh/h)	0	0	0	398	0	331	1	787	0	0	680	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	433	0	360	1	855	0	0	739	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			Yes			No		
Cap, veh/h	0	576	0	669	0	486	60	1867	0	0	1903	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.31	0.00	0.31	0.54	0.54	0.00	0.00	0.54	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	20.0	0.0	20.9	9.5	9.9	0.0	0.0	8.6	0.0
Ln Grp LOS	A	A	A	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		0			793			856			739	
Approach Delay, s/veh		0.0			20.4			9.7			8.6	
Approach LOS					C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		37.0		23.0		37.0		23.0
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		23.1		27.5		23.1		27.5
Max Allow Headway (MAH), s		5.1		4.6		5.1		0.0
Max Q Clear (g_c+I1), s		11.1		15.3		9.3		0.0
Green Ext Time (g_e), s		4.1		3.1		4.2		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		0.21		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3571		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1577		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L+T		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	459	0	433	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.1	0.0	13.3	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	731	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	32.1	0.0	18.5	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	24.8	0.0	18.5	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	28.7	0.0	0.0	0.0	32.1	0.0	18.5
Serve Time pre Blk (g_fs), s	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1061	0	669	0	0	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.65	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1061	0	936	0	0	0	0
Upstream Filter (I)	0.00	0.73	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	19.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.5	0.0	20.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	5.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.72	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	5.6	0.0	8.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	0.47	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	2	0	1
Grp Vol (v), veh/h	0	397	0	0	0	739	0	0
Grp Sat Flow (s), veh/h/ln	0	1617	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	9.1	0.0	0.0	0.0	7.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.1	0.0	0.0	0.0	7.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	866	0	0	0	1903	0	576
V/C Ratio (X)	0.00	0.46	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	866	0	0	0	1903	0	857
Upstream Filter (I)	0.00	0.73	0.00	0.00	0.00	0.76	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	0.0	0.0	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.9	0.0	0.0	0.0	8.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	0.0	0.0	2.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	4.9	0.0	0.0	0.0	4.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.00	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	360	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1577	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	486	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	723	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.79	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	318	79	85	882	132	233	628	96	138	539	404
Future Volume (veh/h)	41	318	79	85	882	132	233	628	96	138	539	404
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	346	86	92	959	143	253	683	104	150	586	439
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	871	213	405	1011	151	332	1209	531	341	1202	528
Arrive On Green	0.05	0.31	0.31	0.07	0.33	0.33	0.08	0.34	0.34	0.08	0.34	0.34
Sat Flow, veh/h	1781	2815	689	1781	3091	461	1781	3554	1561	1781	3554	1561
Grp Volume(v), veh/h	45	216	216	92	551	551	253	683	104	150	586	439
Grp Sat Flow(s),veh/h/ln	1781	1777	1727	1781	1777	1775	1781	1777	1561	1781	1777	1561
Q Serve(g_s), s	1.5	8.6	8.9	3.0	27.2	27.3	7.0	14.1	4.2	4.8	11.8	23.3
Cycle Q Clear(g_c), s	1.5	8.6	8.9	3.0	27.2	27.3	7.0	14.1	4.2	4.8	11.8	23.3
Prop In Lane	1.00		0.40	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	550	534	405	581	580	332	1209	531	341	1202	528
V/C Ratio(X)	0.24	0.39	0.40	0.23	0.95	0.95	0.76	0.57	0.20	0.44	0.49	0.83
Avail Cap(c_a), veh/h	231	582	566	419	582	582	332	1209	531	344	1202	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	0.73	0.73	0.73	0.74	0.74	0.74
Uniform Delay (d), s/veh	22.8	24.4	24.5	18.8	29.5	29.6	22.2	24.3	21.0	18.2	23.6	27.4
Incr Delay (d2), s/veh	0.6	0.4	0.4	0.3	25.1	25.3	7.4	1.4	0.6	0.7	1.0	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	6.3	6.3	2.2	21.1	21.2	6.9	9.3	2.8	3.5	8.0	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	24.8	24.9	19.0	54.6	54.8	29.6	25.7	21.6	18.9	24.6	38.3
LnGrp LOS	C	C	C	B	D	D	C	C	C	B	C	D
Approach Vol, veh/h		477			1194			1040			1175	
Approach Delay, s/veh		24.7			52.0			26.2			29.0	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	35.8	8.7	34.4	10.8	36.0	10.3	32.9
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	9.0	25.3	3.5	29.3	6.8	16.1	5.0	10.9
Green Ext Time (p_c), s	0.0	1.5	0.0	0.2	0.0	3.8	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	318	79	85	882	132	233	628	96	138	539	404
Future Volume (veh/h)	41	318	79	85	882	132	233	628	96	138	539	404
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	0.99		0.98	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	346	86	92	959	143	253	683	104	150	586	439
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	186	871	213	405	1011	151	332	1209	531	341	1202	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.31	0.31	0.07	0.33	0.33	0.08	0.34	0.34	0.08	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.4	24.8	24.9	19.0	54.6	54.8	29.6	25.7	21.6	18.9	24.6	38.3
Ln Grp LOS	C	C	C	B	D	D	C	C	C	B	C	D
Approach Vol, veh/h		477			1194			1040			1175	
Approach Delay, s/veh		24.7			52.0			26.2			29.0	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	11.0	35.8	8.7	34.4	10.8	36.0	10.3	32.9
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.6	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+I1), s	9.0	25.3	3.5	29.3	6.8	16.1	5.0	10.9
Green Ext Time (g_e), s	0.0	1.5	0.0	0.2	0.0	3.8	0.0	2.2
Prob of Phs Call (p_c)	1.00	1.00	0.68	1.00	0.98	1.00	0.90	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.02

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3091		3554		2815

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1561		461		1561		689

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	253	0	45	0	150	0	92	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	1.5	0.0	4.8	0.0	3.0	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	1.5	0.0	4.8	0.0	3.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	549	0	511	0	687	0	948	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	30.4	0.0	27.9	0.0	30.4	0.0	27.9	0.0
Perm LT Serve Time (g_u), s	18.7	0.0	2.2	0.0	16.5	0.0	19.0	0.0
Perm LT Q Serve Time (g_ps), s	18.7	0.0	2.2	0.0	3.9	0.0	1.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	332	0	186	0	341	0	405	0
V/C Ratio (X)	0.76	0.00	0.24	0.00	0.44	0.00	0.23	0.00
Avail Cap (c_a), veh/h	332	0	231	0	344	0	419	0
Upstream Filter (I)	0.73	0.00	0.83	0.00	0.74	0.00	1.00	0.00
Uniform Delay (d1), s/veh	22.2	0.0	22.8	0.0	18.2	0.0	18.8	0.0
Incr Delay (d2), s/veh	7.4	0.0	0.6	0.0	0.7	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	29.6	0.0	23.4	0.0	18.9	0.0	19.0	0.0
1st-Term Q (Q1), veh/ln	3.4	0.0	0.6	0.0	1.9	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.70	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	6.9	0.0	1.1	0.0	3.5	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	1.00	0.00	0.23	0.00	0.51	0.00	0.55	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	586	0	551	0	683	0	216
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	11.8	0.0	27.2	0.0	14.1	0.0	8.6
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	27.2	0.0	14.1	0.0	8.6
Lane Grp Cap (c), veh/h	0	1202	0	581	0	1209	0	550
V/C Ratio (X)	0.00	0.49	0.00	0.95	0.00	0.57	0.00	0.39
Avail Cap (c_a), veh/h	0	1202	0	582	0	1209	0	582
Upstream Filter (I)	0.00	0.74	0.00	1.00	0.00	0.73	0.00	0.83
Uniform Delay (d1), s/veh	0.0	23.6	0.0	29.5	0.0	24.3	0.0	24.4
Incr Delay (d2), s/veh	0.0	1.0	0.0	25.1	0.0	1.4	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.6	0.0	54.6	0.0	25.7	0.0	24.8
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	10.8	0.0	5.7	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	4.0	0.0	0.2	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.43	0.00	1.58	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	21.1	0.0	9.3	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	0.57	0.00	0.43	0.00	0.36	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	439	0	551	0	104	0	216
Grp Sat Flow (s), veh/h/ln	0	1561	0	1775	0	1561	0	1727
Q Serve Time (g_s), s	0.0	23.3	0.0	27.3	0.0	4.2	0.0	8.9
Cycle Q Clear Time (g_c), s	0.0	23.3	0.0	27.3	0.0	4.2	0.0	8.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.26	0.00	1.00	0.00	0.40
Lane Grp Cap (c), veh/h	0	528	0	580	0	531	0	534
V/C Ratio (X)	0.00	0.83	0.00	0.95	0.00	0.20	0.00	0.40
Avail Cap (c_a), veh/h	0	528	0	582	0	531	0	566
Upstream Filter (I)	0.00	0.74	0.00	1.00	0.00	0.73	0.00	0.83
Uniform Delay (d1), s/veh	0.0	27.4	0.0	29.6	0.0	21.0	0.0	24.5
Incr Delay (d2), s/veh	0.0	10.9	0.0	25.3	0.0	0.6	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.3	0.0	54.8	0.0	21.6	0.0	24.9
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	10.8	0.0	1.5	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	4.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.43	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	14.0	0.0	21.2	0.0	2.8	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	2.74	0.00	0.43	0.00	0.55	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	320	88	56	449	60	168	827	37	21	558	133
Future Volume (veh/h)	70	320	88	56	449	60	168	827	37	21	558	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	348	96	61	488	65	183	899	40	23	607	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	244	518	143	272	689	577	339	1585	71	279	1297	309
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	852	1407	388	941	1870	1566	707	3461	154	595	2831	675
Grp Volume(v), veh/h	76	0	444	61	488	65	183	462	477	23	380	372
Grp Sat Flow(s),veh/h/ln	852	0	1795	941	1870	1566	707	1777	1838	595	1777	1728
Q Serve(g_s), s	5.0	0.0	12.5	3.5	13.4	1.6	14.5	11.4	11.4	1.8	8.9	8.9
Cycle Q Clear(g_c), s	18.4	0.0	12.5	15.9	13.4	1.6	23.4	11.4	11.4	13.2	8.9	8.9
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.08	1.00		0.39
Lane Grp Cap(c), veh/h	244	0	661	272	689	577	339	814	842	279	814	792
V/C Ratio(X)	0.31	0.00	0.67	0.22	0.71	0.11	0.54	0.57	0.57	0.08	0.47	0.47
Avail Cap(c_a), veh/h	285	0	748	317	779	652	339	814	842	279	814	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	24.0	0.0	15.9	22.6	16.2	12.5	19.3	11.9	11.9	16.7	11.2	11.2
Incr Delay (d2), s/veh	0.7	0.0	2.0	0.4	2.6	0.1	6.1	2.9	2.8	0.5	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.0	8.3	1.3	9.2	0.9	4.8	7.8	7.9	0.5	5.8	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	17.9	23.0	18.8	12.6	25.3	14.8	14.7	17.2	12.8	12.9
LnGrp LOS	C	A	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		520			614			1122			775	
Approach Delay, s/veh		18.9			18.5			16.4			13.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	32.5	27.5	32.5	27.5
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	25.4	20.4	15.2	17.9
Green Ext Time (p_c), s	0.0	1.3	3.3	2.0

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	320	88	56	449	60	168	827	37	21	558	133
Future Volume (veh/h)	70	320	88	56	449	60	168	827	37	21	558	133
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	0.99		0.97	1.00		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	348	96	61	488	65	183	899	40	23	607	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	244	518	143	272	689	577	339	1585	71	279	1297	309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.46	0.46	0.46	0.46	0.46	0.46
Unsig. Movement Delay												
Ln Grp Delay, s/veh	24.8	0.0	17.9	23.0	18.8	12.6	25.3	14.8	14.7	17.2	12.8	12.9
Ln Grp LOS	C	A	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		520			614			1122			775	
Approach Delay, s/veh		18.9			18.5			16.4			13.0	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		32.5		27.5		32.5		27.5
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		5.3		5.2		5.2		5.0
Max Q Clear (g_c+I1), s		25.4		20.4		15.2		17.9
Green Ext Time (g_e), s		0.0		1.3		3.3		2.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.63
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		707		852		595		941
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3461		1407		2831		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		154		388		675		1566
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	183	0	76	0	23	0	61
Grp Sat Flow (s), veh/h/ln	0	707	0	852	0	595	0	941
Q Serve Time (g_s), s	0.0	14.5	0.0	5.0	0.0	1.8	0.0	3.5
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	18.4	0.0	13.2	0.0	15.9
Perm LT Sat Flow (s_l), veh/h/ln	0	707	0	852	0	595	0	941
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	0.0	22.1	0.0	27.5	0.0	22.1
Perm LT Serve Time (g_u), s	0.0	18.6	0.0	8.7	0.0	16.1	0.0	9.7
Perm LT Q Serve Time (g_ps), s	0.0	14.5	0.0	5.0	0.0	1.8	0.0	3.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	339	0	244	0	279	0	272
V/C Ratio (X)	0.00	0.54	0.00	0.31	0.00	0.08	0.00	0.22
Avail Cap (c_a), veh/h	0	339	0	285	0	279	0	317
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.84	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.3	0.0	24.0	0.0	16.7	0.0	22.6
Incr Delay (d2), s/veh	0.0	6.1	0.0	0.7	0.0	0.5	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.3	0.0	24.8	0.0	17.2	0.0	23.0
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	0.9	0.0	0.2	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	4.8	0.0	1.8	0.0	0.5	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	1.21	0.00	0.45	0.00	0.12	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	462	0	0	0	380	0	488
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	11.4	0.0	0.0	0.0	8.9	0.0	13.4
Cycle Q Clear Time (g_c), s	0.0	11.4	0.0	0.0	0.0	8.9	0.0	13.4
Lane Grp Cap (c), veh/h	0	814	0	0	0	814	0	689
V/C Ratio (X)	0.00	0.57	0.00	0.00	0.00	0.47	0.00	0.71
Avail Cap (c_a), veh/h	0	814	0	0	0	814	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.84	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.9	0.0	0.0	0.0	11.2	0.0	16.2
Incr Delay (d2), s/veh	0.0	2.9	0.0	0.0	0.0	1.6	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.8	0.0	0.0	0.0	12.8	0.0	18.8
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	0.0	0.0	2.9	0.0	4.9
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.00	0.00	1.80	0.00	1.71
%ile Back of Q (95%), veh/ln	0.0	7.8	0.0	0.0	0.0	5.8	0.0	9.2
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	0.00	0.00	0.23	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	477	0	444	0	372	0	65
Grp Sat Flow (s), veh/h/ln	0	1838	0	1795	0	1728	0	1566
Q Serve Time (g_s), s	0.0	11.4	0.0	12.5	0.0	8.9	0.0	1.6
Cycle Q Clear Time (g_c), s	0.0	11.4	0.0	12.5	0.0	8.9	0.0	1.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	0.22	0.00	0.39	0.00	1.00
Lane Grp Cap (c), veh/h	0	842	0	661	0	792	0	577
V/C Ratio (X)	0.00	0.57	0.00	0.67	0.00	0.47	0.00	0.11
Avail Cap (c_a), veh/h	0	842	0	748	0	792	0	652
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.84	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.9	0.0	15.9	0.0	11.2	0.0	12.5
Incr Delay (d2), s/veh	0.0	2.8	0.0	2.0	0.0	1.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.7	0.0	17.9	0.0	12.9	0.0	12.6
1st-Term Q (Q1), veh/ln	0.0	3.8	0.0	4.4	0.0	2.8	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.4	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.75	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.9	0.0	8.3	0.0	5.7	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.24	0.00	0.22	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/10/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	156	211	406	128	11	129	359	115	14	437	19	93
Future Volume (vph)	156	211	406	128	11	129	359	115	14	437	19	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.98	0.96			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		0.99	1.00		
Frt	1.00	0.92	0.85			1.00	0.96		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1650	2850	1287			1648	3163		1640	3175		
Flt Permitted	0.26	1.00	1.00			0.25	1.00		0.47	1.00		
Satd. Flow (perm)	444	2850	1287			431	3163		819	3175		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	170	229	441	139	12	140	390	125	15	475	21	101
RTOR Reduction (vph)	0	0	146	0	0	0	22	0	0	12	0	0
Lane Group Flow (vph)	170	520	143	0	0	152	493	0	15	585	0	0
Confl. Peds. (#/hr)	9		11	8	11	8		9	9		7	11
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	41.4	30.4	30.4			38.9	29.7		29.0	29.0		
Effective Green, g (s)	41.4	30.4	30.4			38.9	29.7		29.0	29.0		
Actuated g/C Ratio	0.30	0.22	0.22			0.28	0.21		0.21	0.21		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	226	618	279			199	671		169	657		
v/s Ratio Prot	c0.06	c0.18				0.05	0.16			c0.18		
v/s Ratio Perm	0.16		0.11			0.16			0.02			
v/c Ratio	0.75	0.97dr	0.51			0.76	0.73		0.09	0.89		
Uniform Delay, d1	39.9	52.5	48.3			42.3	51.5		44.8	54.0		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	13.2	13.1	6.6			15.9	7.0		1.0	16.7		
Delay (s)	53.1	65.6	54.9			58.2	58.5		45.9	70.6		
Level of Service	D	E	D			E	E		D	E		
Approach Delay (s)		60.2					58.4			70.0		
Approach LOS		E					E			E		

Intersection Summary			
HCM 2000 Control Delay	57.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	20	52	354	94	41	391	156	14
Future Volume (vph)	20	52	354	94	41	391	156	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	0.99			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.97			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1651	3182			3196	1345	
Flt Permitted		0.14	1.00			0.95	1.00	
Satd. Flow (perm)		236	3182			3196	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	57	385	102	45	425	170	15
RTOR Reduction (vph)	0	0	17	0	0	0	136	0
Lane Group Flow (vph)	0	79	470	0	0	487	32	0
Confl. Peds. (#/hr)	7	11		9	8	9	9	7
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		47.2	47.2			26.4	26.4	
Effective Green, g (s)		47.2	47.2			26.4	26.4	
Actuated g/C Ratio		0.34	0.34			0.19	0.19	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		200	1072			602	253	
v/s Ratio Prot		0.03	c0.15			c0.15	0.02	
v/s Ratio Perm		0.10						
v/c Ratio		0.40	0.44			0.81	0.13	
Uniform Delay, d1		34.6	36.1			54.4	47.2	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.3	1.3			8.8	0.4	
Delay (s)		35.9	37.4			63.2	47.6	
Level of Service		D	D			E	D	
Approach Delay (s)			37.2			59.2		
Approach LOS			D			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	17	54	221	67	61	19	44	292	51	38	66	122
Future Volume (vph)	17	54	221	67	61	19	44	292	51	38	66	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.98				1.00	0.99			1.00	1.00
Flpb, ped/bikes		0.98	1.00				0.98	1.00			1.00	1.00
Frt		1.00	0.94				1.00	0.97			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1612	3063				1618	3142			1652	1652
Flt Permitted		0.31	1.00				0.35	1.00			0.95	0.95
Satd. Flow (perm)		533	3063				602	3142			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	59	240	73	66	21	48	317	55	41	72	133
RTOR Reduction (vph)	0	0	11	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	77	368	0	0	0	69	408	0	0	72	133
Confl. Peds. (#/hr)	12	27		17	13	17	13		12	27	24	12
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		34.4	34.4				34.4	34.4			20.1	20.1
Effective Green, g (s)		34.4	34.4				34.4	34.4			20.1	20.1
Actuated g/C Ratio		0.19	0.19				0.19	0.19			0.11	0.11
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		101	585				115	600			184	184
v/s Ratio Prot			0.12					0.13			0.04	0.08
v/s Ratio Perm		c0.14					0.11					
v/c Ratio		0.76	0.63				0.60	0.68			0.39	0.72
Uniform Delay, d1		68.9	66.9				66.5	67.7			74.3	77.3
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		28.2	2.1				8.2	3.2			1.4	13.1
Delay (s)		97.2	69.1				74.7	70.9			75.6	90.4
Level of Service		F	E				E	E			E	F
Approach Delay (s)			73.8					71.4				
Approach LOS			E					E				

Intersection Summary			
HCM 2000 Control Delay	69.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	155.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SEL2	SEL	SET	SER
Lane Configurations												
Traffic Volume (vph)	438	42	21	26	115	382	61	6	6	54	347	158
Future Volume (vph)	438	42	21	26	115	382	61	6	6	54	347	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Lane Util. Factor	0.95	1.00			1.00	0.95	1.00			1.00	0.91	0.91
Frpb, ped/bikes	1.00	0.88			1.00	1.00	0.95			1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00			0.98	1.00	1.00
Frt	1.00	0.85			1.00	1.00	0.85			1.00	0.99	0.85
Flt Protected	1.00	1.00			0.95	1.00	1.00			0.95	1.00	1.00
Satd. Flow (prot)	3303	1300			1652	3303	1400			1618	3140	1306
Flt Permitted	1.00	1.00			0.95	1.00	1.00			0.17	1.00	1.00
Satd. Flow (perm)	3303	1300			1652	3303	1400			293	3140	1306
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	476	46	23	28	125	415	66	7	7	59	377	172
RTOR Reduction (vph)	0	48	0	0	0	0	50	0	0	0	0	0
Lane Group Flow (vph)	476	21	0	0	153	415	23	0	0	66	394	155
Confl. Peds. (#/hr)		24	17	24	17		24	12	27	24		13
Turn Type	NA	Perm		Prot	Prot	NA	Perm		Perm	Perm	NA	Perm
Protected Phases	6			5	5	2					10	
Permitted Phases		6					2		10	10		10
Actuated Green, G (s)	55.0	55.0			21.6	56.7	56.7			41.1	41.1	41.1
Effective Green, g (s)	55.0	55.0			21.6	56.7	56.7			41.1	41.1	41.1
Actuated g/C Ratio	0.31	0.31			0.12	0.32	0.32			0.23	0.23	0.23
Clearance Time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1009	397			198	1040	441			66	716	298
v/s Ratio Prot	c0.14				c0.09	0.13					0.13	
v/s Ratio Perm		0.02					0.02			c0.23		0.12
v/c Ratio	0.47	0.05			0.77	0.40	0.05			1.00	0.55	0.52
Uniform Delay, d1	50.7	44.1			76.8	48.3	42.9			69.5	61.3	60.8
Progression Factor	1.00	1.00			1.12	0.76	4.21			1.00	1.00	1.00
Incremental Delay, d2	1.6	0.3			11.7	0.8	0.1			110.8	0.9	1.6
Delay (s)	52.3	44.4			98.1	37.3	181.1			180.2	62.2	62.5
Level of Service	D	D			F	D	F			F	E	E
Approach Delay (s)	60.6					68.2					74.8	
Approach LOS	E					E					E	

Intersection Summary

Movement	SER2	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	4	64	513	243	40
Future Volume (vph)	4	64	513	243	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	7.6	7.6	7.6	7.6	
Lane Util. Factor	1.00	1.00	0.91	0.91	
Frpb, ped/bikes	0.93	1.00	1.00	0.92	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	
Frt	0.85	1.00	0.99	0.85	
Flt Protected	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1372	1648	3115	1240	
Flt Permitted	1.00	0.37	1.00	1.00	
Satd. Flow (perm)	1372	641	3115	1240	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	70	558	264	43
RTOR Reduction (vph)	3	0	0	110	0
Lane Group Flow (vph)	1	70	606	149	0
Confl. Peds. (#/hr)	24	2		27	24
Turn Type	Perm	Perm	NA	Perm	
Protected Phases			14		
Permitted Phases	10	14		14	
Actuated Green, G (s)	41.1	41.1	41.1	41.1	
Effective Green, g (s)	41.1	41.1	41.1	41.1	
Actuated g/C Ratio	0.23	0.23	0.23	0.23	
Clearance Time (s)	7.6	7.6	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	313	146	711	283	
v/s Ratio Prot			0.19		
v/s Ratio Perm	0.00	0.11		0.12	
v/c Ratio	0.00	0.48	0.85	0.53	
Uniform Delay, d1	53.6	60.2	66.5	60.9	
Progression Factor	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	2.5	9.7	1.8	
Delay (s)	53.6	62.7	76.2	62.7	
Level of Service	D	E	E	E	
Approach Delay (s)			71.5		
Approach LOS			E		

Intersection Summary

Future without Project Conditions – Year 2026

Morning Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1625	6	0	1303	0	1	0	64	776	28	240
Future Volume (veh/h)	0	1625	6	0	1303	0	1	0	64	776	28	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1766	7	0	1416	0	1	0	70	567	416	261
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2125	8	0	1438	0	2	0	128	590	355	223
Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Sat Flow, veh/h	0	5418	21	0	3741	0	22	0	1547	1781	1073	673
Grp Volume(v), veh/h	0	1145	628	0	1416	0	71	0	0	567	0	677
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1569	0	0	1781	0	1746
Q Serve(g_s), s	0.0	27.2	27.2	0.0	35.5	0.0	3.9	0.0	0.0	28.1	0.0	29.8
Cycle Q Clear(g_c), s	0.0	27.2	27.2	0.0	35.5	0.0	3.9	0.0	0.0	28.1	0.0	29.8
Prop In Lane	0.00		0.01	0.00		0.00	0.01		0.99	1.00		0.39
Lane Grp Cap(c), veh/h	0	1378	755	0	1438	0	130	0	0	590	0	578
V/C Ratio(X)	0.00	0.83	0.83	0.00	0.98	0.00	0.54	0.00	0.00	0.96	0.00	1.17
Avail Cap(c_a), veh/h	0	1378	755	0	1438	0	157	0	0	590	0	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.0	24.0	0.0	26.5	0.0	39.6	0.0	0.0	29.5	0.0	30.1
Incr Delay (d2), s/veh	0.0	6.0	10.3	0.0	20.3	0.0	3.5	0.0	0.0	27.6	0.0	94.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	16.5	19.0	0.0	24.5	0.0	2.9	0.0	0.0	22.1	0.0	38.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.0	34.4	0.0	46.8	0.0	43.1	0.0	0.0	57.1	0.0	124.4
LnGrp LOS	A	C	C	A	D	A	D	A	A	E	A	F
Approach Vol, veh/h		1773			1416			71			1244	
Approach Delay, s/veh		31.5			46.8			43.1			93.7	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	41.5	35.0	41.5	13.5
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	29.2	31.8	37.5	5.9
Green Ext Time (p_c), s	4.5	0.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	53.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1625	6	0	1303	0	1	0	64	776	28	240
Future Volume (veh/h)	0	1625	6	0	1303	0	1	0	64	776	28	240
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1766	7	0	1416	0	1	0	70	567	416	261
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2125	8	0	1438	0	2	0	128	590	355	223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	30.0	34.4	0.0	46.8	0.0	43.1	0.0	0.0	57.1	0.0	124.4
Ln Grp LOS	A	C	C	A	D	A	D	A	A	E	A	F
Approach Vol, veh/h		1773			1416			71			1244	
Approach Delay, s/veh		31.5			46.8			43.1			93.7	
Approach LOS		C			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		41.5	13.5	35.0		41.5		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		29.2	5.9	31.8		37.5		
Green Ext Time (g_e), s		4.5	0.1	0.0		0.0		
Prob of Phs Call (p_c)		1.00	0.84	1.00		1.00		
Prob of Max Out (p_x)		0.97	1.00	1.00		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	22	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5418	0	1073		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		21	1547	673		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	71	567	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1569	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	3.9	28.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	3.9	28.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	36.4	0.0	0.0	0.0	36.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	130	590	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.54	0.96	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	157	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	39.6	29.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.5	27.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	43.1	57.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.5	11.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	4.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.41	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	2.9	22.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.27	2.37	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1145	0	0	0	1416	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	27.2	0.0	0.0	0.0	35.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.2	0.0	0.0	0.0	35.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	1378	0	0	0	1438	0	0
V/C Ratio (X)	0.00	0.83	0.00	0.00	0.00	0.98	0.00	0.00
Avail Cap (c_a), veh/h	0	1378	0	0	0	1438	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	0.0	0.0	26.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.0	0.0	0.0	0.0	20.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.0	0.0	0.0	0.0	46.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.9	0.0	0.0	0.0	13.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.0	0.0	4.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	1.00	1.00	0.00	1.39	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	16.5	0.0	0.0	0.0	24.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.70	0.00	0.00	0.00	3.50	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	628	0	677	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1746	0	0	0	0
Q Serve Time (g_s), s	0.0	27.2	0.0	29.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.2	0.0	29.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.99	0.39	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	755	0	578	0	0	0	0
V/C Ratio (X)	0.00	0.83	0.00	1.17	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	755	0	578	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.3	0.0	94.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.4	0.0	124.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.9	0.0	11.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.2	0.0	15.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	1.00	1.45	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	19.0	0.0	38.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	4.16	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	24.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	1123	169	82	1546	33	161	344	114	68	356	256
Future Volume (veh/h)	67	1123	169	82	1546	33	161	344	114	68	356	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	1221	184	89	1680	36	175	374	124	74	387	278
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	1970	865	203	1970	865	188	599	479	212	599	479
Arrive On Green	0.55	0.55	0.55	1.00	1.00	1.00	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	284	3554	1559	383	3554	1559	759	1870	1497	882	1870	1497
Grp Volume(v), veh/h	73	1221	184	89	1680	36	175	374	124	74	387	278
Grp Sat Flow(s),veh/h/ln	284	1777	1559	383	1777	1559	759	1870	1497	882	1870	1497
Q Serve(g_s), s	13.9	21.0	5.4	15.1	0.0	0.0	12.8	15.3	5.5	7.0	16.0	14.0
Cycle Q Clear(g_c), s	13.9	21.0	5.4	36.1	0.0	0.0	28.8	15.3	5.5	22.3	16.0	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	1970	865	203	1970	865	188	599	479	212	599	479
V/C Ratio(X)	0.31	0.62	0.21	0.44	0.85	0.04	0.93	0.62	0.26	0.35	0.65	0.58
Avail Cap(c_a), veh/h	237	1970	865	203	1970	865	188	599	479	212	599	479
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.56	0.56	0.56	0.64	0.64	0.64	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0	13.6	10.1	7.6	0.0	0.0	41.0	26.0	22.7	35.5	26.2	25.6
Incr Delay (d2), s/veh	3.3	1.5	0.6	3.8	2.8	0.1	34.4	1.3	0.2	1.0	2.4	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	12.2	3.2	1.6	1.4	0.0	8.7	10.0	3.4	2.7	11.4	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	15.1	10.7	11.4	2.8	0.1	75.5	27.3	22.9	36.5	28.7	27.3
LnGrp LOS	B	B	B	B	A	A	E	C	C	D	C	C
Approach Vol, veh/h		1478			1805			673			739	
Approach Delay, s/veh		14.6			3.2			39.0			28.9	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.4	34.6	55.4	34.6
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 50	28.8	* 50	28.8
Max Q Clear Time (g_c+I1), s	23.0	30.8	38.1	24.3
Green Ext Time (p_c), s	12.9	0.0	9.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	1123	169	82	1546	33	161	344	114	68	356	256
Future Volume (veh/h)	67	1123	169	82	1546	33	161	344	114	68	356	256
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	0.98		0.94	0.98		0.94
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	1221	184	89	1680	36	175	374	124	74	387	278
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	237	1970	865	203	1970	865	188	599	479	212	599	479
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.55	0.55	0.55	1.00	1.00	1.00	0.32	0.32	0.32	0.32	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	15.4	15.1	10.7	11.4	2.8	0.1	75.5	27.3	22.9	36.5	28.7	27.3
Ln Grp LOS	B	B	B	B	A	A	E	C	C	D	C	C
Approach Vol, veh/h		1478			1805			673			739	
Approach Delay, s/veh		14.6			3.2			39.0			28.9	
Approach LOS		B			A			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		55.4		34.6		55.4		34.6
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 50		28.8		* 50		28.8
Max Allow Headway (MAH), s		5.3		5.1		5.2		4.7
Max Q Clear (g_c+I1), s		23.0		30.8		38.1		24.3
Green Ext Time (g_e), s		12.9		0.0		9.1		1.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		284		759		383		882
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1559		1497		1559		1497
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	73	0	175	0	89	0	74
Grp Sat Flow (s), veh/h/ln	0	284	0	759	0	383	0	882
Q Serve Time (g_s), s	0.0	13.9	0.0	12.8	0.0	15.1	0.0	7.0
Cycle Q Clear Time (g_c), s	0.0	13.9	0.0	28.8	0.0	36.1	0.0	22.3
Perm LT Sat Flow (s_l), veh/h/ln	0	284	0	759	0	383	0	882
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	49.9	0.0	28.8	0.0	49.9	0.0	28.8
Perm LT Serve Time (g_u), s	0.0	49.9	0.0	12.8	0.0	28.9	0.0	13.5
Perm LT Q Serve Time (g_ps), s	0.0	13.9	0.0	12.8	0.0	15.1	0.0	7.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	237	0	188	0	203	0	212
V/C Ratio (X)	0.00	0.31	0.00	0.93	0.00	0.44	0.00	0.35
Avail Cap (c_a), veh/h	0	237	0	188	0	203	0	212
Upstream Filter (I)	0.00	1.00	0.00	0.64	0.00	0.56	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	41.0	0.0	7.6	0.0	35.5
Incr Delay (d2), s/veh	0.0	3.3	0.0	34.4	0.0	3.8	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.4	0.0	75.5	0.0	11.4	0.0	36.5
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	3.8	0.0	0.7	0.0	1.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.8	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.56	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.8	0.0	8.7	0.0	1.6	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	3.39	0.00	0.29	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1221	0	374	0	1680	0	387
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	21.0	0.0	15.3	0.0	0.0	0.0	16.0
Cycle Q Clear Time (g_c), s	0.0	21.0	0.0	15.3	0.0	0.0	0.0	16.0
Lane Grp Cap (c), veh/h	0	1970	0	599	0	1970	0	599
V/C Ratio (X)	0.00	0.62	0.00	0.62	0.00	0.85	0.00	0.65
Avail Cap (c_a), veh/h	0	1970	0	599	0	1970	0	599
Upstream Filter (I)	0.00	1.00	0.00	0.64	0.00	0.56	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.6	0.0	26.0	0.0	0.0	0.0	26.2
Incr Delay (d2), s/veh	0.0	1.5	0.0	1.3	0.0	2.8	0.0	2.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.1	0.0	27.3	0.0	2.8	0.0	28.7
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	6.4	0.0	0.0	0.0	6.7
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.2	0.0	0.8	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.59	0.00	1.51	0.00	1.80	0.00	1.62
%ile Back of Q (95%), veh/ln	0.0	12.2	0.0	10.0	0.0	1.4	0.0	11.4
%ile Storage Ratio (RQ%)	0.00	2.62	0.00	0.21	0.00	0.12	0.00	0.77
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	184	0	124	0	36	0	278
Grp Sat Flow (s), veh/h/ln	0	1559	0	1497	0	1559	0	1497
Q Serve Time (g_s), s	0.0	5.4	0.0	5.5	0.0	0.0	0.0	14.0
Cycle Q Clear Time (g_c), s	0.0	5.4	0.0	5.5	0.0	0.0	0.0	14.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	865	0	479	0	865	0	479
V/C Ratio (X)	0.00	0.21	0.00	0.26	0.00	0.04	0.00	0.58
Avail Cap (c_a), veh/h	0	865	0	479	0	865	0	479
Upstream Filter (I)	0.00	1.00	0.00	0.64	0.00	0.56	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.1	0.0	22.7	0.0	0.0	0.0	25.6
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.2	0.0	0.1	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.7	0.0	22.9	0.0	0.1	0.0	27.3
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	1.8	0.0	0.0	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.74
%ile Back of Q (95%), veh/ln	0.0	3.2	0.0	3.4	0.0	0.0	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.73	0.00	0.90	0.00	0.01	0.00	2.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1341	0	0	994	3	466	22	230	13	0	55
Future Volume (veh/h)	11	1341	0	0	994	3	466	22	230	13	0	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1458	0	0	1080	3	390	187	250	14	0	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	198	1642	0	0	1642	726	477	194	260	29	0	123
Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.27	0.27	0.27	0.09	0.00	0.09
Sat Flow, veh/h	521	3647	0	0	3647	1571	1781	725	969	306	0	1310
Grp Volume(v), veh/h	12	1458	0	0	1080	3	390	0	437	74	0	0
Grp Sat Flow(s),veh/h/ln	521	1777	0	0	1777	1571	1781	0	1695	1615	0	0
Q Serve(g_s), s	1.2	15.7	0.0	0.0	21.1	0.1	18.5	0.0	22.9	3.9	0.0	0.0
Cycle Q Clear(g_c), s	22.3	15.7	0.0	0.0	21.1	0.1	18.5	0.0	22.9	3.9	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.57	0.19		0.81
Lane Grp Cap(c), veh/h	198	1642	0	0	1642	726	477	0	454	151	0	0
V/C Ratio(X)	0.06	0.89	0.00	0.00	0.66	0.00	0.82	0.00	0.96	0.49	0.00	0.00
Avail Cap(c_a), veh/h	198	1642	0	0	1642	726	477	0	454	179	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.00	0.00	0.33	0.33	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.7	2.4	0.0	0.0	18.7	13.1	30.9	0.0	32.5	38.7	0.0	0.0
Incr Delay (d2), s/veh	0.4	5.9	0.0	0.0	0.7	0.0	10.7	0.0	32.8	2.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	4.4	0.0	0.0	10.7	0.1	13.8	0.0	18.8	3.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.2	8.3	0.0	0.0	19.4	13.1	41.6	0.0	65.3	41.2	0.0	0.0
LnGrp LOS	A	A	A	A	B	B	D	A	E	D	A	A
Approach Vol, veh/h		1470			1083			827			74	
Approach Delay, s/veh		8.3			19.4			54.1			41.2	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	46.7	13.8	46.7	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	24.3	5.9	23.1	24.9
Green Ext Time (p_c), s	12.5	0.1	10.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1341	0	0	994	3	466	22	230	13	0	55
Future Volume (veh/h)	11	1341	0	0	994	3	466	22	230	13	0	55
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1458	0	0	1080	3	390	187	250	14	0	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	198	1642	0	0	1642	726	477	194	260	29	0	123
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.27	0.27	0.27	0.09	0.00	0.09
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.2	8.3	0.0	0.0	19.4	13.1	41.6	0.0	65.3	41.2	0.0	0.0
Ln Grp LOS	A	A	A	A	B	B	D	A	E	D	A	A
Approach Vol, veh/h		1470			1083			827			74	
Approach Delay, s/veh		8.3			19.4			54.1			41.2	
Approach LOS		A			B			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		46.7	29.5	13.8		46.7		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.8	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		24.3	24.9	5.9		23.1		
Green Ext Time (g_e), s		12.5	0.0	0.1		10.4		
Prob of Phs Call (p_c)		1.00	1.00	0.84		1.00		
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		521	1781	306		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	725	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	969	1310		1571		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	12	390	74	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	521	1781	1615	0	0	0	0
Q Serve Time (g_s), s	0.0	1.2	18.5	3.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.3	18.5	3.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	521	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.6	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	20.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	41.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.19	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	198	477	151	0	0	0	0
V/C Ratio (X)	0.00	0.06	0.82	0.49	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	198	477	179	0	0	0	0
Upstream Filter (I)	0.00	0.75	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.7	30.9	38.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	10.7	2.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.2	41.6	41.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.1	7.5	1.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.4	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.55	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.2	13.8	3.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.08	1.06	0.19	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1458	0	0	0	1080	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	15.7	0.0	0.0	0.0	21.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.7	0.0	0.0	0.0	21.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	1642	0	0	0	1642	0	0
V/C Ratio (X)	0.00	0.89	0.00	0.00	0.00	0.66	0.00	0.00
Avail Cap (c_a), veh/h	0	1642	0	0	0	1642	0	0
Upstream Filter (I)	0.00	0.75	0.00	0.00	0.00	0.33	0.00	0.00
Uniform Delay (d1), s/veh	0.0	2.4	0.0	0.0	0.0	18.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.9	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.3	0.0	0.0	0.0	19.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	0.0	0.0	7.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.00	0.00	1.33	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.4	0.0	0.0	0.0	10.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	437	0	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1695	0	0	1571	0	0
Q Serve Time (g_s), s	0.0	0.0	22.9	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	22.9	0.0	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.57	0.81	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	454	0	0	726	0	0
V/C Ratio (X)	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	454	0	0	726	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.33	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	32.5	0.0	0.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	32.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	65.3	0.0	0.0	13.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.46	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	18.8	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.45	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	717	574	147	663	81	170	497	89	104	1204	47
Future Volume (veh/h)	159	717	574	147	663	81	170	497	89	104	1204	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	173	779	624	160	721	88	185	540	97	113	1309	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	597	618	164	935	114	194	686	558	263	1242	48
Arrive On Green	0.08	0.32	0.32	0.06	0.29	0.29	0.08	0.37	0.37	0.07	0.36	0.36
Sat Flow, veh/h	1781	1870	1563	1781	3182	388	1781	1870	1522	1781	3483	136
Grp Volume(v), veh/h	173	779	624	160	402	407	185	540	97	113	667	693
Grp Sat Flow(s),veh/h/ln	1781	1870	1563	1781	1777	1793	1781	1870	1522	1781	1777	1842
Q Serve(g_s), s	8.0	38.3	38.3	7.0	24.8	24.8	8.4	30.9	5.2	4.7	42.8	42.8
Cycle Q Clear(g_c), s	8.0	38.3	38.3	7.0	24.8	24.8	8.4	30.9	5.2	4.7	42.8	42.8
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	268	597	618	164	522	527	194	686	558	263	634	657
V/C Ratio(X)	0.65	1.30	1.01	0.98	0.77	0.77	0.96	0.79	0.17	0.43	1.05	1.05
Avail Cap(c_a), veh/h	283	597	618	164	522	527	194	686	558	265	634	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.26	0.26	0.26	0.40	0.40	0.40	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	40.8	36.4	34.8	38.7	38.7	31.7	33.8	25.7	25.7	38.6	38.6
Incr Delay (d2), s/veh	1.2	140.5	21.0	38.1	4.5	4.4	51.8	8.9	0.7	1.1	50.3	50.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.0	54.1	25.1	7.2	14.6	14.7	10.4	21.8	3.5	3.6	36.7	38.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	181.4	57.4	72.9	43.1	43.1	83.5	42.8	26.4	26.8	88.9	89.1
LnGrp LOS	C	F	F	E	D	D	F	D	C	C	F	F
Approach Vol, veh/h		1576			969			822			1473	
Approach Delay, s/veh		115.7			48.1			50.0			84.2	
Approach LOS		F			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	44.0	15.0	48.5	15.6	40.9	13.8	49.7
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 7	* 38	9.0	* 43	* 11	* 34	8.0	* 44
Max Q Clear Time (g_c+I1), s	9.0	40.3	10.4	44.8	10.0	26.8	6.7	32.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	81.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	717	574	147	663	81	170	497	89	104	1204	47
Future Volume (veh/h)	159	717	574	147	663	81	170	497	89	104	1204	47
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	173	779	624	160	721	88	185	540	97	113	1309	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	268	597	618	164	935	114	194	686	558	263	1242	48
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.32	0.32	0.06	0.29	0.29	0.08	0.37	0.37	0.07	0.36	0.36
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.5	181.4	57.4	72.9	43.1	43.1	83.5	42.8	26.4	26.8	88.9	89.1
Ln Grp LOS	C	F	F	E	D	D	F	D	C	C	F	F
Approach Vol, veh/h		1576			969			822			1473	
Approach Delay, s/veh		115.7			48.1			50.0			84.2	
Approach LOS		F			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	12.5	44.0	15.0	48.5	15.6	40.9	13.8	49.7
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 7	* 38	9.0	* 43	* 11	* 34	8.0	* 44
Max Allow Headway (MAH), s	3.7	4.6	3.8	5.1	3.7	5.0	3.8	5.0
Max Q Clear (g_c+l1), s	9.0	40.3	10.4	44.8	10.0	26.8	6.7	32.9
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.8
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1870	3483	3182	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1563	136	388	1522

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	160	0	185	0	173	0	113	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	8.4	0.0	8.0	0.0	4.7	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	8.4	0.0	8.0	0.0	4.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	384	0	400	0	673	0	791	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	35.2	0.0	42.8	0.0	35.2	0.0	42.8	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	10.4	0.0	13.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	8.6	0.0	4.9	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	164	0	194	0	268	0	263	0
V/C Ratio (X)	0.98	0.00	0.96	0.00	0.65	0.00	0.43	0.00
Avail Cap (c_a), veh/h	164	0	194	0	283	0	265	0
Upstream Filter (I)	0.40	0.00	1.00	0.00	0.26	0.00	1.00	0.00
Uniform Delay (d1), s/veh	34.8	0.0	31.7	0.0	29.2	0.0	25.7	0.0
Incr Delay (d2), s/veh	38.1	0.0	51.8	0.0	1.2	0.0	1.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	72.9	0.0	83.5	0.0	30.5	0.0	26.8	0.0
1st-Term Q (Q1), veh/ln	3.2	0.0	3.5	0.0	3.3	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	1.7	0.0	2.8	0.0	0.1	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.47	0.00	1.65	0.00	1.45	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.2	0.0	10.4	0.0	5.0	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	1.15	0.00	3.66	0.00	0.45	0.00	0.72	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	779	0	667	0	402	0	540
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	38.3	0.0	42.8	0.0	24.8	0.0	30.9
Cycle Q Clear Time (g_c), s	0.0	38.3	0.0	42.8	0.0	24.8	0.0	30.9
Lane Grp Cap (c), veh/h	0	597	0	634	0	522	0	686
V/C Ratio (X)	0.00	1.30	0.00	1.05	0.00	0.77	0.00	0.79
Avail Cap (c_a), veh/h	0	597	0	634	0	522	0	686
Upstream Filter (I)	0.00	0.26	0.00	1.00	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.8	0.0	38.6	0.0	38.7	0.0	33.8
Incr Delay (d2), s/veh	0.0	140.5	0.0	50.3	0.0	4.5	0.0	8.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	181.4	0.0	88.9	0.0	43.1	0.0	42.8
1st-Term Q (Q1), veh/ln	0.0	17.0	0.0	18.0	0.0	10.5	0.0	13.7
2nd-Term Q (Q2), veh/ln	0.0	23.3	0.0	8.9	0.0	0.6	0.0	1.7

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.34	0.00	1.36	0.00	1.31	0.00	1.42
%ile Back of Q (95%), veh/ln	0.0	54.1	0.0	36.7	0.0	14.6	0.0	21.8
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	7.28	0.00	0.15	0.00	7.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	45.5	0.0	8.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	624	0	693	0	407	0	97
Grp Sat Flow (s), veh/h/ln	0	1563	0	1842	0	1793	0	1522
Q Serve Time (g_s), s	0.0	38.3	0.0	42.8	0.0	24.8	0.0	5.2
Cycle Q Clear Time (g_c), s	0.0	38.3	0.0	42.8	0.0	24.8	0.0	5.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.07	0.00	0.22	0.00	1.00
Lane Grp Cap (c), veh/h	0	618	0	657	0	527	0	558
V/C Ratio (X)	0.00	1.01	0.00	1.05	0.00	0.77	0.00	0.17
Avail Cap (c_a), veh/h	0	618	0	657	0	527	0	558
Upstream Filter (I)	0.00	0.26	0.00	1.00	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.4	0.0	38.6	0.0	38.7	0.0	25.7
Incr Delay (d2), s/veh	0.0	21.0	0.0	50.5	0.0	4.4	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	57.4	0.0	89.1	0.0	43.1	0.0	26.4
1st-Term Q (Q1), veh/ln	0.0	17.4	0.0	18.7	0.0	10.6	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	3.6	0.0	9.2	0.0	0.6	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.19	0.00	1.36	0.00	1.31	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	25.1	0.0	38.0	0.0	14.7	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	7.54	0.00	0.15	0.00	1.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	1.6	0.0	9.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	81.4
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	614	275	92	504	50	90	579	122	120	1219	137
Future Volume (veh/h)	98	614	275	92	504	50	90	579	122	120	1219	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.88	0.97		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	667	299	100	548	54	98	629	133	130	1325	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	756	621	123	756	621	111	1678	657	326	1498	167
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	815	1870	1536	582	1870	1536	359	3554	1390	685	3172	353
Grp Volume(v), veh/h	107	667	299	100	548	54	98	629	133	130	737	737
Grp Sat Flow(s),veh/h/ln	815	1870	1536	582	1870	1536	359	1777	1390	685	1777	1748
Q Serve(g_s), s	11.5	29.7	13.0	6.7	22.2	2.0	7.8	10.2	5.0	13.5	33.6	34.7
Cycle Q Clear(g_c), s	33.7	29.7	13.0	36.4	22.2	2.0	42.5	10.2	5.0	23.7	33.6	34.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	208	756	621	123	756	621	111	1678	657	326	839	826
V/C Ratio(X)	0.51	0.88	0.48	0.81	0.72	0.09	0.88	0.37	0.20	0.40	0.88	0.89
Avail Cap(c_a), veh/h	208	756	621	123	756	621	111	1678	657	326	839	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	24.8	19.8	43.6	22.6	16.5	43.7	15.2	13.9	22.8	21.4	21.7
Incr Delay (d2), s/veh	0.8	1.6	0.2	42.0	6.0	0.3	45.3	0.1	0.1	0.8	10.5	12.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	14.0	5.3	6.5	15.4	1.2	6.3	6.8	2.6	3.8	21.2	21.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.6	26.4	20.1	85.6	28.5	16.8	89.0	15.3	14.0	23.6	31.9	33.8
LnGrp LOS	D	C	C	F	C	B	F	B	B	C	C	C
Approach Vol, veh/h		1073			702			860			1604	
Approach Delay, s/veh		25.7			35.8			23.5			32.1	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	42.0	48.0	42.0	48.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 36	* 43	* 36	* 43
Max Q Clear Time (g_c+I1), s	35.7	44.5	38.4	36.7
Green Ext Time (p_c), s	0.5	0.0	0.0	4.4

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	614	275	92	504	50	90	579	122	120	1219	137
Future Volume (veh/h)	98	614	275	92	504	50	90	579	122	120	1219	137
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.88	0.97		0.88
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	667	299	100	548	54	98	629	133	130	1325	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	208	756	621	123	756	621	111	1678	657	326	1498	167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.47	0.47	0.47	0.47	0.47	0.47
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.6	26.4	20.1	85.6	28.5	16.8	89.0	15.3	14.0	23.6	31.9	33.8
Ln Grp LOS	D	C	C	F	C	B	F	B	B	C	C	C
Approach Vol, veh/h		1073			702			860			1604	
Approach Delay, s/veh		25.7			35.8			23.5			32.1	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		42.0		48.0		42.0		48.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 36		* 43		* 36		* 43
Max Allow Headway (MAH), s		4.8		5.6		5.2		5.2
Max Q Clear (g_c+l1), s		35.7		44.5		38.4		36.7
Green Ext Time (g_e), s		0.5		0.0		0.0		4.4
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.97

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		815		359		582		685

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		3172

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1536		1390		1536		353

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	107	0	98	0	100	0	130
Grp Sat Flow (s), veh/h/ln	0	815	0	359	0	582	0	685
Q Serve Time (g_s), s	0.0	11.5	0.0	7.8	0.0	6.7	0.0	13.5
Cycle Q Clear Time (g_c), s	0.0	33.7	0.0	42.5	0.0	36.4	0.0	23.7
Perm LT Sat Flow (s_l), veh/h/ln	0	815	0	359	0	582	0	685
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	36.4	0.0	42.5	0.0	36.4	0.0	42.5
Perm LT Serve Time (g_u), s	0.0	14.2	0.0	7.8	0.0	6.7	0.0	32.3
Perm LT Q Serve Time (g_ps), s	0.0	11.5	0.0	7.8	0.0	6.7	0.0	13.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	208	0	111	0	123	0	326
V/C Ratio (X)	0.00	0.51	0.00	0.88	0.00	0.81	0.00	0.40
Avail Cap (c_a), veh/h	0	208	0	111	0	123	0	326
Upstream Filter (I)	0.00	0.09	0.00	0.86	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.8	0.0	43.7	0.0	43.6	0.0	22.8
Incr Delay (d2), s/veh	0.0	0.8	0.0	45.3	0.0	42.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.6	0.0	89.0	0.0	85.6	0.0	23.6
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	2.1	0.0	2.2	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.4	0.0	1.4	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.33	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.0	0.0	6.3	0.0	6.5	0.0	3.8
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	2.30	0.00	1.22	0.00	1.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	667	0	629	0	548	0	737
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	29.7	0.0	10.2	0.0	22.2	0.0	33.6
Cycle Q Clear Time (g_c), s	0.0	29.7	0.0	10.2	0.0	22.2	0.0	33.6
Lane Grp Cap (c), veh/h	0	756	0	1678	0	756	0	839
V/C Ratio (X)	0.00	0.88	0.00	0.37	0.00	0.72	0.00	0.88
Avail Cap (c_a), veh/h	0	756	0	1678	0	756	0	839
Upstream Filter (I)	0.00	0.09	0.00	0.86	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.8	0.0	15.2	0.0	22.6	0.0	21.4
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.1	0.0	6.0	0.0	10.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.4	0.0	15.3	0.0	28.5	0.0	31.9
1st-Term Q (Q1), veh/ln	0.0	12.0	0.0	3.8	0.0	9.0	0.0	12.4
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	1.3	0.0	2.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.14	0.00	1.78	0.00	1.51	0.00	1.43
%ile Back of Q (95%), veh/ln	0.0	14.0	0.0	6.8	0.0	15.4	0.0	21.2
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.14	0.00	1.09	0.00	1.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	299	0	133	0	54	0	737
Grp Sat Flow (s), veh/h/ln	0	1536	0	1390	0	1536	0	1748
Q Serve Time (g_s), s	0.0	13.0	0.0	5.0	0.0	2.0	0.0	34.7
Cycle Q Clear Time (g_c), s	0.0	13.0	0.0	5.0	0.0	2.0	0.0	34.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	621	0	657	0	621	0	826
V/C Ratio (X)	0.00	0.48	0.00	0.20	0.00	0.09	0.00	0.89
Avail Cap (c_a), veh/h	0	621	0	657	0	621	0	826
Upstream Filter (I)	0.00	0.09	0.00	0.86	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.8	0.0	13.9	0.0	16.5	0.0	21.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.1	0.0	0.3	0.0	12.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.1	0.0	14.0	0.0	16.8	0.0	33.8
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	1.4	0.0	0.6	0.0	12.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.24	0.00	1.80	0.00	1.80	0.00	1.42
%ile Back of Q (95%), veh/ln	0.0	5.3	0.0	2.6	0.0	1.2	0.0	21.7
%ile Storage Ratio (RQ%)	0.00	0.85	0.00	0.61	0.00	0.32	0.00	1.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	58	67	324	405	35
Future Vol, veh/h	8	58	67	324	405	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	63	73	352	440	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	781	459	478	0	-	0
Stage 1	459	-	-	-	-	-
Stage 2	322	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	347	601	1082	-	-	-
Stage 1	635	-	-	-	-	-
Stage 2	708	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	324	601	1082	-	-	-
Mov Cap-2 Maneuver	440	-	-	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	708	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1082	-	575	-	-
HCM Lane V/C Ratio	0.067	-	0.125	-	-
HCM Control Delay (s)	8.6	-	12.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	7	84	251	19	404
Future Vol, veh/h	36	7	84	251	19	404
Conflicting Peds, #/hr	10	6	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	8	91	273	21	439

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	583	98	0	0	365	0
Stage 1	92	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	475	958	-	-	1194	-
Stage 1	932	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	462	953	-	-	1193	-
Mov Cap-2 Maneuver	518	-	-	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	599	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	560	1193	-
HCM Lane V/C Ratio	-	-	0.083	0.017	-
HCM Control Delay (s)	-	-	12	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	80	100	81	37	140	20	466	71	251	1237	15
Future Volume (veh/h)	116	80	100	81	37	140	20	466	71	251	1237	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	87	109	88	40	152	22	507	77	273	1345	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	197	247	276	89	338	234	2189	935	489	2214	26
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.20	0.20	0.20	0.62	0.62	0.62
Sat Flow, veh/h	1180	747	936	1175	337	1279	400	3554	1518	824	3595	43
Grp Volume(v), veh/h	126	0	196	88	0	192	22	507	77	273	665	696
Grp Sat Flow(s),veh/h/ln	1180	0	1684	1175	0	1616	400	1777	1518	824	1777	1860
Q Serve(g_s), s	9.0	0.0	8.7	6.1	0.0	8.9	4.4	10.7	3.7	22.4	20.7	20.7
Cycle Q Clear(g_c), s	17.9	0.0	8.7	14.8	0.0	8.9	25.1	10.7	3.7	33.2	20.7	20.7
Prop In Lane	1.00		0.56	1.00		0.79	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	274	0	445	276	0	427	234	2189	935	489	1094	1146
V/C Ratio(X)	0.46	0.00	0.44	0.32	0.00	0.45	0.09	0.23	0.08	0.56	0.61	0.61
Avail Cap(c_a), veh/h	464	0	715	465	0	686	234	2189	935	489	1094	1146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	27.6	33.7	0.0	27.7	32.9	18.0	15.2	17.0	10.6	10.6
Incr Delay (d2), s/veh	1.2	0.0	0.7	0.7	0.0	0.7	0.8	0.2	0.2	4.5	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.8	0.0	6.4	3.2	0.0	6.3	0.9	8.5	2.2	7.9	12.2	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	0.0	28.3	34.4	0.0	28.4	33.7	18.3	15.4	21.6	13.1	13.0
LnGrp LOS	D	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		322			280			606			1634	
Approach Delay, s/veh		31.4			30.3			18.5			14.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.4	29.6	60.4	29.6
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	35.2	19.9	27.1	16.8
Green Ext Time (p_c), s	4.4	1.6	3.3	1.5

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	80	100	81	37	140	20	466	71	251	1237	15
Future Volume (veh/h)	116	80	100	81	37	140	20	466	71	251	1237	15
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.98	0.99		0.98	1.00		0.96	0.99		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	87	109	88	40	152	22	507	77	273	1345	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	274	197	247	276	89	338	234	2189	935	489	2214	26
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.20	0.20	0.20	0.62	0.62	0.62
Unsig. Movement Delay												
Ln Grp Delay, s/veh	36.3	0.0	28.3	34.4	0.0	28.4	33.7	18.3	15.4	21.6	13.1	13.0
Ln Grp LOS	D	A	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		322			280			606			1634	
Approach Delay, s/veh		31.4			30.3			18.5			14.5	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		60.4		29.6		60.4		29.6
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.2		5.1		5.2		5.3
Max Q Clear (g_c+l1), s		35.2		19.9		27.1		16.8
Green Ext Time (g_e), s		4.4		1.6		3.3		1.5
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.01		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		824		1180		400		1175
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3595		747		3554		337
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		43		936		1518		1279
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	273	0	126	0	22	0	88
Grp Sat Flow (s), veh/h/ln	0	824	0	1180	0	400	0	1175
Q Serve Time (g_s), s	0.0	22.4	0.0	9.0	0.0	4.4	0.0	6.1
Cycle Q Clear Time (g_c), s	0.0	33.2	0.0	17.9	0.0	25.1	0.0	14.8
Perm LT Sat Flow (s_l), veh/h/ln	0	824	0	1180	0	400	0	1175
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	55.4	0.0	23.8	0.0	55.4	0.0	23.8
Perm LT Serve Time (g_u), s	0.0	44.7	0.0	14.8	0.0	34.8	0.0	15.0
Perm LT Q Serve Time (g_ps), s	0.0	22.4	0.0	9.0	0.0	4.4	0.0	6.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	489	0	274	0	234	0	276
V/C Ratio (X)	0.00	0.56	0.00	0.46	0.00	0.09	0.00	0.32
Avail Cap (c_a), veh/h	0	489	0	464	0	234	0	465
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.99	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.0	0.0	35.1	0.0	32.9	0.0	33.7
Incr Delay (d2), s/veh	0.0	4.5	0.0	1.2	0.0	0.8	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.6	0.0	36.3	0.0	33.7	0.0	34.4
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	2.6	0.0	0.5	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.78	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.9	0.0	4.8	0.0	0.9	0.0	3.2
%ile Storage Ratio (RQ%)	0.00	1.35	0.00	3.04	0.00	0.24	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	665	0	0	0	507	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	20.7	0.0	0.0	0.0	10.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	0.0	0.0	10.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1094	0	0	0	2189	0	0
V/C Ratio (X)	0.00	0.61	0.00	0.00	0.00	0.23	0.00	0.00
Avail Cap (c_a), veh/h	0	1094	0	0	0	2189	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.99	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.6	0.0	0.0	0.0	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.5	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.1	0.0	0.0	0.0	18.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	0.0	0.0	4.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.59	0.00	1.00	0.00	1.74	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	12.2	0.0	0.0	0.0	8.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.00	0.00	0.70	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	696	0	196	0	77	0	192
Grp Sat Flow (s), veh/h/ln	0	1860	0	1684	0	1518	0	1616
Q Serve Time (g_s), s	0.0	20.7	0.0	8.7	0.0	3.7	0.0	8.9
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	8.7	0.0	3.7	0.0	8.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.56	0.00	1.00	0.00	0.79
Lane Grp Cap (c), veh/h	0	1146	0	445	0	935	0	427
V/C Ratio (X)	0.00	0.61	0.00	0.44	0.00	0.08	0.00	0.45
Avail Cap (c_a), veh/h	0	1146	0	715	0	935	0	686
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.99	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.6	0.0	27.6	0.0	15.2	0.0	27.7
Incr Delay (d2), s/veh	0.0	2.4	0.0	0.7	0.0	0.2	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.0	0.0	28.3	0.0	15.4	0.0	28.4
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	3.5	0.0	1.2	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.58	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	12.6	0.0	6.4	0.0	2.2	0.0	6.3
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.60	0.00	0.55	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	76	355	213	11	32	54
Future Vol, veh/h	76	355	213	11	32	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	83	386	232	12	35	59
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	12.5	10	9.1
HCM LOS	B	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	37%
Vol Thru, %	0%	100%	95%	0%
Vol Right, %	0%	0%	5%	63%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	76	355	224	86
LT Vol	76	0	0	32
Through Vol	0	355	213	0
RT Vol	0	0	11	54
Lane Flow Rate	83	386	243	93
Geometry Grp	7	7	5	2
Degree of Util (X)	0.126	0.533	0.321	0.135
Departure Headway (Hd)	5.472	4.97	4.753	5.216
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	655	725	755	684
Service Time	3.209	2.706	2.794	3.269
HCM Lane V/C Ratio	0.127	0.532	0.322	0.136
HCM Control Delay	9	13.3	10	9.1
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.4	3.2	1.4	0.5

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	100	146	66	14	61
Future Vol, veh/h	40	100	146	66	14	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	109	159	72	15	66
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.4	8.8	7.8
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	19%
Vol Thru, %	0%	100%	69%	0%
Vol Right, %	0%	0%	31%	81%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	100	212	75
LT Vol	40	0	0	14
Through Vol	0	100	146	0
RT Vol	0	0	66	61
Lane Flow Rate	43	109	230	82
Geometry Grp	7	7	5	2
Degree of Util (X)	0.064	0.145	0.269	0.098
Departure Headway (Hd)	5.3	4.798	4.204	4.34
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	668	738	857	828
Service Time	3.095	2.592	2.214	2.351
HCM Lane V/C Ratio	0.064	0.148	0.268	0.099
HCM Control Delay	8.5	8.4	8.8	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.5	1.1	0.3

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	11	86	59	104	3	92	2	12	6	46	34
Future Vol, veh/h	0	11	86	59	104	3	92	2	12	6	46	34
Conflicting Peds, #/hr	41	0	57	57	0	41	13	0	50	50	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	93	64	113	3	100	2	13	7	50	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	162	0	0	368	354	119	400	446	169
Stage 1	-	-	-	-	-	-	69	69	-	284	284	-
Stage 2	-	-	-	-	-	-	299	285	-	116	162	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1417	-	-	588	571	933	560	507	875
Stage 1	0	-	-	-	-	-	941	837	-	723	676	-
Stage 2	0	-	-	-	-	-	710	676	-	889	764	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1353	-	-	473	502	855	492	446	838
Mov Cap-2 Maneuver	-	-	-	-	-	-	517	537	-	565	497	-
Stage 1	-	-	-	-	-	-	941	799	-	723	623	-
Stage 2	-	-	-	-	-	-	589	623	-	838	730	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.8	13.1	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	517	855	-	-	1353	-	-	601
HCM Lane V/C Ratio	0.193	0.015	-	-	0.047	-	-	0.145
HCM Control Delay (s)	13.6	9.3	-	-	7.8	-	-	12
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	0.5

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	58	29	106	20	11	192
Future Vol, veh/h	58	29	106	20	11	192
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	32	115	22	12	209

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	359	126	0	0	137	0
Stage 1	126	-	-	-	-	-
Stage 2	233	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	640	924	-	-	1447	-
Stage 1	900	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	635	924	-	-	1447	-
Mov Cap-2 Maneuver	672	-	-	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	800	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	739	1447	-
HCM Lane V/C Ratio	-	-	0.128	0.008	-
HCM Control Delay (s)	-	-	10.6	7.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	875	179	132	352	74	136	413	72	118	507	23
Future Volume (veh/h)	120	875	179	132	352	74	136	413	72	118	507	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	1.00		0.84	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	951	195	143	383	80	148	449	78	128	551	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	1153	455	166	1170	463	174	599	429	154	579	411
Arrive On Green	0.09	0.32	0.32	0.09	0.33	0.33	0.10	0.32	0.32	0.09	0.31	0.31
Sat Flow, veh/h	1781	3554	1402	1781	3554	1405	1781	1870	1337	1781	1870	1328
Grp Volume(v), veh/h	130	951	195	143	383	80	148	449	78	128	551	25
Grp Sat Flow(s),veh/h/ln	1781	1777	1402	1781	1777	1405	1781	1870	1337	1781	1870	1328
Q Serve(g_s), s	8.6	29.6	13.1	9.5	9.7	4.9	9.8	25.8	5.1	8.5	34.6	1.6
Cycle Q Clear(g_c), s	8.6	29.6	13.1	9.5	9.7	4.9	9.8	25.8	5.1	8.5	34.6	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	1153	455	166	1170	463	174	599	429	154	579	411
V/C Ratio(X)	0.82	0.82	0.43	0.86	0.33	0.17	0.85	0.75	0.18	0.83	0.95	0.06
Avail Cap(c_a), veh/h	257	1153	455	166	1170	463	178	599	429	190	592	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82
Uniform Delay (d), s/veh	53.8	37.4	31.8	53.6	30.2	28.6	53.3	36.5	29.4	53.9	40.6	29.2
Incr Delay (d2), s/veh	10.7	6.8	2.9	33.8	0.7	0.8	29.8	5.2	0.2	18.3	22.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.6	19.6	8.3	9.7	7.6	3.1	9.7	18.2	3.0	7.7	25.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.4	44.1	34.7	87.4	31.0	29.4	83.1	41.6	29.6	72.2	62.8	29.2
LnGrp LOS	E	D	C	F	C	C	F	D	C	E	E	C
Approach Vol, veh/h		1276			606			675			704	
Approach Delay, s/veh		44.8			44.1			49.3			63.3	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	44.5	16.7	42.1	17.2	43.9	15.4	43.5
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	17.3	* 32	12.0	* 38	11.2	* 38	12.8	* 37
Max Q Clear Time (g_c+I1), s	10.6	11.7	11.8	36.6	11.5	31.6	10.5	27.8
Green Ext Time (p_c), s	0.2	2.5	0.0	0.5	0.0	3.4	0.1	2.1

Intersection Summary	
HCM 6th Ctrl Delay	49.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	875	179	132	352	74	136	413	72	118	507	23
Future Volume (veh/h)	120	875	179	132	352	74	136	413	72	118	507	23
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.88	1.00		0.89	1.00		0.84	1.00		0.84
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	951	195	143	383	80	148	449	78	128	551	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	158	1153	455	166	1170	463	174	599	429	154	579	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.32	0.32	0.09	0.33	0.33	0.10	0.32	0.32	0.09	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	64.4	44.1	34.7	87.4	31.0	29.4	83.1	41.6	29.6	72.2	62.8	29.2
Ln Grp LOS	E	D	C	F	C	C	F	D	C	E	E	C
Approach Vol, veh/h		1276			606			675			704	
Approach Delay, s/veh		44.8			44.1			49.3			63.3	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.6	44.5	16.7	42.1	17.2	43.9	15.4	43.5
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	17.3	* 32	12.0	* 38	11.2	* 38	12.8	* 37
Max Allow Headway (MAH), s	3.7	4.9	3.8	5.1	3.7	4.9	3.8	5.0
Max Q Clear (g_c+l1), s	10.6	11.7	11.8	36.6	11.5	31.6	10.5	27.8
Green Ext Time (g_e), s	0.2	2.5	0.0	0.5	0.0	3.4	0.1	2.1
Prob of Phs Call (p_c)	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	0.06	0.00	1.00	1.00	1.00	0.00	1.00	0.32

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1405		1328		1402		1337

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	130	0	148	0	143	0	128	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	8.6	0.0	9.8	0.0	9.5	0.0	8.5	0.0
Cycle Q Clear Time (g_c), s	8.6	0.0	9.8	0.0	9.5	0.0	8.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	158	0	174	0	166	0	154	0
V/C Ratio (X)	0.82	0.00	0.85	0.00	0.86	0.00	0.83	0.00
Avail Cap (c_a), veh/h	257	0	178	0	166	0	190	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.82	0.00
Uniform Delay (d1), s/veh	53.8	0.0	53.3	0.0	53.6	0.0	53.9	0.0
Incr Delay (d2), s/veh	10.7	0.0	29.8	0.0	33.8	0.0	18.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.4	0.0	83.1	0.0	87.4	0.0	72.2	0.0
1st-Term Q (Q1), veh/ln	3.8	0.0	4.3	0.0	4.2	0.0	3.8	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	1.4	0.0	1.6	0.0	0.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.68	0.00	1.68	0.00	1.70	0.00
%ile Back of Q (95%), veh/ln	7.6	0.0	9.7	0.0	9.7	0.0	7.7	0.0
%ile Storage Ratio (RQ%)	0.90	0.00	1.98	0.00	1.23	0.00	2.18	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	383	0	551	0	951	0	449
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	9.7	0.0	34.6	0.0	29.6	0.0	25.8
Cycle Q Clear Time (g_c), s	0.0	9.7	0.0	34.6	0.0	29.6	0.0	25.8
Lane Grp Cap (c), veh/h	0	1170	0	579	0	1153	0	599
V/C Ratio (X)	0.00	0.33	0.00	0.95	0.00	0.82	0.00	0.75
Avail Cap (c_a), veh/h	0	1170	0	592	0	1153	0	599
Upstream Filter (I)	0.00	1.00	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.2	0.0	40.6	0.0	37.4	0.0	36.5
Incr Delay (d2), s/veh	0.0	0.7	0.0	22.2	0.0	6.8	0.0	5.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.0	0.0	62.8	0.0	44.1	0.0	41.6
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	15.6	0.0	12.5	0.0	11.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	3.6	0.0	1.1	0.0	0.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.34	0.00	1.45	0.00	1.47
%ile Back of Q (95%), veh/ln	0.0	7.6	0.0	25.6	0.0	19.6	0.0	18.2
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.53	0.00	0.60	0.00	0.86
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	80	0	25	0	195	0	78
Grp Sat Flow (s), veh/h/ln	0	1405	0	1328	0	1402	0	1337
Q Serve Time (g_s), s	0.0	4.9	0.0	1.6	0.0	13.1	0.0	5.1
Cycle Q Clear Time (g_c), s	0.0	4.9	0.0	1.6	0.0	13.1	0.0	5.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	463	0	411	0	455	0	429
V/C Ratio (X)	0.00	0.17	0.00	0.06	0.00	0.43	0.00	0.18
Avail Cap (c_a), veh/h	0	463	0	421	0	455	0	429
Upstream Filter (I)	0.00	1.00	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.6	0.0	29.2	0.0	31.8	0.0	29.4
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.1	0.0	2.9	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.4	0.0	29.2	0.0	34.7	0.0	29.6
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	0.5	0.0	4.4	0.0	1.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.75	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.1	0.0	0.9	0.0	8.3	0.0	3.0
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	0.21	0.00	2.12	0.00	0.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.6
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	81	225	117	0	256	0	0	423	59
Future Volume (veh/h)	0	0	0	81	225	117	0	256	0	0	423	59
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	0	0	1870	1870
Adj Flow Rate, veh/h				88	245	127	0	278	0	0	460	64
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	0	0	2	2
Cap, veh/h				123	366	201	0	2775	0	0	1252	174
Arrive On Green				0.14	0.14	0.14	0.00	1.00	0.00	0.00	0.78	0.78
Sat Flow, veh/h				907	2695	1480	0	3741	0	0	1603	223
Grp Volume(v), veh/h				177	156	127	0	278	0	0	0	524
Grp Sat Flow(s),veh/h/ln				1825	1777	1480	0	1777	0	0	0	1826
Q Serve(g_s), s				11.1	10.0	9.7	0.0	0.0	0.0	0.0	0.0	10.6
Cycle Q Clear(g_c), s				11.1	10.0	9.7	0.0	0.0	0.0	0.0	0.0	10.6
Prop In Lane				0.50		1.00	0.00		0.00	0.00		0.12
Lane Grp Cap(c), veh/h				248	241	201	0	2775	0	0	0	1426
V/C Ratio(X)				0.71	0.65	0.63	0.00	0.10	0.00	0.00	0.00	0.37
Avail Cap(c_a), veh/h				456	444	370	0	2775	0	0	0	1426
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.67	0.67	0.67	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				49.6	49.1	49.0	0.0	0.0	0.0	0.0	0.0	4.0
Incr Delay (d2), s/veh				2.6	1.9	2.2	0.0	0.1	0.0	0.0	0.0	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				8.2	7.3	6.2	0.0	0.1	0.0	0.0	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.2	51.1	51.2	0.0	0.1	0.0	0.0	0.0	4.8
LnGrp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					460			278			524	
Approach Delay, s/veh					51.5			0.1			4.8	
Approach LOS					D			A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	98.7	21.3	98.7
Change Period (Y+Rc), s	* 5	* 5	* 5
Max Green Setting (Gmax), s	* 80	* 30	* 80
Max Q Clear Time (g_c+I1), s	12.6	13.1	2.0
Green Ext Time (p_c), s	5.8	2.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	81	225	117	0	256	0	0	423	59
Future Volume (veh/h)	0	0	0	81	225	117	0	256	0	0	423	59
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.93	1.00		1.00	1.00		0.98
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	0	0	1870	1870
Adj Flow Rate, veh/h				88	245	127	0	278	0	0	460	64
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	0	0	2	2
Opposing Right Turn Influence				Yes			No			No		
Cap, veh/h				123	366	201	0	2775	0	0	1252	174
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Prop Arrive On Green				0.14	0.14	0.14	0.00	1.00	0.00	0.00	0.78	0.78
Unsig. Movement Delay												
Ln Grp Delay, s/veh				52.2	51.1	51.2	0.0	0.1	0.0	0.0	0.0	4.8
Ln Grp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					460			278			524	
Approach Delay, s/veh					51.5			0.1			4.8	
Approach LOS					D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		8.0		11.0		8.0		
Phs Duration (G+Y+Rc), s		98.7		21.3		98.7		
Change Period (Y+Rc), s		* 5		* 5		* 5		
Max Green (Gmax), s		* 80		* 30		* 80		
Max Allow Headway (MAH), s		6.2		4.8		6.1		
Max Q Clear (g_c+I1), s		12.6		13.1		2.0		
Green Ext Time (g_e), s		5.8		2.0		2.8		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		0.02		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		0		907		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1603		2695		3741		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		223		1480		0		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment				L+T				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	177	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1825	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	93.7	0.0	0.0	0.0	93.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	248	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	456	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	52.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.59	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment				T		T		
Lanes in Grp	0	0	0	1	0	2	0	0
Grp Vol (v), veh/h	0	0	0	156	0	278	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	241	0	2775	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.65	0.00	0.10	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	444	0	2775	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.67	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.9	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	51.1	0.0	0.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.63	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.3	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.40	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	524	0	127	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1826	0	1480	0	0	0	0
Q Serve Time (g_s), s	0.0	10.6	0.0	9.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.6	0.0	9.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1426	0	201	0	0	0	0
V/C Ratio (X)	0.00	0.37	0.00	0.63	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1426	0	370	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.67	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.0	0.0	49.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	2.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.8	0.0	51.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.1	0.0	3.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.70	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	6.1	0.0	6.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.70	0.00	0.34	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	182	558	1353	77
Future Volume (veh/h)	0	0	182	558	1353	77
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.89
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			198	607	1471	84
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			238	3352	2551	145
Arrive On Green			0.13	0.94	1.00	1.00
Sat Flow, veh/h			1781	3647	3485	192
Grp Volume(v), veh/h			198	607	766	789
Grp Sat Flow(s),veh/h/ln			1781	1777	1777	1807
Q Serve(g_s), s			9.8	1.1	0.0	0.0
Cycle Q Clear(g_c), s			9.8	1.1	0.0	0.0
Prop In Lane			1.00			0.11
Lane Grp Cap(c), veh/h			238	3352	1336	1359
V/C Ratio(X)			0.83	0.18	0.57	0.58
Avail Cap(c_a), veh/h			412	3352	1336	1359
HCM Platoon Ratio			1.00	1.00	1.33	1.33
Upstream Filter(I)			0.91	0.91	0.77	0.77
Uniform Delay (d), s/veh			38.0	0.2	0.0	0.0
Incr Delay (d2), s/veh			6.8	0.1	1.4	1.4
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln			8.0	0.1	0.9	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			44.8	0.3	1.4	1.4
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				805	1555	
Approach Delay, s/veh				11.2	1.4	
Approach LOS				B	A	

Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	90.0			17.2	72.8
Change Period (Y+Rc), s	5.1			* 5.2	5.1
Max Green Setting (Gmax), s	84.9			* 21	58.9
Max Q Clear Time (g_c+I1), s	3.1			11.8	2.0
Green Ext Time (p_c), s	4.9			0.4	18.6

Intersection Summary	
HCM 6th Ctrl Delay	4.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	182	558	1353	77
Future Volume (veh/h)	0	0	182	558	1353	77
Number			5	2	6	16
Initial Q, veh			0	0	0	0
Ped-Bike Adj (A_pbT)			1.00			0.89
Parking Bus Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			198	607	1471	84
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Opposing Right Turn Influence			Yes			
Cap, veh/h			238	3352	2551	145
HCM Platoon Ratio			1.00	1.00	1.33	1.33
Prop Arrive On Green			0.13	0.94	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh			44.8	0.3	1.4	1.4
Ln Grp LOS			D	A	A	A
Approach Vol, veh/h				805	1555	
Approach Delay, s/veh				11.2	1.4	
Approach LOS				B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		
Case No		4.0			2.0	8.0		
Phs Duration (G+Y+Rc), s		90.0			17.2	72.8		
Change Period (Y+Rc), s		5.1			* 5.2	5.1		
Max Green (Gmax), s		84.9			* 21	58.9		
Max Allow Headway (MAH), s		5.2			3.8	5.3		
Max Q Clear (g_c+I1), s		3.1			11.8	2.0		
Green Ext Time (g_e), s		4.9			0.4	18.6		
Prob of Phs Call (p_c)		1.00			0.99	1.00		
Prob of Max Out (p_x)		0.00			0.02	0.12		
Left-Turn Movement Data								
Assigned Mvmt					5	1		
Mvmt Sat Flow, veh/h					1781	0		
Through Movement Data								
Assigned Mvmt		2				6		
Mvmt Sat Flow, veh/h		3647				3485		
Right-Turn Movement Data								
Assigned Mvmt		12				16		
Mvmt Sat Flow, veh/h		0				192		
Left Lane Group Data								
Assigned Mvmt	0	0	0	0	5	1	0	0
Lane Assignment					L (Prot)			

Lanes in Grp	0	0	0	0	1	0	0	0
Grp Vol (v), veh/h	0	0	0	0	198	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	9.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	9.8	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	67.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	238	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	412	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	38.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	44.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	1.73	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	4.06	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	607	0	0	0	766	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	3352	0	0	0	1336	0	0
V/C Ratio (X)	0.00	0.18	0.00	0.00	0.00	0.57	0.00	0.00
Avail Cap (c_a), veh/h	0	3352	0	0	0	1336	0	0
Upstream Filter (I)	0.00	0.91	0.00	0.00	0.00	0.77	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	1.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	0.0	0.0	1.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	0	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	789	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1807	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1359	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1359	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.7
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	14	1	0	14	0	0	230	4	0	470	0
Future Volume (veh/h)	0	14	1	0	14	0	0	230	4	0	470	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	15	1	0	15	0	0	250	4	0	511	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Cap, veh/h	0	42	3	0	45	0	0	3135	50	0	1638	0
Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.00	0.00	0.88	0.88	0.00	1.00	0.00
Sat Flow, veh/h	0	1734	116	0	1870	0	0	3673	57	0	1870	0
Grp Volume(v), veh/h	0	0	16	0	15	0	0	124	130	0	511	0
Grp Sat Flow(s),veh/h/ln	0	0	1850	0	1870	0	0	1777	1860	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.0	0.0	0.9	0.0	0.0	1.1	1.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.0	0.0	0.9	0.0	0.0	1.1	1.1	0.0	0.0	0.0
Prop In Lane	0.00		0.06	0.00		0.00	0.00		0.03	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	45	0	45	0	0	1556	1629	0	1638	0
V/C Ratio(X)	0.00	0.00	0.36	0.00	0.33	0.00	0.00	0.08	0.08	0.00	0.31	0.00
Avail Cap(c_a), veh/h	0	0	108	0	109	0	0	1556	1629	0	1638	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.99	0.99	0.00	0.92	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.6	0.0	57.6	0.0	0.0	1.0	1.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	21.0	0.0	18.7	0.0	0.0	0.1	0.1	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.3	0.0	1.2	0.0	0.0	0.3	0.3	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	78.7	0.0	76.3	0.0	0.0	1.1	1.1	0.0	0.5	0.0
LnGrp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		16			15			254			511	
Approach Delay, s/veh		78.7			76.3			1.1			0.5	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.1	9.9	110.1	9.9
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	3.1	3.0	2.0	2.9
Green Ext Time (p_c), s	2.3	0.0	5.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	14	1	0	14	0	0	230	4	0	470	0
Future Volume (veh/h)	0	14	1	0	14	0	0	230	4	0	470	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	15	1	0	15	0	0	250	4	0	511	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	42	3	0	45	0	0	3135	50	0	1638	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.00	0.00	0.88	0.88	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	78.7	0.0	76.3	0.0	0.0	1.1	1.1	0.0	0.5	0.0
Ln Grp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		16			15			254			511	
Approach Delay, s/veh		78.7			76.3			1.1			0.5	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.1		9.9		110.1		9.9
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+l1), s		3.1		3.0		2.0		2.9
Green Ext Time (g_e), s		2.3		0.0		5.5		0.0
Prob of Phs Call (p_c)		1.00		0.41		1.00		0.39
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3673		1734		1870		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		57		116		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.1	0.0	2.9	0.0	105.1	0.0	2.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	124	0	0	0	511	0	15
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	1870
Q Serve Time (g_s), s	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.9
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.9
Lane Grp Cap (c), veh/h	0	1556	0	0	0	1638	0	45
V/C Ratio (X)	0.00	0.08	0.00	0.00	0.00	0.31	0.00	0.33
Avail Cap (c_a), veh/h	0	1556	0	0	0	1638	0	109
Upstream Filter (I)	0.00	0.99	0.00	0.00	0.00	0.92	0.00	1.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	0.0	0.0	0.0	0.0	57.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.5	0.0	18.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.1	0.0	0.0	0.0	0.5	0.0	76.3
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	0.4	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.00	0.00	0.12	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	130	0	16	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1860	0	1850	0	0	0	0
Q Serve Time (g_s), s	0.0	1.1	0.0	1.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	1.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.03	0.00	0.06	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1629	0	45	0	0	0	0
V/C Ratio (X)	0.00	0.08	0.00	0.36	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1629	0	108	0	0	0	0
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	57.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	21.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.1	0.0	78.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	713	266	94	0	19	0	136	108	40	441	0
Future Volume (veh/h)	90	713	266	94	0	19	0	136	108	40	441	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.69	1.00		0.94	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	98	775	289	102	0	21	0	148	117	43	479	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	865	889	358	128	0	78	0	955	687	640	1092	0
Arrive On Green	0.25	0.25	0.25	0.07	0.00	0.07	0.00	0.50	0.50	0.05	0.58	0.00
Sat Flow, veh/h	3456	3554	1429	1781	0	1096	0	2015	1382	1781	1870	0
Grp Volume(v), veh/h	98	775	289	102	0	21	0	136	129	43	479	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1429	1781	0	1096	0	1777	1526	1781	1870	0
Q Serve(g_s), s	3.4	32.2	29.3	8.7	0.0	2.8	0.0	6.4	7.2	1.7	22.1	0.0
Cycle Q Clear(g_c), s	3.4	32.2	29.3	8.7	0.0	2.8	0.0	6.4	7.2	1.7	22.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.91	1.00		0.00
Lane Grp Cap(c), veh/h	865	889	358	128	0	78	0	883	758	640	1092	0
V/C Ratio(X)	0.11	0.87	0.81	0.80	0.00	0.27	0.00	0.15	0.17	0.07	0.44	0.00
Avail Cap(c_a), veh/h	920	946	380	468	0	288	0	883	758	658	1092	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.96	0.96	0.00
Uniform Delay (d), s/veh	44.6	55.4	54.3	70.4	0.0	67.7	0.0	21.1	21.3	15.2	17.9	0.0
Incr Delay (d2), s/veh	0.1	8.9	12.4	10.9	0.0	1.8	0.0	0.4	0.5	0.0	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	21.8	17.2	7.7	0.0	1.5	0.0	5.0	4.9	1.2	14.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.6	64.3	66.6	81.3	0.0	69.5	0.0	21.5	21.8	15.3	19.1	0.0
LnGrp LOS	D	E	E	F	A	E	A	C	C	B	B	A
Approach Vol, veh/h		1162			123			265			522	
Approach Delay, s/veh		63.2			79.3			21.6			18.8	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	94.9		43.5	13.4	81.5		15.5
Change Period (Y+Rc), s	* 5		* 5	* 5	* 5		4.5
Max Green Setting (Gmax), s	* 58		* 41	* 10	* 43		40.5
Max Q Clear Time (g_c+I1), s	24.1		34.2	3.7	9.2		10.7
Green Ext Time (p_c), s	6.5		4.3	0.0	3.2		0.4

Intersection Summary	
HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	713	266	94	0	19	0	136	108	40	441	0
Future Volume (veh/h)	90	713	266	94	0	19	0	136	108	40	441	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.90	1.00		0.69	1.00		0.94	0.99		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	98	775	289	102	0	21	0	148	117	43	479	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	865	889	358	128	0	78	0	955	687	640	1092	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.25	0.25	0.25	0.07	0.00	0.07	0.00	0.50	0.50	0.05	0.58	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	44.6	64.3	66.6	81.3	0.0	69.5	0.0	21.5	21.8	15.3	19.1	0.0
Ln Grp LOS	D	E	E	F	A	E	A	C	C	B	B	A
Approach Vol, veh/h		1162			123			265			522	
Approach Delay, s/veh		63.2			79.3			21.6			18.8	
Approach LOS		E			E			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	10.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		94.9	15.5	43.5	13.4	81.5		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 58	40.5	* 41	* 10	* 43		
Max Allow Headway (MAH), s		7.1	4.2	5.7	3.8	7.3		
Max Q Clear (g_c+l1), s		24.1	10.7	34.2	3.7	9.2		
Green Ext Time (g_e), s		6.5	0.4	4.3	0.0	3.2		
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.84	1.00		
Prob of Max Out (p_x)		0.02	0.00	0.92	0.03	0.00		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		2015		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1096	1429		1382		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L	LL (Pr/Pm)				

Lanes in Grp	0	0	1	2	1	0	0	0
Grp Vol (v), veh/h	0	0	102	98	43	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	8.7	3.4	1.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	8.7	3.4	1.7	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1781	1728	1100	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	78.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	69.4	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	76.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	128	865	640	0	0	0
V/C Ratio (X)	0.00	0.00	0.80	0.11	0.07	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	468	920	658	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.96	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	70.4	44.6	15.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	10.9	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	81.3	44.6	15.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.9	1.4	0.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.79	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	7.7	2.6	1.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.48	1.33	0.52	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	479	0	775	0	136	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.1	0.0	32.2	0.0	6.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.1	0.0	32.2	0.0	6.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1092	0	889	0	883	0	0
V/C Ratio (X)	0.00	0.44	0.00	0.87	0.00	0.15	0.00	0.00
Avail Cap (c_a), veh/h	0	1092	0	946	0	883	0	0
Upstream Filter (I)	0.00	0.96	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.9	0.0	55.4	0.0	21.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	8.9	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.1	0.0	64.3	0.0	21.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	14.2	0.0	2.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	1.1	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.51	1.00	1.42	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	14.9	0.0	21.8	0.0	5.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	4.91	0.00	0.93	0.00	0.38	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	21	289	0	129	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1096	1429	0	1526	0	0
Q Serve Time (g_s), s	0.0	0.0	2.8	29.3	0.0	7.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	2.8	29.3	0.0	7.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	0.91	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	78	358	0	758	0	0
V/C Ratio (X)	0.00	0.00	0.27	0.81	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	0	0	288	380	0	758	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	67.7	54.3	0.0	21.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.8	12.4	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	69.5	66.6	0.0	21.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.8	10.4	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.2	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.48	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	1.5	17.2	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.09	5.84	0.00	0.36	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	710	46	163	176	8	86
Future Vol, veh/h	710	46	163	176	8	86
Conflicting Peds, #/hr	0	53	53	0	14	32
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	40	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	772	50	177	191	9	93

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	875	0	1384	471
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	559	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	769	-	146	540
Stage 1	-	-	-	-	392	-
Stage 2	-	-	-	-	571	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	737	-	105	504
Mov Cap-2 Maneuver	-	-	-	-	231	-
Stage 1	-	-	-	-	376	-
Stage 2	-	-	-	-	429	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.5	15.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	458	-	-	737	-
HCM Lane V/C Ratio	0.223	-	-	0.24	-
HCM Control Delay (s)	15.1	-	-	11.4	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.8	-	-	0.9	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	504	115	101	140	225	54	375	52	160	984	145
Future Volume (veh/h)	181	504	115	101	140	225	54	375	52	160	984	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.86	0.96		0.85	0.98		0.86	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	197	548	125	110	152	245	59	408	57	174	1070	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	417	1002	386	315	499	493	154	1286	624	455	1484	218
Arrive On Green	0.10	0.28	0.28	0.08	0.27	0.27	0.36	0.36	0.36	0.08	0.49	0.49
Sat Flow, veh/h	1781	3554	1368	1781	1870	1355	446	3554	1367	1781	3017	444
Grp Volume(v), veh/h	197	548	125	110	152	245	59	408	57	174	628	600
Grp Sat Flow(s),veh/h/ln	1781	1777	1368	1781	1870	1355	446	1777	1367	1781	1777	1684
Q Serve(g_s), s	9.5	15.7	8.7	5.1	7.8	17.2	14.4	9.9	2.9	7.0	33.4	33.7
Cycle Q Clear(g_c), s	9.5	15.7	8.7	5.1	7.8	17.2	32.6	9.9	2.9	7.0	33.4	33.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	417	1002	386	315	499	493	154	1286	624	455	874	828
V/C Ratio(X)	0.47	0.55	0.32	0.35	0.30	0.50	0.38	0.32	0.09	0.38	0.72	0.72
Avail Cap(c_a), veh/h	441	1007	387	319	499	493	154	1286	624	458	874	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.68	0.68	0.68
Uniform Delay (d), s/veh	27.7	36.6	34.0	28.1	35.1	31.0	43.1	27.6	19.4	20.0	24.0	24.1
Incr Delay (d2), s/veh	0.8	0.6	0.5	0.7	0.3	0.8	6.9	0.6	0.3	0.4	3.5	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	11.2	5.3	4.1	6.5	9.6	3.4	7.7	1.8	5.3	19.6	19.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	37.2	34.5	28.8	35.5	31.7	49.9	28.2	19.7	20.4	27.5	27.8
LnGrp LOS	C	D	C	C	D	C	D	C	B	C	C	C
Approach Vol, veh/h		870			507			524			1402	
Approach Delay, s/veh		34.8			32.2			29.7			26.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		64.8	17.2	38.0	15.6	49.2	15.3	39.8
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s		* 59	13.2	* 31	10.2	* 43	10.0	* 34
Max Q Clear Time (g_c+I1), s		35.7	11.5	19.2	9.0	34.6	7.1	17.7
Green Ext Time (p_c), s		9.5	0.1	1.5	0.1	2.3	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	504	115	101	140	225	54	375	52	160	984	145
Future Volume (veh/h)	181	504	115	101	140	225	54	375	52	160	984	145
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.93		0.86	0.96		0.85	0.98		0.86	0.95		0.83
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	197	548	125	110	152	245	59	408	57	174	1070	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	417	1002	386	315	499	493	154	1286	624	455	1484	218
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.28	0.28	0.08	0.27	0.27	0.36	0.36	0.36	0.08	0.49	0.49
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.5	37.2	34.5	28.8	35.5	31.7	49.9	28.2	19.7	20.4	27.5	27.8
Ln Grp LOS	C	D	C	C	D	C	D	C	B	C	C	C
Approach Vol, veh/h		870			507			524			1402	
Approach Delay, s/veh		34.8			32.2			29.7			26.7	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		4.0	1.1	3.0	1.2	5.3	1.1	3.0
Phs Duration (G+Y+Rc), s		64.8	17.2	38.0	15.6	49.2	15.3	39.8
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s		* 59	13.2	* 31	10.2	* 43	10.0	* 34
Max Allow Headway (MAH), s		5.3	3.8	4.7	3.8	5.6	3.8	5.1
Max Q Clear (g_c+l1), s		35.7	11.5	19.2	9.0	34.6	7.1	17.7
Green Ext Time (g_e), s		9.5	0.1	1.5	0.1	2.3	0.1	3.9
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	0.97	1.00
Prob of Max Out (p_x)		0.00	1.00	0.07	1.00	0.00	1.00	0.09

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			1781		1781	446	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3017		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		444		1355		1367		1368

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		LL (Pr/Pm)		

Lanes in Grp	0	0	1	0	1	1	1	0
Grp Vol (v), veh/h	0	0	197	0	174	59	110	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	1781	446	1781	0
Q Serve Time (g_s), s	0.0	0.0	9.5	0.0	7.0	14.4	5.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	9.5	0.0	7.0	32.6	5.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	918	0	883	446	731	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	32.0	0.0	45.4	43.4	32.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	24.2	0.0	33.5	25.3	18.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.1	0.0	2.9	14.4	2.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	417	0	455	154	315	0
V/C Ratio (X)	0.00	0.00	0.47	0.00	0.38	0.38	0.35	0.00
Avail Cap (c_a), veh/h	0	0	441	0	458	154	319	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.68	0.97	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	27.7	0.0	20.0	43.1	28.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.8	0.0	0.4	6.9	0.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	28.5	0.0	20.4	49.9	28.8	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.0	0.0	2.9	1.6	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.3	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.80	0.00	1.79	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	7.5	0.0	5.3	3.4	4.1	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.16	0.00	1.21	0.58	0.77	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	2	0	2
Grp Vol (v), veh/h	0	628	0	152	0	408	0	548
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	33.4	0.0	7.8	0.0	9.9	0.0	15.7
Cycle Q Clear Time (g_c), s	0.0	33.4	0.0	7.8	0.0	9.9	0.0	15.7
Lane Grp Cap (c), veh/h	0	874	0	499	0	1286	0	1002
V/C Ratio (X)	0.00	0.72	0.00	0.30	0.00	0.32	0.00	0.55
Avail Cap (c_a), veh/h	0	874	0	499	0	1286	0	1007
Upstream Filter (I)	0.00	0.68	0.00	1.00	0.00	0.97	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.0	0.0	35.1	0.0	27.6	0.0	36.6
Incr Delay (d2), s/veh	0.0	3.5	0.0	0.3	0.0	0.6	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.5	0.0	35.5	0.0	28.2	0.0	37.2
1st-Term Q (Q1), veh/ln	0.0	13.6	0.0	3.6	0.0	4.2	0.0	6.8
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.36	0.00	1.80	0.00	1.77	0.00	1.62
%ile Back of Q (95%), veh/ln	0.0	19.6	0.0	6.5	0.0	7.7	0.0	11.2
%ile Storage Ratio (RQ%)	0.00	2.11	0.00	0.48	0.00	0.55	0.00	1.91
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	600	0	245	0	57	0	125
Grp Sat Flow (s), veh/h/ln	0	1684	0	1355	0	1367	0	1368
Q Serve Time (g_s), s	0.0	33.7	0.0	17.2	0.0	2.9	0.0	8.7
Cycle Q Clear Time (g_c), s	0.0	33.7	0.0	17.2	0.0	2.9	0.0	8.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	10.0	0.0	9.7	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.26	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	828	0	493	0	624	0	386
V/C Ratio (X)	0.00	0.72	0.00	0.50	0.00	0.09	0.00	0.32
Avail Cap (c_a), veh/h	0	828	0	493	0	624	0	387
Upstream Filter (I)	0.00	0.68	0.00	1.00	0.00	0.97	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.1	0.0	31.0	0.0	19.4	0.0	34.0
Incr Delay (d2), s/veh	0.0	3.8	0.0	0.8	0.0	0.3	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.8	0.0	31.7	0.0	19.7	0.0	34.5
1st-Term Q (Q1), veh/ln	0.0	13.1	0.0	5.6	0.0	0.9	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.36	0.00	1.69	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	19.0	0.0	9.6	0.0	1.8	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	2.04	0.00	1.81	0.00	0.13	0.00	0.90
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	614	29	14	429	1	22
Future Vol, veh/h	614	29	14	429	1	22
Conflicting Peds, #/hr	0	39	39	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	667	32	15	466	1	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	738	0	1220	389
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	498	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	866	-	185	610
Stage 1	-	-	-	-	443	-
Stage 2	-	-	-	-	610	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	839	-	175	591
Mov Cap-2 Maneuver	-	-	-	-	304	-
Stage 1	-	-	-	-	429	-
Stage 2	-	-	-	-	594	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	568	-	-	839	-
HCM Lane V/C Ratio	0.044	-	-	0.018	-
HCM Control Delay (s)	11.6	-	-	9.4	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

HCM 6th Signalized Intersection Summary
22: Driveway/Fair Ave & Chandler Blvd/Chandler Blvd (W)

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	566	5	2	317	130	2	1	6	121	1	144
Future Volume (veh/h)	111	566	5	2	317	130	2	1	6	121	1	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.99		0.96	0.96		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	121	615	5	2	345	141	2	1	7	132	1	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	498	2203	18	502	760	311	104	68	290	451	3	421
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	906	3611	29	797	1247	510	205	250	1061	1352	10	1539
Grp Volume(v), veh/h	121	303	317	2	0	486	10	0	0	132	0	158
Grp Sat Flow(s),veh/h/ln	906	1777	1864	797	0	1756	1516	0	0	1352	0	1548
Q Serve(g_s), s	7.5	7.2	7.2	0.1	0.0	13.4	0.0	0.0	0.0	6.5	0.0	7.4
Cycle Q Clear(g_c), s	20.9	7.2	7.2	7.3	0.0	13.4	0.4	0.0	0.0	7.0	0.0	7.4
Prop In Lane	1.00		0.02	1.00		0.29	0.20		0.70	1.00		0.99
Lane Grp Cap(c), veh/h	498	1084	1137	502	0	1071	462	0	0	451	0	423
V/C Ratio(X)	0.24	0.28	0.28	0.00	0.00	0.45	0.02	0.00	0.00	0.29	0.00	0.37
Avail Cap(c_a), veh/h	498	1084	1137	502	0	1071	462	0	0	451	0	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.00	0.87	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	8.2	8.2	10.0	0.0	9.5	23.9	0.0	0.0	26.2	0.0	26.5
Incr Delay (d2), s/veh	1.2	0.6	0.6	0.0	0.0	1.2	0.1	0.0	0.0	0.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	4.5	4.7	0.0	0.0	8.0	0.3	0.0	0.0	4.1	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	8.9	8.9	10.0	0.0	10.7	24.0	0.0	0.0	26.6	0.0	27.0
LnGrp LOS	B	A	A	A	A	B	C	A	A	C	A	C
Approach Vol, veh/h		741			488			10			290	
Approach Delay, s/veh		10.1			10.7			24.0			26.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	15.4	9.4	22.9	2.4
Green Ext Time (p_c), s	5.7	1.2	7.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	566	5	2	317	130	2	1	6	121	1	144
Future Volume (veh/h)	111	566	5	2	317	130	2	1	6	121	1	144
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	0.99		0.96	0.99		0.96	0.96		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	121	615	5	2	345	141	2	1	7	132	1	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	498	2203	18	502	760	311	104	68	290	451	3	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	16.3	8.9	8.9	10.0	0.0	10.7	24.0	0.0	0.0	26.6	0.0	27.0
Ln Grp LOS	B	A	A	A	A	B	C	A	A	C	A	C
Approach Vol, veh/h		741			488			10			290	
Approach Delay, s/veh		10.1			10.7			24.0			26.8	
Approach LOS		B			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		4.9		6.3		5.8
Max Q Clear (g_c+l1), s		15.4		9.4		22.9		2.4
Green Ext Time (g_e), s		5.7		1.2		7.5		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.01		0.05		0.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		797		1352		906		205

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1247		10		3611		250

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		510		1539		29		1061

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	2	0	132	0	121	0	10
Grp Sat Flow (s), veh/h/ln	0	797	0	1352	0	906	0	1516
Q Serve Time (g_s), s	0.0	0.1	0.0	6.5	0.0	7.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.3	0.0	7.0	0.0	20.9	0.0	0.4
Perm LT Sat Flow (s_l), veh/h/ln	0	797	0	1352	0	906	0	1232
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1712	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	47.7	0.0	24.2	0.0	41.5	0.0	17.2
Perm LT Q Serve Time (g_ps), s	0.0	0.1	0.0	6.5	0.0	7.5	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	502	0	451	0	498	0	462
V/C Ratio (X)	0.00	0.00	0.00	0.29	0.00	0.24	0.00	0.02
Avail Cap (c_a), veh/h	0	502	0	451	0	498	0	462
Upstream Filter (I)	0.00	0.87	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.0	0.0	26.2	0.0	15.1	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	1.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.0	0.0	26.6	0.0	16.3	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.3	0.0	1.4	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	4.1	0.0	2.8	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	2.77	0.00	0.48	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	303	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	486	0	158	0	317	0	0
Grp Sat Flow (s), veh/h/ln	0	1756	0	1548	0	1864	0	0
Q Serve Time (g_s), s	0.0	13.4	0.0	7.4	0.0	7.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.4	0.0	7.4	0.0	7.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	0.99	0.00	0.02	0.00	0.70
Lane Grp Cap (c), veh/h	0	1071	0	423	0	1137	0	0
V/C Ratio (X)	0.00	0.45	0.00	0.37	0.00	0.28	0.00	0.00
Avail Cap (c_a), veh/h	0	1071	0	423	0	1137	0	0
Upstream Filter (I)	0.00	0.87	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.5	0.0	26.5	0.0	8.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.5	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.7	0.0	27.0	0.0	8.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	2.7	0.0	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	5.0	0.0	4.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	3.36	0.00	0.55	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	406	277	97	570	1148	305
Future Volume (veh/h)	406	277	97	570	1148	305
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	441	301	105	620	1248	332
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	749	344	131	2460	2082	909
Arrive On Green	0.22	0.22	0.07	0.69	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1551
Grp Volume(v), veh/h	441	301	105	620	1248	332
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1551
Q Serve(g_s), s	13.7	22.0	7.0	7.8	0.0	0.0
Cycle Q Clear(g_c), s	13.7	22.0	7.0	7.8	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	749	344	131	2460	2082	909
V/C Ratio(X)	0.59	0.88	0.80	0.25	0.60	0.37
Avail Cap(c_a), veh/h	950	436	223	2460	2082	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.91	0.91	0.84	0.84	0.78	0.78
Uniform Delay (d), s/veh	42.2	45.4	54.8	6.9	0.0	0.0
Incr Delay (d2), s/veh	0.7	13.9	9.3	0.2	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.8	14.9	6.1	4.8	0.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.9	59.3	64.1	7.1	1.0	0.9
LnGrp LOS	D	E	E	A	A	A
Approach Vol, veh/h	742			725	1580	
Approach Delay, s/veh	49.5			15.3	1.0	
Approach LOS	D			B	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.8	75.2		32.0		88.0
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	9.0	2.0		24.0		9.8
Green Ext Time (p_c), s	0.1	17.3		2.0		3.5

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	406	277	97	570	1148	305
Future Volume (veh/h)	406	277	97	570	1148	305
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	441	301	105	620	1248	332
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	749	344	131	2460	2082	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.22	0.22	0.07	0.69	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	42.9	59.3	64.1	7.1	1.0	0.9
Ln Grp LOS	D	E	E	A	A	A
Approach Vol, veh/h	742			725	1580	
Approach Delay, s/veh	49.5			15.3	1.0	
Approach LOS	D			B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	12.8	75.2		32.0		88.0		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.8		3.9		5.0		
Max Q Clear (g_c+I1), s	9.0	2.0		24.0		9.8		
Green Ext Time (g_e), s	0.1	17.3		2.0		3.5		
Prob of Phs Call (p_c)	0.97	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.09	0.71		0.20		0.08		
Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1551		1585		0		
Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	105	0	0	441	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	7.0	0.0	0.0	13.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	0.0	13.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	70.3	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	131	0	0	749	0	0	0	0
V/C Ratio (X)	0.80	0.00	0.00	0.59	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.84	0.00	0.00	0.91	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	54.8	0.0	0.0	42.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	9.3	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.1	0.0	0.0	42.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.1	0.0	0.0	5.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	1.00	0.00	1.64	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	6.1	0.0	0.0	9.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.74	0.00	0.00	2.25	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1248	0	0	0	620	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	2082	0	0	0	2460	0	0
V/C Ratio (X)	0.00	0.60	0.00	0.00	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	2082	0	0	0	2460	0	0
Upstream Filter (I)	0.00	0.78	0.00	0.00	0.00	0.84	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.0	0.0	0.0	0.0	7.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.5	0.0	0.0	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.00	0.00	0.11	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	332	0	301	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1551	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	909	0	344	0	0	0	0
V/C Ratio (X)	0.00	0.37	0.00	0.88	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	909	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.78	0.00	0.91	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	13.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.9	0.0	59.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.50	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	14.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.35	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		16.2						
HCM 6th LOS		B						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	92	30	766	188	45	1393
Future Volume (veh/h)	92	30	766	188	45	1393
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.92		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	33	833	204	49	1514
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	177	58	1954	478	64	2703
Arrive On Green	0.14	0.14	1.00	1.00	0.04	0.76
Sat Flow, veh/h	1260	416	2919	692	1781	3647
Grp Volume(v), veh/h	134	0	524	513	49	1514
Grp Sat Flow(s),veh/h/ln	1688	0	1777	1740	1781	1777
Q Serve(g_s), s	8.9	0.0	0.0	0.0	3.3	21.3
Cycle Q Clear(g_c), s	8.9	0.0	0.0	0.0	3.3	21.3
Prop In Lane	0.75	0.25		0.40	1.00	
Lane Grp Cap(c), veh/h	237	0	1229	1203	64	2703
V/C Ratio(X)	0.57	0.00	0.43	0.43	0.77	0.56
Avail Cap(c_a), veh/h	324	0	1229	1203	223	2703
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.86	0.86	0.28	0.28
Uniform Delay (d), s/veh	48.2	0.0	0.0	0.0	57.4	6.0
Incr Delay (d2), s/veh	2.1	0.0	0.9	1.0	5.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.0	0.0	0.6	0.6	2.6	8.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.3	0.0	0.9	1.0	62.9	6.2
LnGrp LOS	D	A	A	A	E	A
Approach Vol, veh/h	134		1037			1563
Approach Delay, s/veh	50.3		0.9			8.0
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		98.2		21.8	8.3	89.9
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		23.3		10.9	5.3	2.0
Green Ext Time (p_c), s		1.6		0.3	0.0	19.0

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	92	30	766	188	45	1393
Future Volume (veh/h)	92	30	766	188	45	1393
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.92		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	33	833	204	49	1514
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	177	58	1954	478	64	2703
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	1.00	1.00	0.04	0.76
Unsig. Movement Delay						
Ln Grp Delay, s/veh	50.3	0.0	0.9	1.0	62.9	6.2
Ln Grp LOS	D	A	A	A	E	A
Approach Vol, veh/h	134		1037			1563
Approach Delay, s/veh	50.3		0.9			8.0
Approach LOS	D		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		98.2		21.8	8.3	89.9		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+I1), s		23.3		10.9	5.3	2.0		
Green Ext Time (g_e), s		1.6		0.3	0.0	19.0		
Prob of Phs Call (p_c)		1.00		0.99	0.80	1.00		
Prob of Max Out (p_x)		1.00		0.00	0.00	0.07		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1260	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		13		2919		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		416		692		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	134	49	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1688	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	8.9	3.3	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.9	3.3	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	83.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.75	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	237	64	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.77	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	324	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.28	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	48.2	57.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.1	5.5	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.3	62.9	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.8	1.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.70	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.0	2.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.14	0.49	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1514	0	0	0	524	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	21.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	21.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2703	0	0	0	1229	0	0
V/C Ratio (X)	0.00	0.56	0.00	0.00	0.00	0.43	0.00	0.00
Avail Cap (c_a), veh/h	0	2703	0	0	0	1229	0	0
Upstream Filter (I)	0.00	0.28	0.00	0.00	0.00	0.86	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.2	0.0	0.0	0.0	0.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.35	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.4	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.00	0.00	0.15	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	513	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1740	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.25	0.00	0.40	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1203	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1203	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	34	32	118	66	7	27	83	47	12	167	25
Future Vol, veh/h	7	34	32	118	66	7	27	83	47	12	167	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	37	35	128	72	8	29	90	51	13	182	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	10.2	9.3	9.9
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	10%	62%	6%
Vol Thru, %	53%	47%	35%	82%
Vol Right, %	30%	44%	4%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	157	73	191	204
LT Vol	27	7	118	12
Through Vol	83	34	66	167
RT Vol	47	32	7	25
Lane Flow Rate	171	79	208	222
Geometry Grp	1	1	1	1
Degree of Util (X)	0.227	0.108	0.292	0.296
Departure Headway (Hd)	4.788	4.911	5.067	4.805
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	744	722	704	743
Service Time	2.857	2.995	3.137	2.87
HCM Lane V/C Ratio	0.23	0.109	0.295	0.299
HCM Control Delay	9.3	8.6	10.2	9.9
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.9	0.4	1.2	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	36	24	54	47	69	21	462	87	59	1238	20
Future Volume (veh/h)	5	36	24	54	47	69	21	462	87	59	1238	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	1.00		0.93	0.98		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	39	26	59	51	75	23	502	95	64	1346	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	138	85	158	119	207	315	2197	413	637	2666	44
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	45	1032	636	719	887	1542	397	2945	553	803	3573	58
Grp Volume(v), veh/h	70	0	0	110	0	75	23	301	296	64	669	699
Grp Sat Flow(s),veh/h/ln	1713	0	0	1606	0	1542	397	1777	1721	803	1777	1855
Q Serve(g_s), s	0.0	0.0	0.0	2.1	0.0	4.0	2.3	4.7	4.7	2.4	13.8	13.8
Cycle Q Clear(g_c), s	3.3	0.0	0.0	5.3	0.0	4.0	16.1	4.7	4.7	7.1	13.8	13.8
Prop In Lane	0.07		0.37	0.54		1.00	1.00		0.32	1.00		0.03
Lane Grp Cap(c), veh/h	272	0	0	277	0	207	315	1326	1284	637	1326	1384
V/C Ratio(X)	0.26	0.00	0.00	0.40	0.00	0.36	0.07	0.23	0.23	0.10	0.50	0.51
Avail Cap(c_a), veh/h	555	0	0	532	0	466	315	1326	1284	637	1326	1384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.80	0.80	0.80	0.68	0.68	0.68
Uniform Delay (d), s/veh	35.2	0.0	0.0	35.9	0.0	35.5	7.9	3.5	3.5	4.6	4.7	4.7
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.9	0.0	1.1	0.4	0.3	0.3	0.2	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	0.0	0.0	4.1	0.0	2.8	0.4	2.3	2.3	0.6	6.5	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	0.0	0.0	36.9	0.0	36.5	8.3	3.8	3.8	4.8	5.6	5.6
LnGrp LOS	D	A	A	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		70			185			620			1432	
Approach Delay, s/veh		35.7			36.7			4.0			5.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	72.1	17.9	72.1	17.9
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 52	* 27	* 52	* 27
Max Q Clear Time (g_c+I1), s	15.8	7.3	18.1	5.3
Green Ext Time (p_c), s	12.9	0.8	4.4	0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	36	24	54	47	69	21	462	87	59	1238	20
Future Volume (veh/h)	5	36	24	54	47	69	21	462	87	59	1238	20
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.97	0.98		0.97	1.00		0.93	0.98		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	39	26	59	51	75	23	502	95	64	1346	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	49	138	85	158	119	207	315	2197	413	637	2666	44
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.75	0.75	0.75	0.75	0.75	0.75
Unsig. Movement Delay												
Ln Grp Delay, s/veh	35.7	0.0	0.0	36.9	0.0	36.5	8.3	3.8	3.8	4.8	5.6	5.6
Ln Grp LOS	D	A	A	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		70			185			620			1432	
Approach Delay, s/veh		35.7			36.7			4.0			5.5	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		72.1		17.9		72.1		17.9
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 52		* 27		* 52		* 27
Max Allow Headway (MAH), s		5.1		5.0		5.4		5.6
Max Q Clear (g_c+I1), s		15.8		7.3		18.1		5.3
Green Ext Time (g_e), s		12.9		0.8		4.4		0.3
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		803		719		397		45

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3573		887		2945		1032

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		58		1542		553		636

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	64	0	110	0	23	0	70
Grp Sat Flow (s), veh/h/ln	0	803	0	1606	0	397	0	1713
Q Serve Time (g_s), s	0.0	2.4	0.0	2.1	0.0	2.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.1	0.0	5.3	0.0	16.1	0.0	3.3
Perm LT Sat Flow (s_l), veh/h/ln	0	803	0	1329	0	397	0	1262
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1800	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	67.1	0.0	12.1	0.0	67.1	0.0	12.1
Perm LT Serve Time (g_u), s	0.0	62.4	0.0	8.8	0.0	53.3	0.0	6.7
Perm LT Q Serve Time (g_ps), s	0.0	2.4	0.0	2.1	0.0	2.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	7.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	3.3
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.54	0.00	1.00	0.00	0.07
Lane Grp Cap (c), veh/h	0	637	0	277	0	315	0	272
V/C Ratio (X)	0.00	0.10	0.00	0.40	0.00	0.07	0.00	0.26
Avail Cap (c_a), veh/h	0	637	0	532	0	315	0	555
Upstream Filter (I)	0.00	0.68	0.00	1.00	0.00	0.80	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.6	0.0	35.9	0.0	7.9	0.0	35.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.9	0.0	0.4	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.8	0.0	36.9	0.0	8.3	0.0	35.7
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	2.2	0.0	0.2	0.0	1.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.6	0.0	4.1	0.0	0.4	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.22	0.00	0.08	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	669	0	0	0	301	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	13.8	0.0	0.0	0.0	4.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.8	0.0	0.0	0.0	4.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1326	0	0	0	1326	0	0
V/C Ratio (X)	0.00	0.50	0.00	0.00	0.00	0.23	0.00	0.00
Avail Cap (c_a), veh/h	0	1326	0	0	0	1326	0	0
Upstream Filter (I)	0.00	0.68	0.00	0.00	0.00	0.80	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.7	0.0	0.0	0.0	3.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.6	0.0	0.0	0.0	3.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	0.0	0.0	1.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.69	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.5	0.0	0.0	0.0	2.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.46	0.00	0.00	0.00	0.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	699	0	75	0	296	0	0
Grp Sat Flow (s), veh/h/ln	0	1855	0	1542	0	1721	0	0
Q Serve Time (g_s), s	0.0	13.8	0.0	4.0	0.0	4.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.8	0.0	4.0	0.0	4.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.03	0.00	1.00	0.00	0.32	0.00	0.37
Lane Grp Cap (c), veh/h	0	1384	0	207	0	1284	0	0
V/C Ratio (X)	0.00	0.51	0.00	0.36	0.00	0.23	0.00	0.00
Avail Cap (c_a), veh/h	0	1384	0	466	0	1284	0	0
Upstream Filter (I)	0.00	0.68	0.00	1.00	0.00	0.80	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.7	0.0	35.5	0.0	3.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.1	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.6	0.0	36.5	0.0	3.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	1.5	0.0	1.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.68	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.7	0.0	2.8	0.0	2.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	1.78	0.00	0.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	617	642	262	1067	0	0	0	0	801	368	293
Future Volume (veh/h)	0	617	642	262	1067	0	0	0	0	801	368	293
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	671	698	285	1160	0				794	507	318
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	934	808	132	1868	0				653	393	247
Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	1870	1537	397	3647	0				1781	1073	673
Grp Volume(v), veh/h	0	671	698	285	1160	0				794	0	825
Grp Sat Flow(s),veh/h/ln	0	1777	1537	397	1777	0				1781	0	1746
Q Serve(g_s), s	0.0	25.9	35.5	11.8	20.7	0.0				33.0	0.0	33.0
Cycle Q Clear(g_c), s	0.0	25.9	35.5	47.3	20.7	0.0				33.0	0.0	33.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.39
Lane Grp Cap(c), veh/h	0	934	808	132	1868	0				653	0	640
V/C Ratio(X)	0.00	0.72	0.86	2.16	0.62	0.00				1.22	0.00	1.29
Avail Cap(c_a), veh/h	0	934	808	132	1868	0				653	0	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.78	0.78	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.3	18.6	42.7	15.0	0.0				28.5	0.0	28.5
Incr Delay (d2), s/veh	0.0	4.7	11.9	541.6	1.2	0.0				110.7	0.0	141.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	16.0	20.0	40.8	11.9	0.0				48.0	0.0	55.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.0	30.4	584.3	16.3	0.0				139.2	0.0	169.9
LnGrp LOS	A	C	C	F	B	A				F	A	F
Approach Vol, veh/h		1369			1445						1619	
Approach Delay, s/veh		25.8			128.3						154.8	
Approach LOS		C			F						F	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7
Max Green Setting (Gmax), s		* 47		33.0		* 47
Max Q Clear Time (g_c+I1), s		49.3		35.0		37.5
Green Ext Time (p_c), s		0.0		0.0		6.2

Intersection Summary	
HCM 6th Ctrl Delay	106.3
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	617	642	262	1067	0	0	0	0	801	368	293
Future Volume (veh/h)	0	617	642	262	1067	0	0	0	0	801	368	293
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	671	698	285	1160	0				794	507	318
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	934	808	132	1868	0				653	393	247
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	21.0	30.4	584.3	16.3	0.0				139.2	0.0	169.9
Ln Grp LOS	A	C	C	F	B	A				F	A	F
Approach Vol, veh/h		1369			1445						1619	
Approach Delay, s/veh		25.8			128.3						154.8	
Approach LOS		C			F						F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		6.1		4.5		5.3		
Max Q Clear (g_c+I1), s		49.3		35.0		37.5		
Green Ext Time (g_e), s		0.0		0.0		6.2		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		1.00		0.78		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		397		1781		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1073		1870		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		673		1537		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	285	0	794	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	397	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	11.8	0.0	33.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	47.3	0.0	33.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	397	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	47.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	132	0	653	0	0	0	0
V/C Ratio (X)	0.00	2.16	0.00	1.22	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	132	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.78	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	42.7	0.0	28.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	541.6	0.0	110.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	584.3	0.0	139.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	12.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	19.8	0.0	20.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.46	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	40.8	0.0	48.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	3.16	0.00	2.52	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	38.3	0.0	35.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1160	0	0	0	671	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	20.7	0.0	0.0	0.0	25.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	0.0	0.0	25.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1868	0	0	0	934	0	0
V/C Ratio (X)	0.00	0.62	0.00	0.00	0.00	0.72	0.00	0.00
Avail Cap (c_a), veh/h	0	1868	0	0	0	934	0	0
Upstream Filter (I)	0.00	0.78	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	0.0	0.0	16.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	4.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.3	0.0	0.0	0.0	21.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	0.0	0.0	9.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	1.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	0.00	1.00	0.00	1.50	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	11.9	0.0	0.0	0.0	16.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.92	0.00	0.00	0.00	0.86	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	825	0	698	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1746	0	1537	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	33.0	0.0	35.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	33.0	0.0	35.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.39	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	640	0	808	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.29	0.00	0.86	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	640	0	808	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.5	0.0	18.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	141.4	0.0	11.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	169.9	0.0	30.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.6	0.0	11.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	25.2	0.0	2.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.48	0.00	1.44	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	55.9	0.0	20.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.94	0.00	1.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	46.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	106.3
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	1263	0	0	900	397	439	3	212	0	0	0
Future Volume (veh/h)	156	1263	0	0	900	397	439	3	212	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	170	1373	0	0	978	432	355	174	230			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	214	2150	0	0	2072	915	480	196	259			
Arrive On Green	1.00	1.00	0.00	0.00	0.20	0.20	0.27	0.27	0.27			
Sat Flow, veh/h	382	3647	0	0	3594	1513	1781	726	960			
Grp Volume(v), veh/h	170	1373	0	0	972	438	355	0	404			
Grp Sat Flow(s),veh/h/ln	382	1777	0	0	1702	1534	1781	0	1686			
Q Serve(g_s), s	31.7	0.0	0.0	0.0	22.7	22.7	16.4	0.0	20.7			
Cycle Q Clear(g_c), s	54.4	0.0	0.0	0.0	22.7	22.7	16.4	0.0	20.7			
Prop In Lane	1.00		0.00	0.00		0.99	1.00		0.57			
Lane Grp Cap(c), veh/h	214	2150	0	0	2059	928	480	0	454			
V/C Ratio(X)	0.79	0.64	0.00	0.00	0.47	0.47	0.74	0.00	0.89			
Avail Cap(c_a), veh/h	214	2150	0	0	2059	928	523	0	495			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.60	0.60	1.00	0.00	1.00			
Uniform Delay (d), s/veh	14.7	0.0	0.0	0.0	23.3	23.3	30.0	0.0	31.6			
Incr Delay (d2), s/veh	2.8	0.1	0.0	0.0	0.1	0.2	5.1	0.0	16.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	4.5	0.1	0.0	0.0	14.3	13.1	11.7	0.0	15.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	0.1	0.0	0.0	23.4	23.5	35.1	0.0	48.5			
LnGrp LOS	B	A	A	A	C	C	D	A	D			
Approach Vol, veh/h		1543			1410			759				
Approach Delay, s/veh		2.0			23.5			42.2				
Approach LOS		A			C			D				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	60.1	29.9	60.1
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	56.4	22.7	24.7
Green Ext Time (p_c), s	0.0	1.3	11.8

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	1263	0	0	900	397	439	3	212	0	0	0
Future Volume (veh/h)	156	1263	0	0	900	397	439	3	212	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	170	1373	0	0	978	432	355	174	230			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	214	2150	0	0	2072	915	480	196	259			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.20	0.20	0.27	0.27	0.27			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	17.5	0.1	0.0	0.0	23.4	23.5	35.1	0.0	48.5			
Ln Grp LOS	B	A	A	A	C	C	D	A	D			
Approach Vol, veh/h		1543			1410			759				
Approach Delay, s/veh		2.0			23.5			42.2				
Approach LOS		A			C			D				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		60.1		29.9		60.1		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		5.7		4.5		5.2		
Max Q Clear (g_c+I1), s		56.4		22.7		24.7		
Green Ext Time (g_e), s		0.0		1.3		11.8		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		1.00		0.23		

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		382		1781		0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		726		3594		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		960		1513		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	170	0	355	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	382	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	31.7	0.0	16.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	54.4	0.0	16.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	382	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	31.7	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	31.7	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	54.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	214	0	480	0	0	0	0
V/C Ratio (X)	0.00	0.79	0.00	0.74	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	214	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	14.7	0.0	30.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.8	0.0	5.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.5	0.0	35.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.4	0.0	6.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.26	0.00	1.61	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.5	0.0	11.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.69	0.00	0.65	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1373	0	0	0	972	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2150	0	0	0	2059	0	0
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.47	0.00	0.00
Avail Cap (c_a), veh/h	0	2150	0	0	0	2059	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.60	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	23.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	0.0	0.0	23.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	10.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.40	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	14.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	404	0	438	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1686	0	1534	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	20.7	0.0	22.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.7	0.0	22.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.57	0.00	0.99	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	454	0	928	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.89	0.00	0.47	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	495	0	928	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.60	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.6	0.0	23.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	16.9	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	48.5	0.0	23.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.9	0.0	9.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.52	0.00	1.42	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	15.3	0.0	13.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.85	0.00	0.37	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	817	521	219	906	0	149	156	116	51	532	241
Future Volume (veh/h)	108	817	521	219	906	0	149	156	116	51	532	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	888	566	238	985	0	162	170	126	55	578	262
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	786	485	219	1421	634	166	748	737	442	748	614
Arrive On Green	0.02	0.12	0.12	0.16	0.80	0.00	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1781	2081	1284	1781	3554	1585	655	1870	1535	1066	1870	1535
Grp Volume(v), veh/h	117	754	700	238	985	0	162	170	126	55	578	262
Grp Sat Flow(s),veh/h/ln	1781	1777	1588	1781	1777	1585	655	1870	1535	1066	1870	1535
Q Serve(g_s), s	3.6	34.0	34.0	7.0	11.2	0.0	11.8	5.4	4.2	3.2	24.2	11.1
Cycle Q Clear(g_c), s	3.6	34.0	34.0	7.0	11.2	0.0	36.0	5.4	4.2	8.6	24.2	11.1
Prop In Lane	1.00		0.81	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	336	671	600	219	1421	634	166	748	737	442	748	614
V/C Ratio(X)	0.35	1.12	1.17	1.09	0.69	0.00	0.97	0.23	0.17	0.12	0.77	0.43
Avail Cap(c_a), veh/h	336	671	600	219	1421	634	166	748	737	442	748	614
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	39.4	39.4	20.0	6.5	0.0	41.8	17.8	13.4	20.7	23.4	19.5
Incr Delay (d2), s/veh	0.4	68.8	87.0	86.6	2.8	0.0	63.5	0.7	0.5	0.6	7.6	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	39.1	40.0	12.4	4.9	0.0	10.7	4.3	2.7	1.5	17.3	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	108.2	126.4	106.7	9.3	0.0	105.3	18.5	13.9	21.2	31.1	21.7
LnGrp LOS	B	F	F	F	A	A	F	B	B	C	C	C
Approach Vol, veh/h		1571			1223			458			895	
Approach Delay, s/veh		109.5			28.3			47.9			27.7	
Approach LOS		F			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	41.0		41.0	10.0	39.0		41.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	5.0	* 36		* 36	7.0	* 34		* 36
Max Q Clear Time (g_c+I1), s	5.6	13.2		26.2	9.0	36.0		38.0
Green Ext Time (p_c), s	0.0	7.3		3.6	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	817	521	219	906	0	149	156	116	51	532	241
Future Volume (veh/h)	108	817	521	219	906	0	149	156	116	51	532	241
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	0.98		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	888	566	238	985	0	162	170	126	55	578	262
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	336	786	485	219	1421	634	166	748	737	442	748	614
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.12	0.12	0.16	0.80	0.00	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	17.1	108.2	126.4	106.7	9.3	0.0	105.3	18.5	13.9	21.2	31.1	21.7
Ln Grp LOS	B	F	F	F	A	A	F	B	B	C	C	C
Approach Vol, veh/h		1571			1223			458			895	
Approach Delay, s/veh		109.5			28.3			47.9			27.7	
Approach LOS		F			C			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	8.0	41.0		41.0	10.0	39.0		41.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	5.0	* 36		* 36	7.0	* 34		* 36
Max Allow Headway (MAH), s	3.8	5.1		4.9	3.8	5.3		5.5
Max Q Clear (g_c+I1), s	5.6	13.2		26.2	9.0	36.0		38.0
Green Ext Time (g_e), s	0.0	7.3		3.6	0.0	0.0		0.0
Prob of Phs Call (p_c)	0.95	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1066	1781			655

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		2081		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1535		1284		1535

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	117	0	0	55	238	0	0	162
Grp Sat Flow (s), veh/h/ln	1781	0	0	1066	1781	0	0	655
Q Serve Time (g_s), s	3.6	0.0	0.0	3.2	7.0	0.0	0.0	11.8
Cycle Q Clear Time (g_c), s	3.6	0.0	0.0	8.6	7.0	0.0	0.0	36.0
Perm LT Sat Flow (s_l), veh/h/ln	569	0	0	1066	366	0	0	655
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	34.0	0.0	0.0	36.0	35.0	0.0	0.0	36.0
Perm LT Serve Time (g_u), s	24.8	0.0	0.0	30.6	0.0	0.0	0.0	11.8
Perm LT Q Serve Time (g_ps), s	2.5	0.0	0.0	3.2	0.0	0.0	0.0	11.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	336	0	0	442	219	0	0	166
V/C Ratio (X)	0.35	0.00	0.00	0.12	1.09	0.00	0.00	0.97
Avail Cap (c_a), veh/h	336	0	0	442	219	0	0	166
Upstream Filter (I)	0.67	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	16.7	0.0	0.0	20.7	20.0	0.0	0.0	41.8
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.6	86.6	0.0	0.0	63.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.1	0.0	0.0	21.2	106.7	0.0	0.0	105.3
1st-Term Q (Q1), veh/ln	1.4	0.0	0.0	0.8	2.3	0.0	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	5.3	0.0	0.0	2.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.64	0.00	0.00	1.64
%ile Back of Q (95%), veh/ln	2.7	0.0	0.0	1.5	12.4	0.0	0.0	10.7
%ile Storage Ratio (RQ%)	0.45	0.00	0.00	0.22	2.25	0.00	0.00	1.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	4.9	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	985	0	578	0	754	0	170
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	11.2	0.0	24.2	0.0	34.0	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	11.2	0.0	24.2	0.0	34.0	0.0	5.4
Lane Grp Cap (c), veh/h	0	1421	0	748	0	671	0	748
V/C Ratio (X)	0.00	0.69	0.00	0.77	0.00	1.12	0.00	0.23
Avail Cap (c_a), veh/h	0	1421	0	748	0	671	0	748
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.67	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.5	0.0	23.4	0.0	39.4	0.0	17.8
Incr Delay (d2), s/veh	0.0	2.8	0.0	7.6	0.0	68.8	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.3	0.0	31.1	0.0	108.2	0.0	18.5
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	10.1	0.0	16.0	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	1.6	0.0	12.8	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.48	0.00	1.36	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	4.9	0.0	17.3	0.0	39.1	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.65	0.00	1.10	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	20.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	262	0	700	0	126
Grp Sat Flow (s), veh/h/ln	0	1585	0	1535	0	1588	0	1535
Q Serve Time (g_s), s	0.0	0.0	0.0	11.1	0.0	34.0	0.0	4.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.1	0.0	34.0	0.0	4.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.81	0.00	1.00
Lane Grp Cap (c), veh/h	0	634	0	614	0	600	0	737
V/C Ratio (X)	0.00	0.00	0.00	0.43	0.00	1.17	0.00	0.17
Avail Cap (c_a), veh/h	0	634	0	614	0	600	0	737
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.67	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	19.5	0.0	39.4	0.0	13.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.2	0.0	87.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	21.7	0.0	126.4	0.0	13.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.8	0.0	14.3	0.0	1.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	14.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.39	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.5	0.0	40.0	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.92	0.00	1.12	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	637	227	55	820	85	96	307	49	98	995	165
Future Volume (veh/h)	230	637	227	55	820	85	96	307	49	98	995	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.89	0.99		0.82	0.94		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	692	247	60	891	92	104	334	53	107	1082	179
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	779	614	104	948	376	148	1128	175	456	1474	243
Arrive On Green	0.10	0.42	0.42	0.27	0.27	0.27	0.38	0.38	0.38	0.06	0.49	0.49
Sat Flow, veh/h	1781	1870	1473	590	3554	1410	437	2979	461	1781	3008	496
Grp Volume(v), veh/h	250	692	247	60	891	92	104	196	191	107	637	624
Grp Sat Flow(s),veh/h/ln	1781	1870	1473	590	1777	1410	437	1777	1664	1781	1777	1726
Q Serve(g_s), s	12.0	41.1	14.1	8.9	29.4	6.1	24.2	9.2	9.7	4.1	34.2	34.6
Cycle Q Clear(g_c), s	12.0	41.1	14.1	32.0	29.4	6.1	45.4	9.2	9.7	4.1	34.2	34.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.29
Lane Grp Cap(c), veh/h	259	779	614	104	948	376	148	673	630	456	871	846
V/C Ratio(X)	0.96	0.89	0.40	0.58	0.94	0.24	0.70	0.29	0.30	0.23	0.73	0.74
Avail Cap(c_a), veh/h	259	779	614	104	948	376	148	673	630	459	871	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.73	0.73	0.73	0.95	0.95	0.95	0.79	0.79	0.79
Uniform Delay (d), s/veh	30.9	32.4	24.5	56.8	43.1	34.5	49.7	26.0	26.2	19.3	24.3	24.4
Incr Delay (d2), s/veh	46.0	12.2	0.4	5.7	13.2	0.2	23.2	1.0	1.2	0.2	4.3	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.1	28.3	8.6	3.6	19.9	3.9	7.3	7.3	7.2	3.1	20.5	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.9	44.6	25.0	62.5	56.3	34.8	72.9	27.1	27.4	19.5	28.6	29.0
LnGrp LOS	E	D	C	E	E	C	E	C	C	B	C	C
Approach Vol, veh/h		1189			1043			491			1368	
Approach Delay, s/veh		47.3			54.8			36.9			28.1	
Approach LOS		D			D			D			C	

Timer - Assigned Phs		2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s		64.3	18.0	37.7	13.4	50.9		55.7				
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7				
Max Green Setting (Gmax), s		* 59	* 13	* 32	8.0	* 45		* 50				
Max Q Clear Time (g_c+I1), s		36.6	14.0	34.0	6.1	47.4		43.1				
Green Ext Time (p_c), s		9.2	0.0	0.0	0.0	0.0		3.2				

Intersection Summary	
HCM 6th Ctrl Delay	41.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	637	227	55	820	85	96	307	49	98	995	165
Future Volume (veh/h)	230	637	227	55	820	85	96	307	49	98	995	165
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.93	0.99		0.89	0.99		0.82	0.94		0.91
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	692	247	60	891	92	104	334	53	107	1082	179
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	259	779	614	104	948	376	148	1128	175	456	1474	243
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.42	0.42	0.27	0.27	0.27	0.38	0.38	0.38	0.06	0.49	0.49
Unsig. Movement Delay												
Ln Grp Delay, s/veh	76.9	44.6	25.0	62.5	56.3	34.8	72.9	27.1	27.4	19.5	28.6	29.0
Ln Grp LOS	E	D	C	E	E	C	E	C	C	B	C	C
Approach Vol, veh/h		1189			1043			491			1368	
Approach Delay, s/veh		47.3			54.8			36.9			28.1	
Approach LOS		D			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		64.3	18.0	37.7	13.4	50.9		55.7
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 59	* 13	* 32	8.0	* 45		* 50
Max Allow Headway (MAH), s		5.2	3.8	5.3	3.8	6.1		5.0
Max Q Clear (g_c+I1), s		36.6	14.0	34.0	6.1	47.4		43.1
Green Ext Time (g_e), s		9.2	0.0	0.0	0.0	0.0		3.2
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.97	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		0.78

Left-Turn Movement Data						
Assigned Mvmt			3	7	5	1
Mvmt Sat Flow, veh/h			1781	590	1781	437

Through Movement Data						
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3008		3554		2979		1870

Right-Turn Movement Data						
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		496		1410		461		1473

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment		L (Pr/Pm)		LL (Pr/Pm)		L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	250	60	107	104	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	590	1781	437	0	0
Q Serve Time (g_s), s	0.0	0.0	12.0	8.9	4.1	24.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	12.0	32.0	4.1	45.4	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	571	590	941	437	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	34.0	32.0	47.4	45.4	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.6	8.9	35.7	24.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.6	8.9	1.5	24.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	259	104	456	148	0	0
V/C Ratio (X)	0.00	0.00	0.96	0.58	0.23	0.70	0.00	0.00
Avail Cap (c_a), veh/h	0	0	259	104	459	148	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.73	0.79	0.95	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	30.9	56.8	19.3	49.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	46.0	5.7	0.2	23.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	76.9	62.5	19.5	72.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	5.1	1.8	1.7	3.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	3.3	0.2	0.0	1.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.57	1.80	1.80	1.79	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	13.1	3.6	3.1	7.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.22	0.45	0.87	0.89	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	637	0	891	0	196	0	692
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	34.2	0.0	29.4	0.0	9.2	0.0	41.1
Cycle Q Clear Time (g_c), s	0.0	34.2	0.0	29.4	0.0	9.2	0.0	41.1
Lane Grp Cap (c), veh/h	0	871	0	948	0	673	0	779
V/C Ratio (X)	0.00	0.73	0.00	0.94	0.00	0.29	0.00	0.89
Avail Cap (c_a), veh/h	0	871	0	948	0	673	0	779
Upstream Filter (I)	0.00	0.79	0.00	0.73	0.00	0.95	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.3	0.0	43.1	0.0	26.0	0.0	32.4
Incr Delay (d2), s/veh	0.0	4.3	0.0	13.2	0.0	1.0	0.0	12.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.6	0.0	56.3	0.0	27.1	0.0	44.6
1st-Term Q (Q1), veh/ln	0.0	13.8	0.0	12.8	0.0	3.9	0.0	18.2
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	1.7	0.0	0.2	0.0	2.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.38	0.00	1.37	0.00	1.79	0.00	1.36
%ile Back of Q (95%), veh/ln	0.0	20.5	0.0	19.9	0.0	7.3	0.0	28.3
%ile Storage Ratio (RQ%)	0.00	0.71	0.00	0.43	0.00	0.07	0.00	0.95
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	624	0	92	0	191	0	247
Grp Sat Flow (s), veh/h/ln	0	1726	0	1410	0	1664	0	1473
Q Serve Time (g_s), s	0.0	34.6	0.0	6.1	0.0	9.7	0.0	14.1
Cycle Q Clear Time (g_c), s	0.0	34.6	0.0	6.1	0.0	9.7	0.0	14.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	0.28	0.00	1.00
Lane Grp Cap (c), veh/h	0	846	0	376	0	630	0	614
V/C Ratio (X)	0.00	0.74	0.00	0.24	0.00	0.30	0.00	0.40
Avail Cap (c_a), veh/h	0	846	0	376	0	630	0	614
Upstream Filter (I)	0.00	0.79	0.00	0.73	0.00	0.95	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.4	0.0	34.5	0.0	26.2	0.0	24.5
Incr Delay (d2), s/veh	0.0	4.5	0.0	0.2	0.0	1.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.0	0.0	34.8	0.0	27.4	0.0	25.0
1st-Term Q (Q1), veh/ln	0.0	13.5	0.0	2.1	0.0	3.8	0.0	4.9
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.0	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.38	0.00	1.80	0.00	1.80	0.00	1.73
%ile Back of Q (95%), veh/ln	0.0	20.2	0.0	3.9	0.0	7.2	0.0	8.6
%ile Storage Ratio (RQ%)	0.00	0.70	0.00	0.82	0.00	0.07	0.00	1.46
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	41.5
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	614	37	98	667	122	145	398	80	286	864	193
Future Volume (veh/h)	70	614	37	98	667	122	145	398	80	286	864	193
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	667	40	107	725	133	158	433	87	311	939	210
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	779	632	148	1238	227	194	842	358	279	1024	427
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.04	0.08	0.08	0.16	0.29	0.29
Sat Flow, veh/h	638	1870	1518	738	2975	545	1781	3554	1509	1781	3554	1481
Grp Volume(v), veh/h	76	667	40	107	433	425	158	433	87	311	939	210
Grp Sat Flow(s),veh/h/ln	638	1870	1518	738	1777	1744	1781	1777	1509	1781	1777	1481
Q Serve(g_s), s	9.4	29.1	1.4	8.3	16.9	16.9	7.9	10.5	4.9	14.1	23.0	10.6
Cycle Q Clear(g_c), s	26.3	29.1	1.4	37.5	16.9	16.9	7.9	10.5	4.9	14.1	23.0	10.6
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	779	632	148	740	726	194	842	358	279	1024	427
V/C Ratio(X)	0.34	0.86	0.06	0.72	0.59	0.59	0.81	0.51	0.24	1.11	0.92	0.49
Avail Cap(c_a), veh/h	226	779	632	148	740	726	198	869	369	279	1042	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.38	1.00	1.00	1.00	0.93	0.93	0.93	0.48	0.48	0.48
Uniform Delay (d), s/veh	30.4	23.8	15.7	42.3	20.3	20.3	42.5	36.5	33.9	38.0	31.0	26.6
Incr Delay (d2), s/veh	1.5	4.9	0.1	26.0	3.4	3.4	20.7	0.5	0.3	72.8	6.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	16.6	0.9	6.1	11.7	11.5	8.1	8.4	3.3	16.2	13.8	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	28.7	15.8	68.3	23.6	23.7	63.2	37.0	34.2	110.8	37.7	27.0
LnGrp LOS	C	C	B	E	C	C	E	D	C	F	D	C
Approach Vol, veh/h		783			965			678			1460	
Approach Delay, s/veh		28.4			28.6			42.7			51.7	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.5	15.4	31.1		43.5	20.0	26.5
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green Setting (Gmax), s		* 37	10.0	* 26		* 37	14.1	* 22
Max Q Clear Time (g_c+I1), s		39.5	9.9	25.0		31.1	16.1	12.5
Green Ext Time (p_c), s		0.0	0.0	0.9		2.5	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	614	37	98	667	122	145	398	80	286	864	193
Future Volume (veh/h)	70	614	37	98	667	122	145	398	80	286	864	193
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.96	1.00		0.96	1.00		0.95	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	667	40	107	725	133	158	433	87	311	939	210
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	226	779	632	148	1238	227	194	842	358	279	1024	427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.04	0.08	0.08	0.16	0.29	0.29
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.0	28.7	15.8	68.3	23.6	23.7	63.2	37.0	34.2	110.8	37.7	27.0
Ln Grp LOS	C	C	B	E	C	C	E	D	C	F	D	C
Approach Vol, veh/h		783			965			678			1460	
Approach Delay, s/veh		28.4			28.6			42.7			51.7	
Approach LOS		C			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		43.5	15.4	31.1		43.5	20.0	26.5
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 37	10.0	* 26		* 37	14.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.8		5.2	3.7	4.9
Max Q Clear (g_c+I1), s		39.5	9.9	25.0		31.1	16.1	12.5
Green Ext Time (g_e), s		0.0	0.0	0.9		2.5	0.0	2.0
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00	1.00	0.25

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		738	1781			638	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2975		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		545		1481		1518		1509

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	107	158	0	0	76	311	0
Grp Sat Flow (s), veh/h/ln	0	738	1781	0	0	638	1781	0
Q Serve Time (g_s), s	0.0	8.3	7.9	0.0	0.0	9.4	14.1	0.0
Cycle Q Clear Time (g_c), s	0.0	37.5	7.9	0.0	0.0	26.3	14.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	738	0	0	0	638	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	37.5	0.0	0.0	0.0	37.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	8.3	0.0	0.0	0.0	20.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	8.3	0.0	0.0	0.0	9.4	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	148	194	0	0	226	279	0
V/C Ratio (X)	0.00	0.72	0.81	0.00	0.00	0.34	1.11	0.00
Avail Cap (c_a), veh/h	0	148	198	0	0	226	279	0
Upstream Filter (I)	0.00	1.00	0.93	0.00	0.00	0.38	0.48	0.00
Uniform Delay (d1), s/veh	0.0	42.3	42.5	0.0	0.0	30.4	38.0	0.0
Incr Delay (d2), s/veh	0.0	26.0	20.7	0.0	0.0	1.5	72.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	68.3	63.2	0.0	0.0	32.0	110.8	0.0
1st-Term Q (Q1), veh/ln	0.0	2.3	3.6	0.0	0.0	1.4	5.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	1.1	0.0	0.0	0.1	5.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.73	0.00	0.00	1.80	1.41	0.00
%ile Back of Q (95%), veh/ln	0.0	6.1	8.1	0.0	0.0	2.7	16.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.89	2.06	0.00	0.00	0.39	2.75	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	8.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	433	0	939	0	667	0	433
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	16.9	0.0	23.0	0.0	29.1	0.0	10.5
Cycle Q Clear Time (g_c), s	0.0	16.9	0.0	23.0	0.0	29.1	0.0	10.5
Lane Grp Cap (c), veh/h	0	740	0	1024	0	779	0	842
V/C Ratio (X)	0.00	0.59	0.00	0.92	0.00	0.86	0.00	0.51
Avail Cap (c_a), veh/h	0	740	0	1042	0	779	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.48	0.00	0.38	0.00	0.93
Uniform Delay (d1), s/veh	0.0	20.3	0.0	31.0	0.0	23.8	0.0	36.5
Incr Delay (d2), s/veh	0.0	3.4	0.0	6.7	0.0	4.9	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.6	0.0	37.7	0.0	28.7	0.0	37.0
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	9.2	0.0	11.9	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	1.0	0.0	1.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.61	0.00	1.36	0.00	1.28	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	11.7	0.0	13.8	0.0	16.6	0.0	8.4
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.31	0.00	0.36	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	425	0	210	0	40	0	87
Grp Sat Flow (s), veh/h/ln	0	1744	0	1481	0	1518	0	1509
Q Serve Time (g_s), s	0.0	16.9	0.0	10.6	0.0	1.4	0.0	4.9
Cycle Q Clear Time (g_c), s	0.0	16.9	0.0	10.6	0.0	1.4	0.0	4.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	726	0	427	0	632	0	358
V/C Ratio (X)	0.00	0.59	0.00	0.49	0.00	0.06	0.00	0.24
Avail Cap (c_a), veh/h	0	726	0	434	0	632	0	369
Upstream Filter (I)	0.00	1.00	0.00	0.48	0.00	0.38	0.00	0.93
Uniform Delay (d1), s/veh	0.0	20.3	0.0	26.6	0.0	15.7	0.0	33.9
Incr Delay (d2), s/veh	0.0	3.4	0.0	0.4	0.0	0.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.7	0.0	27.0	0.0	15.8	0.0	34.2
1st-Term Q (Q1), veh/ln	0.0	6.5	0.0	3.5	0.0	0.5	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.61	0.00	1.60	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.5	0.0	5.7	0.0	0.9	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.97	0.00	0.22	0.00	0.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	46	438	0	0	1075
Future Vol, veh/h	21	46	438	0	0	1075
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	50	476	0	0	1168

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1060	476	0	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	233	588	-	0	0	-
Stage 1	624	-	-	0	0	-
Stage 2	521	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	233	588	-	-	-	-
Mov Cap-2 Maneuver	364	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	521	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	364	588	-
HCM Lane V/C Ratio	-	0.063	0.085	-
HCM Control Delay (s)	-	15.6	11.7	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.2	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	842	200	239	189	134	47	485	659	235	767	36
Future Volume (veh/h)	41	842	200	239	189	134	47	485	659	235	767	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	915	217	260	205	146	51	527	716	255	834	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	462	857	203	244	1252	559	260	1176	524	290	1224	546
Arrive On Green	0.05	0.30	0.30	0.10	0.35	0.35	0.06	0.33	0.33	0.07	0.34	0.34
Sat Flow, veh/h	1781	2850	675	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	45	570	562	260	205	146	51	527	716	255	834	39
Grp Sat Flow(s),veh/h/ln	1781	1777	1749	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.0	36.1	36.1	12.4	4.8	7.9	2.2	14.0	39.7	9.0	24.1	2.0
Cycle Q Clear(g_c), s	2.0	36.1	36.1	12.4	4.8	7.9	2.2	14.0	39.7	9.0	24.1	2.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	462	535	526	244	1252	559	260	1176	524	290	1224	546
V/C Ratio(X)	0.10	1.07	1.07	1.07	0.16	0.26	0.20	0.45	1.37	0.88	0.68	0.07
Avail Cap(c_a), veh/h	489	535	526	244	1252	559	285	1176	524	290	1224	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.19	0.19	0.19	0.84	0.84	0.84	1.00	1.00	1.00	0.46	0.46	0.46
Uniform Delay (d), s/veh	25.8	42.0	42.0	35.2	26.7	27.7	25.1	31.5	40.2	32.0	33.7	26.4
Incr Delay (d2), s/veh	0.0	38.0	38.8	71.1	0.1	0.2	0.4	1.2	176.4	13.7	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	25.3	25.1	15.2	3.6	5.3	1.6	10.1	60.9	6.6	13.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	79.9	80.7	106.3	26.8	27.9	25.5	32.8	216.5	45.7	35.1	26.5
LnGrp LOS	C	F	F	F	C	C	C	C	F	D	D	C
Approach Vol, veh/h		1177			611			1294			1128	
Approach Delay, s/veh		78.2			60.9			134.2			37.2	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	46.7	11.8	48.2	14.9	45.1	18.0	42.0
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	39.7	8.0	40.5	9.0	39.7	12.4	36.1
Max Q Clear Time (g_c+I1), s	4.2	26.1	4.0	9.9	11.0	41.7	14.4	38.1
Green Ext Time (p_c), s	0.0	4.7	0.0	1.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	81.9
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	842	200	239	189	134	47	485	659	235	767	36
Future Volume (veh/h)	41	842	200	239	189	134	47	485	659	235	767	36
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	915	217	260	205	146	51	527	716	255	834	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	462	857	203	244	1252	559	260	1176	524	290	1224	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.30	0.30	0.10	0.35	0.35	0.06	0.33	0.33	0.07	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.8	79.9	80.7	106.3	26.8	27.9	25.5	32.8	216.5	45.7	35.1	26.5
Ln Grp LOS	C	F	F	F	C	C	C	C	F	D	D	C
Approach Vol, veh/h		1177			611			1294			1128	
Approach Delay, s/veh		78.2			60.9			134.2			37.2	
Approach LOS		E			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.3	46.7	11.8	48.2	14.9	45.1	18.0	42.0
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	39.7	8.0	40.5	9.0	39.7	12.4	36.1
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.4	3.7	5.1
Max Q Clear (g_c+l1), s	4.2	26.1	4.0	9.9	11.0	41.7	14.4	38.1
Green Ext Time (g_e), s	0.0	4.7	0.0	1.7	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.82	1.00	0.78	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.22	0.00	0.70	0.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		2850

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		675

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	51	0	45	0	255	0	260	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.2	0.0	2.0	0.0	9.0	0.0	12.4	0.0
Cycle Q Clear Time (g_c), s	2.2	0.0	2.0	0.0	9.0	0.0	12.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	635	0	1030	0	447	0	497	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.7	0.0	36.1	0.0	39.7	0.0	38.1	0.0
Perm LT Serve Time (g_u), s	17.2	0.0	36.1	0.0	25.7	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.0	0.0	0.0	0.0	25.7	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	260	0	462	0	290	0	244	0
V/C Ratio (X)	0.20	0.00	0.10	0.00	0.88	0.00	1.07	0.00
Avail Cap (c_a), veh/h	285	0	489	0	290	0	244	0
Upstream Filter (I)	1.00	0.00	0.19	0.00	0.46	0.00	0.84	0.00
Uniform Delay (d1), s/veh	25.1	0.0	25.8	0.0	32.0	0.0	35.2	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	13.7	0.0	71.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	25.5	0.0	25.8	0.0	45.7	0.0	106.3	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	0.8	0.0	3.2	0.0	5.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	1.1	0.0	4.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.78	0.00	1.54	0.00	1.51	0.00
%ile Back of Q (95%), veh/ln	1.6	0.0	1.5	0.0	6.6	0.0	15.2	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.48	0.00	0.75	0.00	3.21	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	834	0	205	0	527	0	570
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	24.1	0.0	4.8	0.0	14.0	0.0	36.1
Cycle Q Clear Time (g_c), s	0.0	24.1	0.0	4.8	0.0	14.0	0.0	36.1
Lane Grp Cap (c), veh/h	0	1224	0	1252	0	1176	0	535
V/C Ratio (X)	0.00	0.68	0.00	0.16	0.00	0.45	0.00	1.07
Avail Cap (c_a), veh/h	0	1224	0	1252	0	1176	0	535
Upstream Filter (I)	0.00	0.46	0.00	0.84	0.00	1.00	0.00	0.19
Uniform Delay (d1), s/veh	0.0	33.7	0.0	26.7	0.0	31.5	0.0	42.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.1	0.0	1.2	0.0	38.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.1	0.0	26.8	0.0	32.8	0.0	79.9
1st-Term Q (Q1), veh/ln	0.0	10.1	0.0	2.0	0.0	5.9	0.0	15.2
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	5.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.35	0.00	1.80	0.00	1.67	0.00	1.21
%ile Back of Q (95%), veh/ln	0.0	13.9	0.0	3.6	0.0	10.1	0.0	25.3
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.11	0.00	0.81	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	39	0	146	0	716	0	562
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1749
Q Serve Time (g_s), s	0.0	2.0	0.0	7.9	0.0	39.7	0.0	36.1
Cycle Q Clear Time (g_c), s	0.0	2.0	0.0	7.9	0.0	39.7	0.0	36.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.39
Lane Grp Cap (c), veh/h	0	546	0	559	0	524	0	526
V/C Ratio (X)	0.00	0.07	0.00	0.26	0.00	1.37	0.00	1.07
Avail Cap (c_a), veh/h	0	546	0	559	0	524	0	526
Upstream Filter (I)	0.00	0.46	0.00	0.84	0.00	1.00	0.00	0.19
Uniform Delay (d1), s/veh	0.0	26.4	0.0	27.7	0.0	40.2	0.0	42.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	176.4	0.0	38.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.5	0.0	27.9	0.0	216.5	0.0	80.7
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	2.9	0.0	14.9	0.0	15.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	25.7	0.0	5.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.50	0.00	1.22
%ile Back of Q (95%), veh/ln	0.0	1.4	0.0	5.3	0.0	60.9	0.0	25.1
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	1.13	0.00	9.66	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	47.9	0.0	9.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	81.9
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	483	0	286	0	395	0	0	1337	0
Future Volume (veh/h)	0	0	0	483	0	286	0	395	0	0	1337	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	525	0	311	0	429	0	0	1453	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Cap, veh/h	0	635	0	725	0	527	0	1791	0	0	1791	0
Arrive On Green	0.00	0.00	0.00	0.34	0.00	0.34	0.00	0.50	0.00	0.00	0.50	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1553	0	3741	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	525	0	311	0	429	0	0	1453	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1553	0	1777	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	16.6	0.0	9.9	0.0	4.1	0.0	0.0	20.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	16.6	0.0	9.9	0.0	4.1	0.0	0.0	20.6	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	635	0	725	0	527	0	1791	0	0	1791	0
V/C Ratio(X)	0.00	0.00	0.00	0.72	0.00	0.59	0.00	0.24	0.00	0.00	0.81	0.00
Avail Cap(c_a), veh/h	0	733	0	818	0	608	0	1791	0	0	1791	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.97	0.00	0.00	0.09	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.6	0.0	16.4	0.0	8.4	0.0	0.0	12.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	1.1	0.0	0.3	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	10.8	0.0	6.0	0.0	2.4	0.0	0.0	7.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	21.4	0.0	17.5	0.0	8.7	0.0	0.0	12.9	0.0
LnGrp LOS	A	A	A	C	A	B	A	A	A	A	B	A
Approach Vol, veh/h		0			836			429			1453	
Approach Delay, s/veh		0.0			19.9			8.7			12.9	
Approach LOS					B			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.1	24.9	35.1	24.9
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	27.1	23.5	27.1	23.5
Max Q Clear Time (g_c+I1), s	6.1	18.6	22.6	0.0
Green Ext Time (p_c), s	2.7	1.8	3.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	483	0	286	0	395	0	0	1337	0
Future Volume (veh/h)	0	0	0	483	0	286	0	395	0	0	1337	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	525	0	311	0	429	0	0	1453	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	635	0	725	0	527	0	1791	0	0	1791	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.34	0.00	0.34	0.00	0.50	0.00	0.00	0.50	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	21.4	0.0	17.5	0.0	8.7	0.0	0.0	12.9	0.0
Ln Grp LOS	A	A	A	C	A	B	A	A	A	A	B	A
Approach Vol, veh/h		0			836			429			1453	
Approach Delay, s/veh		0.0			19.9			8.7			12.9	
Approach LOS					B			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		35.1		24.9		35.1		24.9
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		27.1		23.5		27.1		23.5
Max Allow Headway (MAH), s		5.1		4.4		5.1		0.0
Max Q Clear (g_c+I1), s		6.1		18.6		22.6		0.0
Green Ext Time (g_e), s		2.7		1.8		3.4		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		0.90		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3741		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1553		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	525	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	30.2	0.0	0.0	0.0	30.2	0.0	20.4
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	725	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	818	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	21.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.64	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	10.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	429	0	0	0	1453	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	4.1	0.0	0.0	0.0	20.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.1	0.0	0.0	0.0	20.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	1791	0	0	0	1791	0	635
V/C Ratio (X)	0.00	0.24	0.00	0.00	0.00	0.81	0.00	0.00
Avail Cap (c_a), veh/h	0	1791	0	0	0	1791	0	733
Upstream Filter (I)	0.00	0.97	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	0.0	0.0	12.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	0.0	0.0	12.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.3	0.0	0.0	0.0	6.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.19	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	2.4	0.0	0.0	0.0	7.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	311	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1553	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	9.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	527	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	608	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	431	218	82	337	60	97	265	66	222	1178	392
Future Volume (veh/h)	52	431	218	82	337	60	97	265	66	222	1178	392
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	468	237	89	366	65	105	288	72	241	1280	426
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	571	287	245	788	138	228	1314	578	586	1432	630
Arrive On Green	0.06	0.25	0.25	0.07	0.26	0.26	0.07	0.37	0.37	0.11	0.40	0.40
Sat Flow, veh/h	1781	2275	1144	1781	3012	529	1781	3554	1563	1781	3554	1565
Grp Volume(v), veh/h	57	365	340	89	214	217	105	288	72	241	1280	426
Grp Sat Flow(s),veh/h/ln	1781	1777	1642	1781	1777	1765	1781	1777	1563	1781	1777	1565
Q Serve(g_s), s	2.1	17.4	17.6	3.2	9.1	9.3	3.1	5.0	2.7	7.2	30.3	20.1
Cycle Q Clear(g_c), s	2.1	17.4	17.6	3.2	9.1	9.3	3.1	5.0	2.7	7.2	30.3	20.1
Prop In Lane	1.00		0.70	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	446	412	245	465	461	228	1314	578	586	1432	630
V/C Ratio(X)	0.17	0.82	0.83	0.36	0.46	0.47	0.46	0.22	0.12	0.41	0.89	0.68
Avail Cap(c_a), veh/h	369	582	538	260	582	578	238	1314	578	656	1432	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.97	0.97	0.97	0.12	0.12	0.12
Uniform Delay (d), s/veh	22.5	31.8	31.8	23.8	27.9	28.0	20.5	19.4	18.7	14.0	25.1	22.0
Incr Delay (d2), s/veh	0.0	0.7	0.8	0.9	0.7	0.7	1.4	0.4	0.4	0.1	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	8.5	8.0	2.4	6.8	6.9	2.3	3.7	1.8	3.6	14.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	32.4	32.6	24.7	28.6	28.7	21.9	19.8	19.2	14.1	26.3	22.8
LnGrp LOS	C	C	C	C	C	C	C	B	B	B	C	C
Approach Vol, veh/h		762			520			465			1947	
Approach Delay, s/veh		31.8			28.0			20.2			24.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	41.7	9.3	28.5	13.5	38.7	10.2	27.6
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.0	28.1	7.0	* 30	13.0	22.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	5.1	32.3	4.1	11.3	9.2	7.0	5.2	19.6
Green Ext Time (p_c), s	0.0	0.0	0.0	2.2	0.2	1.7	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	431	218	82	337	60	97	265	66	222	1178	392
Future Volume (veh/h)	52	431	218	82	337	60	97	265	66	222	1178	392
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	468	237	89	366	65	105	288	72	241	1280	426
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	335	571	287	245	788	138	228	1314	578	586	1432	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.25	0.25	0.07	0.26	0.26	0.07	0.37	0.37	0.11	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.6	32.4	32.6	24.7	28.6	28.7	21.9	19.8	19.2	14.1	26.3	22.8
Ln Grp LOS	C	C	C	C	C	C	C	B	B	B	C	C
Approach Vol, veh/h		762			520			465			1947	
Approach Delay, s/veh		31.8			28.0			20.2			24.0	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	10.5	41.7	9.3	28.5	13.5	38.7	10.2	27.6
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	13.0	22.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.9	3.7	5.1	3.8	4.9	3.7	5.1
Max Q Clear (g_c+l1), s	5.1	32.3	4.1	11.3	9.2	7.0	5.2	19.6
Green Ext Time (g_e), s	0.0	0.0	0.0	2.2	0.2	1.7	0.0	3.0
Prob of Phs Call (p_c)	0.93	1.00	0.76	1.00	1.00	1.00	0.89	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.02	1.00	0.00	1.00	0.41

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	3012	3554	2275

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1565	529	1563	1144

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	105	0	57	0	241	0	89	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.1	0.0	2.1	0.0	7.2	0.0	3.2	0.0
Cycle Q Clear Time (g_c), s	3.1	0.0	2.1	0.0	7.2	0.0	3.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	287	0	950	0	1015	0	740	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	33.3	0.0	22.6	0.0	34.3	0.0	22.6	0.0
Perm LT Serve Time (g_u), s	6.0	0.0	14.2	0.0	28.3	0.0	5.0	0.0
Perm LT Q Serve Time (g_ps), s	6.0	0.0	0.5	0.0	1.9	0.0	2.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	228	0	335	0	586	0	245	0
V/C Ratio (X)	0.46	0.00	0.17	0.00	0.41	0.00	0.36	0.00
Avail Cap (c_a), veh/h	238	0	369	0	656	0	260	0
Upstream Filter (I)	0.97	0.00	0.09	0.00	0.12	0.00	1.00	0.00
Uniform Delay (d1), s/veh	20.5	0.0	22.5	0.0	14.0	0.0	23.8	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.0	0.1	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	21.9	0.0	22.6	0.0	14.1	0.0	24.7	0.0
1st-Term Q (Q1), veh/ln	1.2	0.0	0.8	0.0	2.7	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.54	0.00	1.34	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.3	0.0	1.3	0.0	3.6	0.0	2.4	0.0
%ile Storage Ratio (RQ%)	0.34	0.00	0.27	0.00	0.53	0.00	0.61	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1280	0	214	0	288	0	365
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	30.3	0.0	9.1	0.0	5.0	0.0	17.4
Cycle Q Clear Time (g_c), s	0.0	30.3	0.0	9.1	0.0	5.0	0.0	17.4
Lane Grp Cap (c), veh/h	0	1432	0	465	0	1314	0	446
V/C Ratio (X)	0.00	0.89	0.00	0.46	0.00	0.22	0.00	0.82
Avail Cap (c_a), veh/h	0	1432	0	582	0	1314	0	582
Upstream Filter (I)	0.00	0.12	0.00	1.00	0.00	0.97	0.00	0.09
Uniform Delay (d1), s/veh	0.0	25.1	0.0	27.9	0.0	19.4	0.0	31.8
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.7	0.0	0.4	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.3	0.0	28.6	0.0	19.8	0.0	32.4
1st-Term Q (Q1), veh/ln	0.0	11.8	0.0	3.7	0.0	2.0	0.0	7.1
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.16	0.00	1.80	0.00	1.80	0.00	1.18
%ile Back of Q (95%), veh/ln	0.0	14.0	0.0	6.8	0.0	3.7	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	1.01	0.00	0.14	0.00	0.14	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	426	0	217	0	72	0	340
Grp Sat Flow (s), veh/h/ln	0	1565	0	1765	0	1563	0	1642
Q Serve Time (g_s), s	0.0	20.1	0.0	9.3	0.0	2.7	0.0	17.6
Cycle Q Clear Time (g_c), s	0.0	20.1	0.0	9.3	0.0	2.7	0.0	17.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.30	0.00	1.00	0.00	0.70
Lane Grp Cap (c), veh/h	0	630	0	461	0	578	0	412
V/C Ratio (X)	0.00	0.68	0.00	0.47	0.00	0.12	0.00	0.83
Avail Cap (c_a), veh/h	0	630	0	578	0	578	0	538
Upstream Filter (I)	0.00	0.12	0.00	1.00	0.00	0.97	0.00	0.09
Uniform Delay (d1), s/veh	0.0	22.0	0.0	28.0	0.0	18.7	0.0	31.8
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.7	0.0	0.4	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.8	0.0	28.7	0.0	19.2	0.0	32.6
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	3.7	0.0	0.9	0.0	6.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.22	0.00	1.80	0.00	1.80	0.00	1.19
%ile Back of Q (95%), veh/ln	0.0	8.4	0.0	6.9	0.0	1.8	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	1.64	0.00	0.14	0.00	0.35	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	353	167	57	359	31	50	356	37	19	1379	124
Future Volume (veh/h)	61	353	167	57	359	31	50	356	37	19	1379	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	384	182	62	390	34	54	387	40	21	1499	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	476	226	216	744	626	120	1389	143	451	1410	126
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	960	1197	567	843	1870	1574	307	3240	333	944	3288	293
Grp Volume(v), veh/h	66	0	566	62	390	34	54	211	216	21	804	830
Grp Sat Flow(s),veh/h/ln	960	0	1764	843	1870	1574	307	1777	1795	944	1777	1804
Q Serve(g_s), s	3.4	0.0	17.1	4.2	9.5	0.8	0.0	4.6	4.7	0.9	25.7	25.7
Cycle Q Clear(g_c), s	12.9	0.0	17.1	21.3	9.5	0.8	25.7	4.6	4.7	5.6	25.7	25.7
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.19	1.00		0.16
Lane Grp Cap(c), veh/h	350	0	702	216	744	626	120	762	770	451	762	774
V/C Ratio(X)	0.19	0.00	0.81	0.29	0.52	0.05	0.45	0.28	0.28	0.05	1.06	1.07
Avail Cap(c_a), veh/h	368	0	735	231	779	656	120	762	770	451	762	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.10	0.10	0.10
Uniform Delay (d), s/veh	18.6	0.0	16.0	25.5	13.7	11.1	30.0	11.1	11.1	12.9	17.1	17.1
Incr Delay (d2), s/veh	0.3	0.0	6.4	0.7	0.6	0.0	11.7	0.9	0.9	0.0	28.8	35.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	11.4	1.5	6.4	0.4	2.0	3.1	3.2	0.3	17.4	19.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	0.0	22.4	26.2	14.3	11.2	41.7	12.0	12.0	13.0	45.9	53.1
LnGrp LOS	B	A	C	C	B	B	D	B	B	B	F	F
Approach Vol, veh/h		632			486			481			1655	
Approach Delay, s/veh		22.0			15.6			15.4			49.1	
Approach LOS		C			B			B			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	30.7	29.3	30.7	29.3
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	27.7	19.1	27.7	23.3
Green Ext Time (p_c), s	0.0	2.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	353	167	57	359	31	50	356	37	19	1379	124
Future Volume (veh/h)	61	353	167	57	359	31	50	356	37	19	1379	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	384	182	62	390	34	54	387	40	21	1499	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	350	476	226	216	744	626	120	1389	143	451	1410	126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.9	0.0	22.4	26.2	14.3	11.2	41.7	12.0	12.0	13.0	45.9	53.1
Ln Grp LOS	B	A	C	C	B	B	D	B	B	B	F	F
Approach Vol, veh/h		632			486			481			1655	
Approach Delay, s/veh		22.0			15.6			15.4			49.1	
Approach LOS		C			B			B			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		30.7		29.3		30.7		29.3
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		6.0		5.2		5.1		5.1
Max Q Clear (g_c+I1), s		27.7		19.1		27.7		23.3
Green Ext Time (g_e), s		0.0		2.0		0.0		0.5
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.87		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		307		960		944		843
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3240		1197		3288		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		333		567		293		1574
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	54	0	66	0	21	0	62
Grp Sat Flow (s), veh/h/ln	0	307	0	960	0	944	0	843
Q Serve Time (g_s), s	0.0	0.0	0.0	3.4	0.0	0.9	0.0	4.2
Cycle Q Clear Time (g_c), s	0.0	25.7	0.0	12.9	0.0	5.6	0.0	21.3
Perm LT Sat Flow (s_l), veh/h/ln	0	307	0	960	0	944	0	843
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	25.7	0.0	23.9	0.0	25.7	0.0	23.9
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.4	0.0	21.0	0.0	6.8
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	3.4	0.0	0.9	0.0	4.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	120	0	350	0	451	0	216
V/C Ratio (X)	0.00	0.45	0.00	0.19	0.00	0.05	0.00	0.29
Avail Cap (c_a), veh/h	0	120	0	368	0	451	0	231
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.10	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.0	0.0	18.6	0.0	12.9	0.0	25.5
Incr Delay (d2), s/veh	0.0	11.7	0.0	0.3	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.7	0.0	18.9	0.0	13.0	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.7	0.0	0.2	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.0	0.0	1.3	0.0	0.3	0.0	1.5
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.32	0.00	0.08	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	211	0	0	0	804	0	390
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	4.6	0.0	0.0	0.0	25.7	0.0	9.5
Cycle Q Clear Time (g_c), s	0.0	4.6	0.0	0.0	0.0	25.7	0.0	9.5
Lane Grp Cap (c), veh/h	0	762	0	0	0	762	0	744
V/C Ratio (X)	0.00	0.28	0.00	0.00	0.00	1.06	0.00	0.52
Avail Cap (c_a), veh/h	0	762	0	0	0	762	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.10	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.1	0.0	0.0	0.0	17.1	0.0	13.7
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	28.8	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.0	0.0	0.0	0.0	45.9	0.0	14.3
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	0.0	0.0	8.6	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	6.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.19	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.1	0.0	0.0	0.0	17.4	0.0	6.4
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.67	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	216	0	566	0	830	0	34
Grp Sat Flow (s), veh/h/ln	0	1795	0	1764	0	1804	0	1574
Q Serve Time (g_s), s	0.0	4.7	0.0	17.1	0.0	25.7	0.0	0.8
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	17.1	0.0	25.7	0.0	0.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.19	0.00	0.32	0.00	0.16	0.00	1.00
Lane Grp Cap (c), veh/h	0	770	0	702	0	774	0	626
V/C Ratio (X)	0.00	0.28	0.00	0.81	0.00	1.07	0.00	0.05
Avail Cap (c_a), veh/h	0	770	0	735	0	774	0	656
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.10	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.1	0.0	16.0	0.0	17.1	0.0	11.1
Incr Delay (d2), s/veh	0.0	0.9	0.0	6.4	0.0	35.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.0	0.0	22.4	0.0	53.1	0.0	11.2
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	5.8	0.0	8.7	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.2	0.0	7.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.62	0.00	1.20	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.2	0.0	11.4	0.0	19.6	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.33	0.00	0.76	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	14.1	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.8
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/10/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	163	430	235	125	21	220	452	128	29	431	42	77
Future Volume (vph)	163	430	235	125	21	220	452	128	29	431	42	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.99	0.97			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Frt	1.00	0.97	0.85			1.00	0.97		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1650	3044	1304			1651	3178		1649	3176		
Flt Permitted	0.24	1.00	1.00			0.13	1.00		0.16	1.00		
Satd. Flow (perm)	423	3044	1304			220	3178		278	3176		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	177	467	255	136	23	239	491	139	32	468	46	84
RTOR Reduction (vph)	0	0	142	0	0	0	18	0	0	9	0	0
Lane Group Flow (vph)	177	595	121	0	0	262	612	0	32	589	0	0
Confl. Peds. (#/hr)	7		9	2	9	2		7	11		1	9
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	42.6	28.4	28.4			52.7	34.0		25.0	25.0		
Effective Green, g (s)	42.6	28.4	28.4			52.7	34.0		25.0	25.0		
Actuated g/C Ratio	0.30	0.20	0.20			0.38	0.24		0.18	0.18		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	253	617	264			273	771		49	567		
v/s Ratio Prot	0.07	0.20				c0.13	c0.19			0.19		
v/s Ratio Perm	0.14		0.09			c0.23			0.12			
v/c Ratio	0.70	0.96	0.46			0.96	0.79		0.65	1.04		
Uniform Delay, d1	38.6	55.3	49.0			39.5	49.7		53.5	57.5		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	8.2	28.5	5.6			42.9	8.2		51.9	48.2		
Delay (s)	46.8	83.7	54.7			82.4	58.0		105.4	105.7		
Level of Service	D	F	D			F	E		F	F		
Approach Delay (s)		70.0					65.1			105.7		
Approach LOS		E					E			F		

Intersection Summary			
HCM 2000 Control Delay	104.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	115.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	13	227	1126	49	135	156	116	8
Future Volume (vph)	13	227	1126	49	135	156	116	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	1.00			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.99			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1651	3279			3195	1345	
Flt Permitted		0.13	1.00			0.95	1.00	
Satd. Flow (perm)		223	3279			3195	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	247	1224	53	147	170	126	9
RTOR Reduction (vph)	0	0	2	0	0	0	103	0
Lane Group Flow (vph)	0	261	1275	0	0	330	19	0
Confl. Peds. (#/hr)	1	9		11	2	11	7	1
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		44.4	44.4			21.7	21.7	
Effective Green, g (s)		44.4	44.4			21.7	21.7	
Actuated g/C Ratio		0.32	0.32			0.15	0.15	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		205	1039			495	208	
v/s Ratio Prot		0.12	c0.39			c0.10	0.01	
v/s Ratio Perm		c0.28						
v/c Ratio		1.27	1.23			0.67	0.09	
Uniform Delay, d1		40.5	47.8			55.7	50.7	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		155.3	110.8			4.1	0.3	
Delay (s)		195.8	158.6			59.9	51.0	
Level of Service		F	F			E	D	
Approach Delay (s)			164.9			57.5		
Approach LOS			F			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	12	29	208	29	68	12	56	369	28	8	14	45
Future Volume (vph)	12	29	208	29	68	12	56	369	28	8	14	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.99				1.00	1.00			1.00	1.00
Flpb, ped/bikes		0.99	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.99			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1631	3125				1644	3248			1652	1652
Flt Permitted		0.29	1.00				0.41	1.00			0.95	0.95
Satd. Flow (perm)		491	3125				711	3248			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	32	226	32	74	13	61	401	30	9	15	49
RTOR Reduction (vph)	0	0	15	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	45	317	0	0	0	74	439	0	0	15	49
Confl. Peds. (#/hr)	4	17		1	5	1	5		4	17	3	4
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		34.6	34.6				34.6	34.6			16.0	16.0
Effective Green, g (s)		34.6	34.6				34.6	34.6			16.0	16.0
Actuated g/C Ratio		0.19	0.19				0.19	0.19			0.09	0.09
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		94	600				136	624			146	146
v/s Ratio Prot			0.10					c0.14			0.01	0.03
v/s Ratio Perm		0.09					0.10					
v/c Ratio		0.48	0.53				0.54	0.70			0.10	0.34
Uniform Delay, d1		64.7	65.4				65.6	67.9			75.4	77.0
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		3.8	0.8				4.4	3.6			0.3	1.4
Delay (s)		68.5	66.2				70.0	71.5			75.7	78.4
Level of Service		E	E				E	E			E	E
Approach Delay (s)			66.5					71.3				
Approach LOS			E					E				

Intersection Summary			
HCM 2000 Control Delay	96.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	146.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL2	SBL	SBT	SBR	SBR2	SEL	SET	SER	SER2	NWL
Lane Configurations												
Traffic Volume (vph)	233	5	15	225	776	101	1	32	1018	252	34	28
Future Volume (vph)	233	5	15	225	776	101	1	32	1018	252	34	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Lane Util. Factor	0.95	1.00		1.00	0.95	1.00		1.00	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.97		1.00	1.00	0.98		1.00	1.00	0.98	0.97	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	0.85	1.00
Flt Protected	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	1.00	0.95
Satd. Flow (prot)	3303	1437		1652	3303	1448		1645	3152	1322	1441	1651
Flt Permitted	1.00	1.00		0.95	1.00	1.00		0.50	1.00	1.00	1.00	0.08
Satd. Flow (perm)	3303	1437		1652	3303	1448		871	3152	1322	1441	135
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	253	5	16	245	843	110	1	35	1107	274	37	30
RTOR Reduction (vph)	0	0	0	0	0	74	0	0	0	0	26	0
Lane Group Flow (vph)	253	5	0	261	843	37	0	35	1134	247	11	30
Confl. Peds. (#/hr)		6	6	1		3	4	6		5	3	3
Turn Type	NA	Perm	Prot	Prot	NA	Perm		Perm	NA	Perm	Perm	Perm
Protected Phases	6		5	5	2				10			
Permitted Phases		6				2		10		10	10	14
Actuated Green, G (s)	32.9	32.9		33.3	50.4	50.4		51.3	51.3	51.3	51.3	51.3
Effective Green, g (s)	32.9	32.9		33.3	50.4	50.4		51.3	51.3	51.3	51.3	51.3
Actuated g/C Ratio	0.18	0.18		0.18	0.28	0.28		0.28	0.28	0.28	0.28	0.28
Clearance Time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	603	262		305	924	405		248	898	376	410	38
v/s Ratio Prot	0.08			c0.16	c0.26				c0.36			
v/s Ratio Perm		0.00				0.03		0.04		0.19	0.01	0.22
v/c Ratio	0.42	0.02		0.86	0.91	0.09		0.14	1.26	0.66	0.03	0.79
Uniform Delay, d1	65.1	60.3		71.0	62.7	47.9		47.9	64.3	56.6	46.3	59.4
Progression Factor	1.00	1.00		1.21	0.67	1.32		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	0.1		11.1	8.2	0.2		0.3	127.2	4.1	0.0	67.6
Delay (s)	67.2	60.5		97.2	50.4	63.2		48.2	191.6	60.7	46.4	127.0
Level of Service	E	E		F	D	E		D	F	E	D	F
Approach Delay (s)	69.2				61.6				162.2			
Approach LOS	E				E				F			

Intersection Summary

Movement	NWT	NWR	NWR2
Lane Configurations			
Traffic Volume (vph)	226	152	20
Future Volume (vph)	226	152	20
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.6	7.6	
Lane Util. Factor	0.91	0.91	
Frpb, ped/bikes	0.99	0.96	
Flpb, ped/bikes	1.00	1.00	
Frt	0.97	0.85	
Flt Protected	1.00	1.00	
Satd. Flow (prot)	3062	1297	
Flt Permitted	1.00	1.00	
Satd. Flow (perm)	3062	1297	
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	246	165	22
RTOR Reduction (vph)	0	95	0
Lane Group Flow (vph)	300	38	0
Confl. Peds. (#/hr)		17	6
Turn Type	NA	Perm	
Protected Phases	14		
Permitted Phases		14	
Actuated Green, G (s)	51.3	51.3	
Effective Green, g (s)	51.3	51.3	
Actuated g/C Ratio	0.28	0.28	
Clearance Time (s)	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	
Lane Grp Cap (vph)	872	369	
v/s Ratio Prot	0.10		
v/s Ratio Perm		0.03	
v/c Ratio	0.34	0.10	
Uniform Delay, d1	51.0	47.4	
Progression Factor	1.00	1.00	
Incremental Delay, d2	0.2	0.1	
Delay (s)	51.2	47.5	
Level of Service	D	D	
Approach Delay (s)	55.1		
Approach LOS	E		

Intersection Summary

Future without Project Conditions – Year 2026

Afternoon Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1635	7	0	1547	0	1	0	18	419	8	196
Future Volume (veh/h)	0	1635	7	0	1547	0	1	0	18	419	8	196
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1777	8	0	1682	0	1	0	20	338	172	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2699	12	0	1828	0	3	0	62	470	200	248
Arrive On Green	0.00	0.51	0.51	0.00	0.51	0.00	0.04	0.00	0.04	0.26	0.26	0.26
Sat Flow, veh/h	0	5415	24	0	3741	0	76	0	1513	1781	759	940
Grp Volume(v), veh/h	0	1153	632	0	1682	0	21	0	0	338	0	385
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1589	0	0	1781	0	1700
Q Serve(g_s), s	0.0	22.4	22.4	0.0	39.3	0.0	1.2	0.0	0.0	15.5	0.0	19.4
Cycle Q Clear(g_c), s	0.0	22.4	22.4	0.0	39.3	0.0	1.2	0.0	0.0	15.5	0.0	19.4
Prop In Lane	0.00		0.01	0.00		0.00	0.05		0.95	1.00		0.55
Lane Grp Cap(c), veh/h	0	1751	960	0	1828	0	65	0	0	470	0	448
V/C Ratio(X)	0.00	0.66	0.66	0.00	0.92	0.00	0.32	0.00	0.00	0.72	0.00	0.86
Avail Cap(c_a), veh/h	0	1751	960	0	1828	0	159	0	0	590	0	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.0	16.0	0.0	20.1	0.0	42.0	0.0	0.0	30.1	0.0	31.5
Incr Delay (d2), s/veh	0.0	2.0	3.5	0.0	9.1	0.0	2.8	0.0	0.0	3.2	0.0	10.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	12.8	14.4	0.0	23.0	0.0	0.9	0.0	0.0	11.0	0.0	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.0	19.6	0.0	29.2	0.0	44.8	0.0	0.0	33.3	0.0	42.1
LnGrp LOS	A	B	B	A	C	A	D	A	A	C	A	D
Approach Vol, veh/h		1785			1682			21			723	
Approach Delay, s/veh		18.6			29.2			44.8			38.0	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	51.4	28.9	51.4	9.7
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	24.4	21.4	41.3	3.2
Green Ext Time (p_c), s	7.5	2.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1635	7	0	1547	0	1	0	18	419	8	196
Future Volume (veh/h)	0	1635	7	0	1547	0	1	0	18	419	8	196
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1777	8	0	1682	0	1	0	20	338	172	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2699	12	0	1828	0	3	0	62	470	200	248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.51	0.51	0.00	0.51	0.00	0.04	0.00	0.04	0.26	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	18.0	19.6	0.0	29.2	0.0	44.8	0.0	0.0	33.3	0.0	42.1
Ln Grp LOS	A	B	B	A	C	A	D	A	A	C	A	D
Approach Vol, veh/h		1785			1682			21			723	
Approach Delay, s/veh		18.6			29.2			44.8			38.0	
Approach LOS		B			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		51.4	9.7	28.9		51.4		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+l1), s		24.4	3.2	21.4		41.3		
Green Ext Time (g_e), s		7.5	0.0	2.3		0.0		
Prob of Phs Call (p_c)		1.00	0.42	1.00		1.00		
Prob of Max Out (p_x)		0.79	0.87	0.40		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	76	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5415	0	759		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		24	1513	940		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	21	338	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1589	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	1.2	15.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	1.2	15.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	46.3	0.0	0.0	0.0	46.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.05	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	65	470	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.32	0.72	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	159	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	42.0	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.8	3.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	44.8	33.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.5	6.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.63	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.9	11.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.08	1.17	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1153	0	0	0	1682	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.4	0.0	0.0	0.0	39.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.4	0.0	0.0	0.0	39.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1751	0	0	0	1828	0	0
V/C Ratio (X)	0.00	0.66	0.00	0.00	0.00	0.92	0.00	0.00
Avail Cap (c_a), veh/h	0	1751	0	0	0	1828	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.0	0.0	0.0	0.0	20.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.0	0.0	9.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.0	0.0	0.0	0.0	29.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.7	0.0	0.0	0.0	14.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	2.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	1.00	1.00	0.00	1.41	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	12.8	0.0	0.0	0.0	23.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	0.00	0.00	3.29	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	632	0	385	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1700	0	0	0	0
Q Serve Time (g_s), s	0.0	22.4	0.0	19.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.4	0.0	19.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.95	0.55	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	960	0	448	0	0	0	0
V/C Ratio (X)	0.00	0.66	0.00	0.86	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	960	0	563	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.0	0.0	31.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.5	0.0	10.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.6	0.0	42.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	7.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	1.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.54	1.00	1.55	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	14.4	0.0	13.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	1.47	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1216	75	91	1745	71	207	347	141	35	295	276
Future Volume (veh/h)	99	1216	75	91	1745	71	207	347	141	35	295	276
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	1322	82	99	1897	77	225	377	153	38	321	300
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	2002	880	197	2002	880	215	582	488	199	582	488
Arrive On Green	0.56	0.56	0.56	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	221	3554	1563	384	3554	1563	800	1870	1568	870	1870	1568
Grp Volume(v), veh/h	108	1322	82	99	1897	77	225	377	153	38	321	300
Grp Sat Flow(s),veh/h/ln	221	1777	1563	384	1777	1563	800	1870	1568	870	1870	1568
Q Serve(g_s), s	37.7	23.3	2.2	19.7	0.0	0.0	15.2	15.7	6.7	3.5	12.8	14.7
Cycle Q Clear(g_c), s	37.7	23.3	2.2	43.0	0.0	0.0	28.0	15.7	6.7	19.2	12.8	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	204	2002	880	197	2002	880	215	582	488	199	582	488
V/C Ratio(X)	0.53	0.66	0.09	0.50	0.95	0.09	1.05	0.65	0.31	0.19	0.55	0.61
Avail Cap(c_a), veh/h	204	2002	880	197	2002	880	215	582	488	199	582	488
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.28	0.28	0.28	0.54	0.54	0.54	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	13.7	9.1	9.9	0.0	0.0	40.2	26.7	23.7	35.0	25.8	26.4
Incr Delay (d2), s/veh	9.5	1.7	0.2	2.6	3.9	0.1	58.2	1.4	0.2	0.5	1.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.9	13.2	1.3	2.1	2.0	0.0	11.9	9.9	4.2	1.3	9.4	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	15.4	9.3	12.4	3.9	0.1	98.4	28.1	23.9	35.5	26.9	28.7
LnGrp LOS	C	B	A	B	A	A	F	C	C	D	C	C
Approach Vol, veh/h		1512			2073			755			659	
Approach Delay, s/veh		15.8			4.2			48.2			28.2	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	56.2	33.8	56.2	33.8
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 51	28.0	* 51	28.0
Max Q Clear Time (g_c+I1), s	39.7	30.0	45.0	21.2
Green Ext Time (p_c), s	8.1	0.0	5.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1216	75	91	1745	71	207	347	141	35	295	276
Future Volume (veh/h)	99	1216	75	91	1745	71	207	347	141	35	295	276
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	1322	82	99	1897	77	225	377	153	38	321	300
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	204	2002	880	197	2002	880	215	582	488	199	582	488
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.56	0.56	0.56	1.00	1.00	1.00	0.31	0.31	0.31	0.31	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.3	15.4	9.3	12.4	3.9	0.1	98.4	28.1	23.9	35.5	26.9	28.7
Ln Grp LOS	C	B	A	B	A	A	F	C	C	D	C	C
Approach Vol, veh/h		1512			2073			755			659	
Approach Delay, s/veh		15.8			4.2			48.2			28.2	
Approach LOS		B			A			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		56.2		33.8		56.2		33.8
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 51		28.0		* 51		28.0
Max Allow Headway (MAH), s		5.8		5.0		5.2		4.6
Max Q Clear (g_c+I1), s		39.7		30.0		45.0		21.2
Green Ext Time (g_e), s		8.1		0.0		5.1		1.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.57
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		221		800		384		870
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1563		1568		1563		1568
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	108	0	225	0	99	0	38
Grp Sat Flow (s), veh/h/ln	0	221	0	800	0	384	0	870
Q Serve Time (g_s), s	0.0	37.7	0.0	15.2	0.0	19.7	0.0	3.5
Cycle Q Clear Time (g_c), s	0.0	37.7	0.0	28.0	0.0	43.0	0.0	19.2
Perm LT Sat Flow (s_l), veh/h/ln	0	221	0	800	0	384	0	870
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	50.7	0.0	28.0	0.0	50.7	0.0	28.0
Perm LT Serve Time (g_u), s	0.0	50.7	0.0	15.2	0.0	27.4	0.0	12.3
Perm LT Q Serve Time (g_ps), s	0.0	37.7	0.0	15.2	0.0	19.7	0.0	3.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	204	0	215	0	197	0	199
V/C Ratio (X)	0.00	0.53	0.00	1.05	0.00	0.50	0.00	0.19
Avail Cap (c_a), veh/h	0	204	0	215	0	197	0	199
Upstream Filter (I)	0.00	1.00	0.00	0.54	0.00	0.28	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.8	0.0	40.2	0.0	9.9	0.0	35.0
Incr Delay (d2), s/veh	0.0	9.5	0.0	58.2	0.0	2.6	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.3	0.0	98.4	0.0	12.4	0.0	35.5
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	4.6	0.0	1.0	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	3.5	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.46	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.9	0.0	11.9	0.0	2.1	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	4.65	0.00	0.38	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1322	0	377	0	1897	0	321
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	23.3	0.0	15.7	0.0	0.0	0.0	12.8
Cycle Q Clear Time (g_c), s	0.0	23.3	0.0	15.7	0.0	0.0	0.0	12.8
Lane Grp Cap (c), veh/h	0	2002	0	582	0	2002	0	582
V/C Ratio (X)	0.00	0.66	0.00	0.65	0.00	0.95	0.00	0.55
Avail Cap (c_a), veh/h	0	2002	0	582	0	2002	0	582
Upstream Filter (I)	0.00	1.00	0.00	0.54	0.00	0.28	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.7	0.0	26.7	0.0	0.0	0.0	25.8
Incr Delay (d2), s/veh	0.0	1.7	0.0	1.4	0.0	3.9	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.4	0.0	28.1	0.0	3.9	0.0	26.9
1st-Term Q (Q1), veh/ln	0.0	8.0	0.0	6.6	0.0	0.0	0.0	5.4
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.2	0.0	1.1	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.56	0.00	1.46	0.00	1.80	0.00	1.70
%ile Back of Q (95%), veh/ln	0.0	13.2	0.0	9.9	0.0	2.0	0.0	9.4
%ile Storage Ratio (RQ%)	0.00	2.84	0.00	0.21	0.00	0.17	0.00	0.64
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	82	0	153	0	77	0	300
Grp Sat Flow (s), veh/h/ln	0	1563	0	1568	0	1563	0	1568
Q Serve Time (g_s), s	0.0	2.2	0.0	6.7	0.0	0.0	0.0	14.7
Cycle Q Clear Time (g_c), s	0.0	2.2	0.0	6.7	0.0	0.0	0.0	14.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	880	0	488	0	880	0	488
V/C Ratio (X)	0.00	0.09	0.00	0.31	0.00	0.09	0.00	0.61
Avail Cap (c_a), veh/h	0	880	0	488	0	880	0	488
Upstream Filter (I)	0.00	1.00	0.00	0.54	0.00	0.28	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.1	0.0	23.7	0.0	0.0	0.0	26.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.1	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.3	0.0	23.9	0.0	0.1	0.0	28.7
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	2.4	0.0	0.0	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.78	0.00	1.80	0.00	1.70
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	4.2	0.0	0.0	0.0	9.3
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	1.13	0.00	0.01	0.00	2.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
4: SR 170 NB Off-Ramp/Troost Ave & Burbank Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1264	0	0	1228	10	651	70	251	5	0	22
Future Volume (veh/h)	23	1264	0	0	1228	10	651	70	251	5	0	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1374	0	0	1335	11	528	327	273	5	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	160	1771	0	0	1771	785	477	251	210	16	0	75
Arrive On Green	1.00	1.00	0.00	0.00	0.50	0.50	0.27	0.27	0.27	0.06	0.00	0.06
Sat Flow, veh/h	406	3647	0	0	3647	1576	1781	939	784	274	0	1316
Grp Volume(v), veh/h	25	1374	0	0	1335	11	528	0	600	29	0	0
Grp Sat Flow(s),veh/h/ln	406	1777	0	0	1777	1576	1781	0	1722	1590	0	0
Q Serve(g_s), s	3.8	0.5	0.0	0.0	27.2	0.3	24.1	0.0	24.1	1.6	0.0	0.0
Cycle Q Clear(g_c), s	31.0	0.5	0.0	0.0	27.2	0.3	24.1	0.0	24.1	1.6	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.46	0.17		0.83
Lane Grp Cap(c), veh/h	160	1771	0	0	1771	785	477	0	461	91	0	0
V/C Ratio(X)	0.16	0.78	0.00	0.00	0.75	0.01	1.11	0.00	1.30	0.32	0.00	0.00
Avail Cap(c_a), veh/h	160	1771	0	0	1771	785	477	0	461	177	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.00	0.00	0.09	0.09	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.5	0.1	0.0	0.0	18.1	11.4	33.0	0.0	33.0	40.7	0.0	0.0
Incr Delay (d2), s/veh	1.5	2.4	0.0	0.0	0.3	0.0	73.6	0.0	150.7	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	1.1	0.0	0.0	11.4	0.2	28.4	0.0	43.2	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.0	2.5	0.0	0.0	18.4	11.4	106.6	0.0	183.6	42.7	0.0	0.0
LnGrp LOS	B	A	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1399			1346			1128			29	
Approach Delay, s/veh		2.6			18.4			147.6			42.7	
Approach LOS		A			B			F			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	49.9	10.6	49.9	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	33.0	3.6	29.2	26.1
Green Ext Time (p_c), s	5.9	0.0	8.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1264	0	0	1228	10	651	70	251	5	0	22
Future Volume (veh/h)	23	1264	0	0	1228	10	651	70	251	5	0	22
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1374	0	0	1335	11	528	327	273	5	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	160	1771	0	0	1771	785	477	251	210	16	0	75
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.50	0.50	0.27	0.27	0.27	0.06	0.00	0.06
Unsig. Movement Delay												
Ln Grp Delay, s/veh	11.0	2.5	0.0	0.0	18.4	11.4	106.6	0.0	183.6	42.7	0.0	0.0
Ln Grp LOS	B	A	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1399			1346			1128			29	
Approach Delay, s/veh		2.6			18.4			147.6			42.7	
Approach LOS		A			B			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		49.9	29.5	10.6		49.9		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.9	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		33.0	26.1	3.6		29.2		
Green Ext Time (g_e), s		5.9	0.0	0.0		8.6		
Prob of Phs Call (p_c)		1.00	1.00	0.56		1.00		
Prob of Max Out (p_x)		0.00	1.00	0.49		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		406	1781	274		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	939	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	784	1316		1576		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	25	528	29	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	406	1781	1590	0	0	0	0
Q Serve Time (g_s), s	0.0	3.8	24.1	1.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	31.0	24.1	1.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	406	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	44.8	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	17.7	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	44.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.17	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	160	477	91	0	0	0	0
V/C Ratio (X)	0.00	0.16	1.11	0.32	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	160	477	177	0	0	0	0
Upstream Filter (I)	0.00	0.70	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.5	33.0	40.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	73.6	2.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.0	106.6	42.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	9.7	0.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	9.8	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.46	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.6	28.4	1.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.22	2.18	0.08	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1374	0	0	0	1335	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.5	0.0	0.0	0.0	27.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.5	0.0	0.0	0.0	27.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1771	0	0	0	1771	0	0
V/C Ratio (X)	0.00	0.78	0.00	0.00	0.00	0.75	0.00	0.00
Avail Cap (c_a), veh/h	0	1771	0	0	0	1771	0	0
Upstream Filter (I)	0.00	0.70	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.1	0.0	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.4	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	2.5	0.0	0.0	0.0	18.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	9.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.00	0.00	1.16	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.1	0.0	0.0	0.0	11.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	600	0	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1722	0	0	1576	0	0
Q Serve Time (g_s), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.46	0.83	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	461	0	0	785	0	0
V/C Ratio (X)	0.00	0.00	1.30	0.00	0.00	0.01	0.00	0.00
Avail Cap (c_a), veh/h	0	0	461	0	0	785	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.0	0.0	0.0	11.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	150.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	183.6	0.0	0.0	11.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.4	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	19.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.50	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	43.2	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.32	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	34.7	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	729	342	208	730	122	317	922	126	73	618	73
Future Volume (veh/h)	283	729	342	208	730	122	317	922	126	73	618	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.90	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	308	792	372	226	793	133	345	1002	137	79	672	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	566	640	216	841	141	342	668	508	170	987	116
Arrive On Green	0.11	0.30	0.30	0.09	0.28	0.28	0.11	0.36	0.36	0.06	0.31	0.31
Sat Flow, veh/h	1781	1870	1549	1781	3032	508	1781	1870	1423	1781	3174	373
Grp Volume(v), veh/h	308	792	372	226	465	461	345	1002	137	79	376	375
Grp Sat Flow(s),veh/h/ln	1781	1870	1549	1781	1777	1764	1781	1870	1423	1781	1777	1770
Q Serve(g_s), s	13.5	36.3	22.3	10.5	30.7	30.7	13.0	42.9	8.2	3.5	22.2	22.3
Cycle Q Clear(g_c), s	13.5	36.3	22.3	10.5	30.7	30.7	13.0	42.9	8.2	3.5	22.2	22.3
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	273	566	640	216	493	489	342	668	508	170	552	550
V/C Ratio(X)	1.13	1.40	0.58	1.05	0.94	0.94	1.01	1.50	0.27	0.46	0.68	0.68
Avail Cap(c_a), veh/h	273	566	640	216	493	489	342	668	508	208	552	550
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.24	0.24	0.24	0.11	0.11	0.11	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	41.8	27.4	32.2	42.4	42.4	32.4	38.6	27.4	30.5	36.1	36.2
Incr Delay (d2), s/veh	68.6	182.6	0.9	33.9	5.4	5.5	51.3	232.6	1.3	2.0	6.6	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.3	61.4	10.6	8.0	15.8	15.7	13.7	94.1	5.3	2.8	15.8	15.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	100.4	224.4	28.3	66.0	47.8	47.9	83.7	271.1	28.7	32.5	42.8	42.9
LnGrp LOS	F	F	C	F	D	D	F	F	C	C	D	D
Approach Vol, veh/h		1472			1152			1484			830	
Approach Delay, s/veh		148.9			51.4			205.2			41.8	
Approach LOS		F			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	42.0	19.0	43.0	19.0	39.0	13.4	48.6
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 11	* 36	13.0	* 37	* 14	* 33	10.0	* 40
Max Q Clear Time (g_c+I1), s	12.5	38.3	15.0	24.3	15.5	32.7	5.5	44.9
Green Ext Time (p_c), s	0.0	0.0	0.0	3.8	0.0	0.3	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	125.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	729	342	208	730	122	317	922	126	73	618	73
Future Volume (veh/h)	283	729	342	208	730	122	317	922	126	73	618	73
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	0.99		0.90	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	308	792	372	226	793	133	345	1002	137	79	672	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	273	566	640	216	841	141	342	668	508	170	987	116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.30	0.30	0.09	0.28	0.28	0.11	0.36	0.36	0.06	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	100.4	224.4	28.3	66.0	47.8	47.9	83.7	271.1	28.7	32.5	42.8	42.9
Ln Grp LOS	F	F	C	F	D	D	F	F	C	C	D	D
Approach Vol, veh/h		1472			1152			1484			830	
Approach Delay, s/veh		148.9			51.4			205.2			41.8	
Approach LOS		F			D			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	16.0	42.0	19.0	43.0	19.0	39.0	13.4	48.6
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 11	* 36	13.0	* 37	* 14	* 33	10.0	* 40
Max Allow Headway (MAH), s	3.7	4.7	3.8	5.2	3.7	5.1	3.8	5.0
Max Q Clear (g_c+I1), s	12.5	38.3	15.0	24.3	15.5	32.7	5.5	44.9
Green Ext Time (g_e), s	0.0	0.0	0.0	3.8	0.0	0.3	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.42	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1870	3174	3032	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1549	373	508	1423

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	226	0	345	0	308	0	79	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	10.5	0.0	13.0	0.0	13.5	0.0	3.5	0.0
Cycle Q Clear Time (g_c), s	10.5	0.0	13.0	0.0	13.5	0.0	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	482	0	706	0	604	0	494	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	33.3	0.0	38.9	0.0	33.3	0.0	37.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	15.0	0.0	2.6	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	15.0	0.0	2.6	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	216	0	342	0	273	0	170	0
V/C Ratio (X)	1.05	0.00	1.01	0.00	1.13	0.00	0.46	0.00
Avail Cap (c_a), veh/h	216	0	342	0	273	0	208	0
Upstream Filter (I)	0.11	0.00	1.00	0.00	0.24	0.00	1.00	0.00
Uniform Delay (d1), s/veh	32.2	0.0	32.4	0.0	31.8	0.0	30.5	0.0
Incr Delay (d2), s/veh	33.9	0.0	51.3	0.0	68.6	0.0	2.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	66.0	0.0	83.7	0.0	100.4	0.0	32.5	0.0
1st-Term Q (Q1), veh/ln	4.4	0.0	3.9	0.0	5.6	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	2.0	0.0	4.9	0.0	5.2	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.24	0.00	1.56	0.00	1.32	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	8.0	0.0	13.7	0.0	14.3	0.0	2.8	0.0
%ile Storage Ratio (RQ%)	1.26	0.00	4.82	0.00	1.29	0.00	0.56	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	2.5	0.0	0.9	0.0	8.6	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	792	0	376	0	465	0	1002
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	36.3	0.0	22.2	0.0	30.7	0.0	42.9
Cycle Q Clear Time (g_c), s	0.0	36.3	0.0	22.2	0.0	30.7	0.0	42.9
Lane Grp Cap (c), veh/h	0	566	0	552	0	493	0	668
V/C Ratio (X)	0.00	1.40	0.00	0.68	0.00	0.94	0.00	1.50
Avail Cap (c_a), veh/h	0	566	0	552	0	493	0	668
Upstream Filter (I)	0.00	0.24	0.00	1.00	0.00	0.11	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	36.1	0.0	42.4	0.0	38.6
Incr Delay (d2), s/veh	0.0	182.6	0.0	6.6	0.0	5.4	0.0	232.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	224.4	0.0	42.8	0.0	47.8	0.0	271.1
1st-Term Q (Q1), veh/ln	0.0	16.1	0.0	9.5	0.0	13.1	0.0	19.0
2nd-Term Q (Q2), veh/ln	0.0	28.7	0.0	1.0	0.0	0.7	0.0	43.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.37	0.00	1.51	0.00	1.15	0.00	1.51
%ile Back of Q (95%), veh/ln	0.0	61.4	0.0	15.8	0.0	15.8	0.0	94.1
%ile Storage Ratio (RQ%)	0.00	0.71	0.00	3.13	0.00	0.16	0.00	33.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	56.6	0.0	0.0	0.0	0.0	0.0	83.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	372	0	375	0	461	0	137
Grp Sat Flow (s), veh/h/ln	0	1549	0	1770	0	1764	0	1423
Q Serve Time (g_s), s	0.0	22.3	0.0	22.3	0.0	30.7	0.0	8.2
Cycle Q Clear Time (g_c), s	0.0	22.3	0.0	22.3	0.0	30.7	0.0	8.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.21	0.00	0.29	0.00	1.00
Lane Grp Cap (c), veh/h	0	640	0	550	0	489	0	508
V/C Ratio (X)	0.00	0.58	0.00	0.68	0.00	0.94	0.00	0.27
Avail Cap (c_a), veh/h	0	640	0	550	0	489	0	508
Upstream Filter (I)	0.00	0.24	0.00	1.00	0.00	0.11	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.4	0.0	36.2	0.0	42.4	0.0	27.4
Incr Delay (d2), s/veh	0.0	0.9	0.0	6.7	0.0	5.5	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.3	0.0	42.9	0.0	47.9	0.0	28.7
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	9.5	0.0	12.9	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.0	0.0	0.7	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.28	0.00	1.51	0.00	1.15	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.6	0.0	15.8	0.0	15.7	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	3.13	0.00	0.16	0.00	1.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	125.1
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	631	77	93	699	87	145	945	169	96	740	135
Future Volume (veh/h)	117	631	77	93	699	87	145	945	169	96	740	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	686	84	101	760	95	158	1027	184	104	804	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	881	726	195	881	726	189	1441	618	156	1208	221
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	646	1870	1541	699	1870	1541	588	3554	1524	461	2979	545
Grp Volume(v), veh/h	127	686	84	101	760	95	158	1027	184	104	480	471
Grp Sat Flow(s),veh/h/ln	646	1870	1541	699	1870	1541	588	1777	1524	461	1777	1747
Q Serve(g_s), s	9.8	27.6	2.7	12.7	32.6	3.1	16.7	21.7	7.3	14.8	19.8	19.8
Cycle Q Clear(g_c), s	42.4	27.6	2.7	40.3	32.6	3.1	36.5	21.7	7.3	36.5	19.8	19.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	150	881	726	195	881	726	189	1441	618	156	721	708
V/C Ratio(X)	0.84	0.78	0.12	0.52	0.86	0.13	0.83	0.71	0.30	0.67	0.67	0.67
Avail Cap(c_a), veh/h	150	881	726	195	881	726	189	1441	618	156	721	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.54	0.54	0.54	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	19.9	13.3	36.7	21.2	13.4	39.2	22.4	18.1	39.6	21.8	21.8
Incr Delay (d2), s/veh	5.4	0.6	0.0	9.5	10.9	0.4	15.9	0.9	0.1	10.5	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.8	12.5	1.3	4.6	21.7	1.9	6.7	12.0	4.3	4.9	12.7	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.7	20.5	13.3	46.2	32.1	13.8	55.1	23.3	18.2	50.1	24.1	24.1
LnGrp LOS	D	C	B	D	C	B	E	C	B	D	C	C
Approach Vol, veh/h		897			956			1369			1055	
Approach Delay, s/veh		23.7			31.8			26.3			26.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	48.0	42.0	48.0	42.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 42	* 37	* 42	* 37
Max Q Clear Time (g_c+I1), s	44.4	38.5	42.3	38.5
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	631	77	93	699	87	145	945	169	96	740	135
Future Volume (veh/h)	117	631	77	93	699	87	145	945	169	96	740	135
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	686	84	101	760	95	158	1027	184	104	804	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	150	881	726	195	881	726	189	1441	618	156	1208	221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Unsig. Movement Delay												
Ln Grp Delay, s/veh	47.7	20.5	13.3	46.2	32.1	13.8	55.1	23.3	18.2	50.1	24.1	24.1
Ln Grp LOS	D	C	B	D	C	B	E	C	B	D	C	C
Approach Vol, veh/h		897			956			1369			1055	
Approach Delay, s/veh		23.7			31.8			26.3			26.7	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		48.0		42.0		48.0		42.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 42		* 37		* 42		* 37
Max Allow Headway (MAH), s		5.1		5.1		5.0		5.4
Max Q Clear (g_c+I1), s		44.4		38.5		42.3		38.5
Green Ext Time (g_e), s		0.0		0.0		0.1		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		646		588		699		461
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		2979
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1541		1524		1541		545
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	127	0	158	0	101	0	104
Grp Sat Flow (s), veh/h/ln	0	646	0	588	0	699	0	461
Q Serve Time (g_s), s	0.0	9.8	0.0	16.7	0.0	12.7	0.0	14.8
Cycle Q Clear Time (g_c), s	0.0	42.4	0.0	36.5	0.0	40.3	0.0	36.5
Perm LT Sat Flow (s_l), veh/h/ln	0	646	0	588	0	699	0	461
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	42.4	0.0	36.5	0.0	42.4	0.0	36.5
Perm LT Serve Time (g_u), s	0.0	9.8	0.0	16.7	0.0	14.8	0.0	14.8
Perm LT Q Serve Time (g_ps), s	0.0	9.8	0.0	16.7	0.0	12.7	0.0	14.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	150	0	189	0	195	0	156
V/C Ratio (X)	0.00	0.84	0.00	0.83	0.00	0.52	0.00	0.67
Avail Cap (c_a), veh/h	0	150	0	189	0	195	0	156
Upstream Filter (I)	0.00	0.09	0.00	0.54	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.3	0.0	39.2	0.0	36.7	0.0	39.6
Incr Delay (d2), s/veh	0.0	5.4	0.0	15.9	0.0	9.5	0.0	10.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.7	0.0	55.1	0.0	46.2	0.0	50.1
1st-Term Q (Q1), veh/ln	0.0	2.7	0.0	3.4	0.0	2.1	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.8	0.0	0.5	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.29	0.00	1.58	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.8	0.0	6.7	0.0	4.6	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	2.44	0.00	0.87	0.00	1.55
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	686	0	1027	0	760	0	480
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	27.6	0.0	21.7	0.0	32.6	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	27.6	0.0	21.7	0.0	32.6	0.0	19.8
Lane Grp Cap (c), veh/h	0	881	0	1441	0	881	0	721
V/C Ratio (X)	0.00	0.78	0.00	0.71	0.00	0.86	0.00	0.67
Avail Cap (c_a), veh/h	0	881	0	1441	0	881	0	721
Upstream Filter (I)	0.00	0.09	0.00	0.54	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.9	0.0	22.4	0.0	21.2	0.0	21.8
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.9	0.0	10.9	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.5	0.0	23.3	0.0	32.1	0.0	24.1
1st-Term Q (Q1), veh/ln	0.0	10.7	0.0	8.3	0.0	12.6	0.0	7.6
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.2	0.0	2.7	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.15	0.00	1.41	0.00	1.42	0.00	1.58
%ile Back of Q (95%), veh/ln	0.0	12.5	0.0	12.0	0.0	21.7	0.0	12.7
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.25	0.00	1.53	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	84	0	184	0	95	0	471
Grp Sat Flow (s), veh/h/ln	0	1541	0	1524	0	1541	0	1747
Q Serve Time (g_s), s	0.0	2.7	0.0	7.3	0.0	3.1	0.0	19.8
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	7.3	0.0	3.1	0.0	19.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.31
Lane Grp Cap (c), veh/h	0	726	0	618	0	726	0	708
V/C Ratio (X)	0.00	0.12	0.00	0.30	0.00	0.13	0.00	0.67
Avail Cap (c_a), veh/h	0	726	0	618	0	726	0	708
Upstream Filter (I)	0.00	0.09	0.00	0.54	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.3	0.0	18.1	0.0	13.4	0.0	21.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.4	0.0	2.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.3	0.0	18.2	0.0	13.8	0.0	24.1
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	2.4	0.0	1.0	0.0	7.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	0.00	1.77	0.00	1.80	0.00	1.58
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	4.3	0.0	1.9	0.0	12.5
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	1.00	0.00	0.49	0.00	0.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	36	75	280	311	52
Future Vol, veh/h	13	36	75	280	311	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	39	82	304	338	57

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	683	367	395	0	-	0
Stage 1	367	-	-	-	-	-
Stage 2	316	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	399	677	1162	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	371	677	1162	-	-	-
Mov Cap-2 Maneuver	479	-	-	-	-	-
Stage 1	650	-	-	-	-	-
Stage 2	713	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	1.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1162	-	610	-	-
HCM Lane V/C Ratio	0.07	-	0.087	-	-
HCM Control Delay (s)	8.3	-	11.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	15	114	181	20	322
Future Vol, veh/h	40	15	114	181	20	322
Conflicting Peds, #/hr	12	5	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	16	124	197	22	350

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	550	149	0	0	341	0
Stage 1	144	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	496	898	-	-	1218	-
Stage 1	883	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	475	880	-	-	1199	-
Mov Cap-2 Maneuver	546	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	655	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	609	1199	-
HCM Lane V/C Ratio	-	-	0.098	0.018	-
HCM Control Delay (s)	-	-	11.6	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	51	44	61	101	326	28	837	45	171	627	20
Future Volume (veh/h)	132	51	44	61	101	326	28	837	45	171	627	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		0.97	0.99		0.90	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	143	55	48	66	110	354	30	910	49	186	682	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	375	327	553	157	506	330	1660	665	215	1635	53
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.15	0.15	0.15	0.47	0.47	0.47
Sat Flow, veh/h	928	908	792	1262	381	1226	739	3554	1424	586	3499	113
Grp Volume(v), veh/h	143	0	103	66	0	464	30	910	49	186	346	358
Grp Sat Flow(s),veh/h/ln	928	0	1700	1262	0	1606	739	1777	1424	586	1777	1835
Q Serve(g_s), s	13.5	0.0	3.4	3.1	0.0	21.5	3.3	21.3	2.6	20.8	11.6	11.6
Cycle Q Clear(g_c), s	35.0	0.0	3.4	6.5	0.0	21.5	14.9	21.3	2.6	42.0	11.6	11.6
Prop In Lane	1.00		0.47	1.00		0.76	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	242	0	702	553	0	663	330	1660	665	215	830	857
V/C Ratio(X)	0.59	0.00	0.15	0.12	0.00	0.70	0.09	0.55	0.07	0.87	0.42	0.42
Avail Cap(c_a), veh/h	253	0	721	568	0	682	330	1660	665	215	830	857
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	0.0	16.5	18.5	0.0	21.8	31.8	29.3	21.4	37.5	15.9	15.9
Incr Delay (d2), s/veh	3.4	0.0	0.1	0.1	0.0	3.1	0.5	1.3	0.2	34.3	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	0.0	2.4	1.6	0.0	13.2	1.2	15.4	1.6	10.2	8.3	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	0.0	16.6	18.6	0.0	24.9	32.3	30.5	21.6	71.8	17.4	17.4
LnGrp LOS	D	A	B	B	A	C	C	C	C	E	B	B
Approach Vol, veh/h		246			530			989			890	
Approach Delay, s/veh		30.0			24.1			30.2			28.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	47.0	43.0	47.0	43.0
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	44.0	37.0	23.3	23.5
Green Ext Time (p_c), s	0.0	0.2	6.4	3.2

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	51	44	61	101	326	28	837	45	171	627	20
Future Volume (veh/h)	132	51	44	61	101	326	28	837	45	171	627	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	0.98		0.97	0.99		0.90	1.00		0.90
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	143	55	48	66	110	354	30	910	49	186	682	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	242	375	327	553	157	506	330	1660	665	215	1635	53
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.15	0.15	0.15	0.47	0.47	0.47
Unsig. Movement Delay												
Ln Grp Delay, s/veh	39.6	0.0	16.6	18.6	0.0	24.9	32.3	30.5	21.6	71.8	17.4	17.4
Ln Grp LOS	D	A	B	B	A	C	C	C	C	E	B	B
Approach Vol, veh/h		246			530			989			890	
Approach Delay, s/veh		30.0			24.1			30.2			28.8	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		47.0		43.0		47.0		43.0
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.6		5.3		5.1		5.5
Max Q Clear (g_c+l1), s		44.0		37.0		23.3		23.5
Green Ext Time (g_e), s		0.0		0.2		6.4		3.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.14
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		586		928		739		1262
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3499		908		3554		381
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		113		792		1424		1226
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	186	0	143	0	30	0	66
Grp Sat Flow (s), veh/h/ln	0	586	0	928	0	739	0	1262
Q Serve Time (g_s), s	0.0	20.8	0.0	13.5	0.0	3.3	0.0	3.1
Cycle Q Clear Time (g_c), s	0.0	42.0	0.0	35.0	0.0	14.9	0.0	6.5
Perm LT Sat Flow (s_l), veh/h/ln	0	586	0	928	0	739	0	1262
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	42.0	0.0	37.2	0.0	42.0	0.0	37.2
Perm LT Serve Time (g_u), s	0.0	20.8	0.0	15.7	0.0	30.4	0.0	33.7
Perm LT Q Serve Time (g_ps), s	0.0	20.8	0.0	13.5	0.0	3.3	0.0	3.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	215	0	242	0	330	0	553
V/C Ratio (X)	0.00	0.87	0.00	0.59	0.00	0.09	0.00	0.12
Avail Cap (c_a), veh/h	0	215	0	253	0	330	0	568
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.96	0.00	1.00
Uniform Delay (d1), s/veh	0.0	37.5	0.0	36.3	0.0	31.8	0.0	18.5
Incr Delay (d2), s/veh	0.0	34.3	0.0	3.4	0.0	0.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	71.8	0.0	39.6	0.0	32.3	0.0	18.6
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	3.0	0.0	0.6	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.66	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.2	0.0	5.9	0.0	1.2	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	1.72	0.00	3.74	0.00	0.32	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	346	0	0	0	910	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	11.6	0.0	0.0	0.0	21.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.6	0.0	0.0	0.0	21.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	830	0	0	0	1660	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.00	0.00	0.55	0.00	0.00
Avail Cap (c_a), veh/h	0	830	0	0	0	1660	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.96	0.00	0.00
Uniform Delay (d1), s/veh	0.0	15.9	0.0	0.0	0.0	29.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.0	1.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.4	0.0	0.0	0.0	30.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	0.0	0.0	10.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.00	0.00	1.50	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.3	0.0	0.0	0.0	15.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.00	0.00	1.27	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	358	0	103	0	49	0	464
Grp Sat Flow (s), veh/h/ln	0	1835	0	1700	0	1424	0	1606
Q Serve Time (g_s), s	0.0	11.6	0.0	3.4	0.0	2.6	0.0	21.5
Cycle Q Clear Time (g_c), s	0.0	11.6	0.0	3.4	0.0	2.6	0.0	21.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.06	0.00	0.47	0.00	1.00	0.00	0.76
Lane Grp Cap (c), veh/h	0	857	0	702	0	665	0	663
V/C Ratio (X)	0.00	0.42	0.00	0.15	0.00	0.07	0.00	0.70
Avail Cap (c_a), veh/h	0	857	0	721	0	665	0	682
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.96	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.9	0.0	16.5	0.0	21.4	0.0	21.8
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.1	0.0	0.2	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.4	0.0	16.6	0.0	21.6	0.0	24.9
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	1.3	0.0	0.8	0.0	7.8
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.74	0.00	1.80	0.00	1.80	0.00	1.57
%ile Back of Q (95%), veh/ln	0.0	8.5	0.0	2.4	0.0	1.6	0.0	13.2
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.22	0.00	0.40	0.00	0.99
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	56	199	425	4	10	50
Future Vol, veh/h	56	199	425	4	10	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	61	216	462	4	11	54
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	9.8	13.7	8.7
HCM LOS	A	B	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	17%
Vol Thru, %	0%	100%	99%	0%
Vol Right, %	0%	0%	1%	83%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	56	199	429	60
LT Vol	56	0	0	10
Through Vol	0	199	425	0
RT Vol	0	0	4	50
Lane Flow Rate	61	216	466	65
Geometry Grp	7	7	5	2
Degree of Util (X)	0.094	0.303	0.583	0.093
Departure Headway (Hd)	5.541	5.038	4.503	5.111
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	646	714	802	698
Service Time	3.275	2.772	2.531	3.161
HCM Lane V/C Ratio	0.094	0.303	0.581	0.093
HCM Control Delay	8.9	10	13.7	8.7
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.3	1.3	3.8	0.3

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	57	90	170	54	7	27
Future Vol, veh/h	57	90	170	54	7	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	98	185	59	8	29
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.3	8.7	7.6
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	21%
Vol Thru, %	0%	100%	76%	0%
Vol Right, %	0%	0%	24%	79%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	57	90	224	34
LT Vol	57	0	0	7
Through Vol	0	90	170	0
RT Vol	0	0	54	27
Lane Flow Rate	62	98	243	37
Geometry Grp	7	7	5	2
Degree of Util (X)	0.09	0.128	0.275	0.045
Departure Headway (Hd)	5.222	4.721	4.069	4.389
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	683	754	872	821
Service Time	2.982	2.48	2.152	2.389
HCM Lane V/C Ratio	0.091	0.13	0.279	0.045
HCM Control Delay	8.5	8.2	8.7	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.4	1.1	0.1

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	19	75	57	66	1	141	8	17	3	20	37
Future Vol, veh/h	2	19	75	57	66	1	141	8	17	3	20	37
Conflicting Peds, #/hr	23	0	35	35	0	23	12	0	26	26	0	12
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	21	82	62	72	1	153	9	18	3	22	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	96	0	0	138	0	0	300	280	82	326	362	108
Stage 1	-	-	-	-	-	-	60	60	-	220	220	-
Stage 2	-	-	-	-	-	-	240	220	-	106	142	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1498	-	-	1446	-	-	652	628	978	627	565	946
Stage 1	-	-	-	-	-	-	951	845	-	782	721	-
Stage 2	-	-	-	-	-	-	763	721	-	900	779	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1471	-	-	1406	-	-	561	573	931	564	515	920
Mov Cap-2 Maneuver	-	-	-	-	-	-	561	573	-	564	515	-
Stage 1	-	-	-	-	-	-	923	820	-	767	677	-
Stage 2	-	-	-	-	-	-	669	677	-	854	756	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.5	13.3	10.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	561	931	1471	-	-	1406	-	-	721
HCM Lane V/C Ratio	0.273	0.02	0.001	-	-	0.044	-	-	0.086
HCM Control Delay (s)	13.8	8.9	7.5	-	-	7.7	-	-	10.5
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.1	0.1	0	-	-	0.1	-	-	0.3

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	19	150	61	30	152
Future Vol, veh/h	37	19	150	61	30	152
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	21	163	66	33	165

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	427	196	0	0	229	0
Stage 1	196	-	-	-	-	-
Stage 2	231	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	584	845	-	-	1339	-
Stage 1	837	-	-	-	-	-
Stage 2	807	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	569	845	-	-	1339	-
Mov Cap-2 Maneuver	629	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	787	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	689	1339	-
HCM Lane V/C Ratio	-	-	0.088	0.024	-
HCM Control Delay (s)	-	-	10.7	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	482	114	32	363	54	153	528	58	45	338	55
Future Volume (veh/h)	121	482	114	32	363	54	153	528	58	45	338	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	524	124	35	395	59	166	574	63	49	367	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	1502	656	51	1286	559	196	632	529	63	493	411
Arrive On Green	0.09	0.42	0.42	0.03	0.36	0.36	0.11	0.34	0.34	0.04	0.26	0.26
Sat Flow, veh/h	1781	3554	1551	1781	3554	1546	1781	1870	1565	1781	1870	1560
Grp Volume(v), veh/h	132	524	124	35	395	59	166	574	63	49	367	60
Grp Sat Flow(s),veh/h/ln	1781	1777	1551	1781	1777	1546	1781	1870	1565	1781	1870	1560
Q Serve(g_s), s	8.7	12.0	6.0	2.3	9.6	3.0	11.0	35.2	3.3	3.3	21.6	3.5
Cycle Q Clear(g_c), s	8.7	12.0	6.0	2.3	9.6	3.0	11.0	35.2	3.3	3.3	21.6	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	1502	656	51	1286	559	196	632	529	63	493	411
V/C Ratio(X)	0.83	0.35	0.19	0.68	0.31	0.11	0.85	0.91	0.12	0.78	0.74	0.15
Avail Cap(c_a), veh/h	238	1502	656	104	1286	559	318	810	678	119	602	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82
Uniform Delay (d), s/veh	53.7	23.4	21.7	57.7	27.5	25.4	52.4	37.9	27.4	57.4	40.5	33.8
Incr Delay (d2), s/veh	14.0	0.6	0.6	15.0	0.6	0.4	11.1	11.8	0.1	15.2	3.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.9	8.7	4.1	2.2	7.4	2.1	9.3	24.7	2.3	3.1	15.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.7	24.1	22.4	72.7	28.1	25.8	63.5	49.8	27.5	72.6	43.8	34.0
LnGrp LOS	E	C	C	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		780			489			803			476	
Approach Delay, s/veh		31.2			31.0			50.9			45.5	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	48.4	18.2	36.6	9.4	55.7	9.3	45.6
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	16.0	* 23	21.4	* 39	7.0	* 32	8.0	* 52
Max Q Clear Time (g_c+I1), s	10.7	11.6	13.0	23.6	4.3	14.0	5.3	37.2
Green Ext Time (p_c), s	0.1	2.0	0.3	2.0	0.0	3.5	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	482	114	32	363	54	153	528	58	45	338	55
Future Volume (veh/h)	121	482	114	32	363	54	153	528	58	45	338	55
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	524	124	35	395	59	166	574	63	49	367	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	159	1502	656	51	1286	559	196	632	529	63	493	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.42	0.42	0.03	0.36	0.36	0.11	0.34	0.34	0.04	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.7	24.1	22.4	72.7	28.1	25.8	63.5	49.8	27.5	72.6	43.8	34.0
Ln Grp LOS	E	C	C	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		780			489			803			476	
Approach Delay, s/veh		31.2			31.0			50.9			45.5	
Approach LOS		C			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.7	48.4	18.2	36.6	9.4	55.7	9.3	45.6
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	16.0	* 23	21.4	* 39	7.0	* 32	8.0	* 52
Max Allow Headway (MAH), s	3.7	4.9	3.8	5.0	3.7	4.8	3.8	5.0
Max Q Clear (g_c+I1), s	10.7	11.6	13.0	23.6	4.3	14.0	5.3	37.2
Green Ext Time (g_e), s	0.1	2.0	0.3	2.0	0.0	3.5	0.0	3.4
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	0.69	1.00	0.80	1.00
Prob of Max Out (p_x)	0.23	0.00	0.02	0.04	1.00	0.00	1.00	0.13

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1546		1560		1551		1565

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	132	0	166	0	35	0	49	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	8.7	0.0	11.0	0.0	2.3	0.0	3.3	0.0
Cycle Q Clear Time (g_c), s	8.7	0.0	11.0	0.0	2.3	0.0	3.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	159	0	196	0	51	0	63	0
V/C Ratio (X)	0.83	0.00	0.85	0.00	0.68	0.00	0.78	0.00
Avail Cap (c_a), veh/h	238	0	318	0	104	0	119	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.82	0.00
Uniform Delay (d1), s/veh	53.7	0.0	52.4	0.0	57.7	0.0	57.4	0.0
Incr Delay (d2), s/veh	14.0	0.0	11.1	0.0	15.0	0.0	15.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	67.7	0.0	63.5	0.0	72.7	0.0	72.6	0.0
1st-Term Q (Q1), veh/ln	3.8	0.0	4.9	0.0	1.0	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.6	0.0	0.2	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.78	0.00	1.70	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.9	0.0	9.3	0.0	2.2	0.0	3.1	0.0
%ile Storage Ratio (RQ%)	0.94	0.00	1.89	0.00	0.29	0.00	0.88	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	395	0	367	0	524	0	574
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	9.6	0.0	21.6	0.0	12.0	0.0	35.2
Cycle Q Clear Time (g_c), s	0.0	9.6	0.0	21.6	0.0	12.0	0.0	35.2
Lane Grp Cap (c), veh/h	0	1286	0	493	0	1502	0	632
V/C Ratio (X)	0.00	0.31	0.00	0.74	0.00	0.35	0.00	0.91
Avail Cap (c_a), veh/h	0	1286	0	602	0	1502	0	810
Upstream Filter (I)	0.00	1.00	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.5	0.0	40.5	0.0	23.4	0.0	37.9
Incr Delay (d2), s/veh	0.0	0.6	0.0	3.3	0.0	0.6	0.0	11.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.1	0.0	43.8	0.0	24.1	0.0	49.8
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	9.8	0.0	4.9	0.0	15.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.5	0.0	0.1	0.0	2.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.46	0.00	1.73	0.00	1.39
%ile Back of Q (95%), veh/ln	0.0	7.4	0.0	15.0	0.0	8.7	0.0	24.7
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.31	0.00	0.27	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	59	0	60	0	124	0	63
Grp Sat Flow (s), veh/h/ln	0	1546	0	1560	0	1551	0	1565
Q Serve Time (g_s), s	0.0	3.0	0.0	3.5	0.0	6.0	0.0	3.3
Cycle Q Clear Time (g_c), s	0.0	3.0	0.0	3.5	0.0	6.0	0.0	3.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	559	0	411	0	656	0	529
V/C Ratio (X)	0.00	0.11	0.00	0.15	0.00	0.19	0.00	0.12
Avail Cap (c_a), veh/h	0	559	0	502	0	656	0	678
Upstream Filter (I)	0.00	1.00	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	33.8	0.0	21.7	0.0	27.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.1	0.0	0.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.8	0.0	34.0	0.0	22.4	0.0	27.5
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	1.3	0.0	2.2	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.1	0.0	2.4	0.0	4.1	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	0.56	0.00	1.05	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	35	222	57	0	295	0	0	269	75
Future Volume (veh/h)	0	0	0	35	222	57	0	295	0	0	269	75
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	0	0	1870	1870
Adj Flow Rate, veh/h				38	241	62	0	321	0	0	292	82
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	0	0	2	2
Cap, veh/h				60	403	184	0	2803	0	0	1106	311
Arrive On Green				0.13	0.13	0.13	0.00	1.00	0.00	0.00	0.79	0.79
Sat Flow, veh/h				471	3153	1440	0	3741	0	0	1402	394
Grp Volume(v), veh/h				149	130	62	0	321	0	0	0	374
Grp Sat Flow(s),veh/h/ln				1847	1777	1440	0	1777	0	0	0	1796
Q Serve(g_s), s				9.2	8.3	4.7	0.0	0.0	0.0	0.0	0.0	6.7
Cycle Q Clear(g_c), s				9.2	8.3	4.7	0.0	0.0	0.0	0.0	0.0	6.7
Prop In Lane				0.25		1.00	0.00		0.00	0.00		0.22
Lane Grp Cap(c), veh/h				236	227	184	0	2803	0	0	0	1417
V/C Ratio(X)				0.63	0.57	0.34	0.00	0.11	0.00	0.00	0.00	0.26
Avail Cap(c_a), veh/h				523	503	408	0	2803	0	0	0	1417
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.52	0.52	0.52	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				49.7	49.2	47.7	0.0	0.0	0.0	0.0	0.0	3.4
Incr Delay (d2), s/veh				1.5	1.2	0.6	0.0	0.1	0.0	0.0	0.0	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				6.7	5.9	3.0	0.0	0.1	0.0	0.0	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.1	50.4	48.3	0.0	0.1	0.0	0.0	0.0	3.8
LnGrp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					341			321			374	
Approach Delay, s/veh					50.3			0.1			3.8	
Approach LOS					D			A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	99.7	20.3	99.7
Change Period (Y+Rc), s	* 5	* 5	* 5
Max Green Setting (Gmax), s	* 76	* 34	* 76
Max Q Clear Time (g_c+I1), s	8.7	11.2	2.0
Green Ext Time (p_c), s	3.8	1.6	3.3

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	35	222	57	0	295	0	0	269	75
Future Volume (veh/h)	0	0	0	35	222	57	0	295	0	0	269	75
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.91	1.00		1.00	1.00		0.99
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	0	0	1870	1870
Adj Flow Rate, veh/h				38	241	62	0	321	0	0	292	82
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	0	0	2	2
Opposing Right Turn Influence				Yes			No			No		
Cap, veh/h				60	403	184	0	2803	0	0	1106	311
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Prop Arrive On Green				0.13	0.13	0.13	0.00	1.00	0.00	0.00	0.79	0.79
Unsig. Movement Delay												
Ln Grp Delay, s/veh				51.1	50.4	48.3	0.0	0.1	0.0	0.0	0.0	3.8
Ln Grp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					341			321			374	
Approach Delay, s/veh					50.3			0.1			3.8	
Approach LOS					D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		8.0		11.0		8.0		
Phs Duration (G+Y+Rc), s		99.7		20.3		99.7		
Change Period (Y+Rc), s		* 5		* 5		* 5		
Max Green (Gmax), s		* 76		* 34		* 76		
Max Allow Headway (MAH), s		6.2		4.9		6.1		
Max Q Clear (g_c+I1), s		8.7		11.2		2.0		
Green Ext Time (g_e), s		3.8		1.6		3.3		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		0.00		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		0		471		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1402		3153		3741		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		394		1440		0		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment				L+T				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	149	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1847	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.2	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	94.7	0.0	0.0	0.0	94.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	236	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	51.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.57	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment				T		T		
Lanes in Grp	0	0	0	1	0	2	0	0
Grp Vol (v), veh/h	0	0	0	130	0	321	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	227	0	2803	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	0.11	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	503	0	2803	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.52	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.4	0.0	0.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.62	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	5.9	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.33	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	374	0	62	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1796	0	1440	0	0	0	0
Q Serve Time (g_s), s	0.0	6.7	0.0	4.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	4.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.22	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1417	0	184	0	0	0	0
V/C Ratio (X)	0.00	0.26	0.00	0.34	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1417	0	408	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.52	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.4	0.0	47.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.8	0.0	48.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	1.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	3.7	0.0	3.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.17	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	314	986	651	73
Future Volume (veh/h)	0	0	314	986	651	73
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.91
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			341	1072	708	79
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			382	3352	2140	238
Arrive On Green			0.21	0.94	0.22	0.22
Sat Flow, veh/h			1781	3647	3282	355
Grp Volume(v), veh/h			341	1072	394	393
Grp Sat Flow(s),veh/h/ln			1781	1777	1777	1767
Q Serve(g_s), s			16.7	2.2	16.8	16.8
Cycle Q Clear(g_c), s			16.7	2.2	16.8	16.8
Prop In Lane			1.00			0.20
Lane Grp Cap(c), veh/h			382	3352	1192	1186
V/C Ratio(X)			0.89	0.32	0.33	0.33
Avail Cap(c_a), veh/h			491	3352	1192	1186
HCM Platoon Ratio			1.00	1.00	0.33	0.33
Upstream Filter(I)			0.72	0.72	0.93	0.93
Uniform Delay (d), s/veh			34.3	0.2	18.1	18.1
Incr Delay (d2), s/veh			11.8	0.2	0.7	0.7
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln			12.3	0.2	12.6	12.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			46.1	0.4	18.7	18.8
LnGrp LOS			D	A	B	B
Approach Vol, veh/h				1413	787	
Approach Delay, s/veh				11.4	18.8	
Approach LOS				B	B	

Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	90.0			24.5	65.5
Change Period (Y+Rc), s	5.1			* 5.2	5.1
Max Green Setting (Gmax), s	84.9			* 25	54.9
Max Q Clear Time (g_c+I1), s	4.2			18.7	18.8
Green Ext Time (p_c), s	10.8			0.6	5.8

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	314	986	651	73
Future Volume (veh/h)	0	0	314	986	651	73
Number			5	2	6	16
Initial Q, veh			0	0	0	0
Ped-Bike Adj (A_pbT)			1.00			0.91
Parking Bus Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			341	1072	708	79
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Opposing Right Turn Influence			Yes			
Cap, veh/h			382	3352	2140	238
HCM Platoon Ratio			1.00	1.00	0.33	0.33
Prop Arrive On Green			0.21	0.94	0.22	0.22
Unsig. Movement Delay						
Ln Grp Delay, s/veh			46.1	0.4	18.7	18.8
Ln Grp LOS			D	A	B	B
Approach Vol, veh/h				1413	787	
Approach Delay, s/veh				11.4	18.8	
Approach LOS				B	B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		
Case No		4.0			2.0	8.0		
Phs Duration (G+Y+Rc), s		90.0			24.5	65.5		
Change Period (Y+Rc), s		5.1			* 5.2	5.1		
Max Green (Gmax), s		84.9			* 25	54.9		
Max Allow Headway (MAH), s		5.2			3.8	5.3		
Max Q Clear (g_c+l1), s		4.2			18.7	18.8		
Green Ext Time (g_e), s		10.8			0.6	5.8		
Prob of Phs Call (p_c)		1.00			1.00	1.00		
Prob of Max Out (p_x)		0.00			0.28	0.01		
Left-Turn Movement Data								
Assigned Mvmt					5	1		
Mvmt Sat Flow, veh/h					1781	0		
Through Movement Data								
Assigned Mvmt		2				6		
Mvmt Sat Flow, veh/h		3647				3282		
Right-Turn Movement Data								
Assigned Mvmt		12				16		
Mvmt Sat Flow, veh/h		0				355		
Left Lane Group Data								
Assigned Mvmt	0	0	0	0	5	1	0	0
Lane Assignment					L (Prot)			

Lanes in Grp	0	0	0	0	1	0	0	0
Grp Vol (v), veh/h	0	0	0	0	341	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	60.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	382	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	491	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	34.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	11.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	46.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	1.48	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	6.26	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1072	0	0	0	394	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	2.2	0.0	0.0	0.0	16.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.2	0.0	0.0	0.0	16.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	3352	0	0	0	1192	0	0
V/C Ratio (X)	0.00	0.32	0.00	0.00	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	3352	0	0	0	1192	0	0
Upstream Filter (I)	0.00	0.72	0.00	0.00	0.00	0.93	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.2	0.0	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	0.0	0.0	18.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	0.00	0.00	1.55	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.2	0.0	0.0	0.0	12.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	1.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	0	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	393	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1767	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	16.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	16.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1186	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1186	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	0.00	0.00	1.56	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	12.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	1.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	1	0	326	1	0	273	0
Future Volume (veh/h)	0	13	1	0	13	1	0	326	1	0	273	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	1	0	354	1	0	297	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Cap, veh/h	0	40	3	0	40	3	0	3188	9	0	1640	0
Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.88	0.88	0.00	1.00	0.00
Sat Flow, veh/h	0	1725	123	0	1725	123	0	3729	10	0	1870	0
Grp Volume(v), veh/h	0	0	15	0	0	15	0	173	182	0	297	0
Grp Sat Flow(s),veh/h/ln	0	0	1848	0	0	1848	0	1777	1869	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.6	1.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.6	1.6	0.0	0.0	0.0
Prop In Lane	0.00		0.07	0.00		0.07	0.00		0.01	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	42	0	0	42	0	1558	1639	0	1640	0
V/C Ratio(X)	0.00	0.00	0.35	0.00	0.00	0.35	0.00	0.11	0.11	0.00	0.18	0.00
Avail Cap(c_a), veh/h	0	0	108	0	0	108	0	1558	1639	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.98	0.98	0.00	0.97	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.7	0.0	0.0	57.7	0.0	1.0	1.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	21.6	0.0	0.0	21.6	0.0	0.1	0.1	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.3	0.0	0.0	1.3	0.0	0.4	0.5	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	79.4	0.0	0.0	79.4	0.0	1.1	1.1	0.0	0.2	0.0
LnGrp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		15			15			355			297	
Approach Delay, s/veh		79.4			79.4			1.1			0.2	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.2	9.8	110.2	9.8
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	3.6	3.0	2.0	3.0
Green Ext Time (p_c), s	3.3	0.0	2.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.2
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	1	0	326	1	0	273	0
Future Volume (veh/h)	0	13	1	0	13	1	0	326	1	0	273	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	1	0	354	1	0	297	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	40	3	0	40	3	0	3188	9	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.88	0.88	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	79.4	0.0	0.0	79.4	0.0	1.1	1.1	0.0	0.2	0.0
Ln Grp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		15			15			355			297	
Approach Delay, s/veh		79.4			79.4			1.1			0.2	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.2		9.8		110.2		9.8
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+I1), s		3.6		3.0		2.0		3.0
Green Ext Time (g_e), s		3.3		0.0		2.8		0.0
Prob of Phs Call (p_c)		1.00		0.39		1.00		0.39
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3729		1725		1870		1725
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		10		123		0		123
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.2	0.0	2.8	0.0	105.2	0.0	2.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	173	0	0	0	297	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1558	0	0	0	1640	0	0
V/C Ratio (X)	0.00	0.11	0.00	0.00	0.00	0.18	0.00	0.00
Avail Cap (c_a), veh/h	0	1558	0	0	0	1640	0	0
Upstream Filter (I)	0.00	0.98	0.00	0.00	0.00	0.97	0.00	0.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.1	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	182	0	15	0	0	0	15
Grp Sat Flow (s), veh/h/ln	0	1869	0	1848	0	0	0	1848
Q Serve Time (g_s), s	0.0	1.6	0.0	1.0	0.0	0.0	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	1.0	0.0	0.0	0.0	1.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.00	0.07	0.00	0.00	0.00	0.07
Lane Grp Cap (c), veh/h	0	1639	0	42	0	0	0	42
V/C Ratio (X)	0.00	0.11	0.00	0.35	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	1639	0	108	0	0	0	108
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	57.7	0.0	0.0	0.0	57.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	21.6	0.0	0.0	0.0	21.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.1	0.0	79.4	0.0	0.0	0.0	79.4
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.5	0.0	1.3	0.0	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.04	0.00	0.00	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.2
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	468	97	124	0	47	0	181	122	37	263	0
Future Volume (veh/h)	69	468	97	124	0	47	0	181	122	37	263	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.78	1.00		0.97	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	75	509	105	135	0	51	0	197	133	40	286	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	611	629	248	164	0	114	0	1132	720	664	1191	0
Arrive On Green	0.18	0.18	0.18	0.09	0.00	0.09	0.00	0.55	0.55	0.05	0.64	0.00
Sat Flow, veh/h	3456	3554	1402	1781	0	1234	0	2147	1306	1781	1870	0
Grp Volume(v), veh/h	75	509	105	135	0	51	0	169	161	40	286	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1402	1781	0	1234	0	1777	1583	1781	1870	0
Q Serve(g_s), s	2.8	21.2	10.3	11.5	0.0	6.0	0.0	7.3	7.8	1.4	10.1	0.0
Cycle Q Clear(g_c), s	2.8	21.2	10.3	11.5	0.0	6.0	0.0	7.3	7.8	1.4	10.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.83	1.00		0.00
Lane Grp Cap(c), veh/h	611	629	248	164	0	114	0	979	872	664	1191	0
V/C Ratio(X)	0.12	0.81	0.42	0.82	0.00	0.45	0.00	0.17	0.18	0.06	0.24	0.00
Avail Cap(c_a), veh/h	785	808	319	630	0	437	0	979	872	684	1191	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	53.3	60.9	56.4	68.7	0.0	66.2	0.0	17.1	17.3	11.9	12.0	0.0
Incr Delay (d2), s/veh	0.1	5.6	1.6	9.8	0.0	2.8	0.0	0.4	0.5	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	15.1	6.7	9.5	0.0	3.6	0.0	5.6	5.4	1.0	7.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.4	66.5	58.0	78.5	0.0	69.0	0.0	17.5	17.7	11.9	12.5	0.0
LnGrp LOS	D	E	E	E	A	E	A	B	B	B	B	A
Approach Vol, veh/h		689			186			330			326	
Approach Delay, s/veh		63.8			75.8			17.6			12.4	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	2	4	5	6	8
Phs Duration (G+Y+Rc), s	103.1	32.3	13.2	89.9	18.7
Change Period (Y+Rc), s	* 5	* 5	* 5	* 5	4.5
Max Green Setting (Gmax), s	* 50	* 35	* 10	* 35	54.5
Max Q Clear Time (g_c+I1), s	12.1	23.2	3.4	9.8	13.5
Green Ext Time (p_c), s	3.5	4.1	0.0	3.7	0.7

Intersection Summary	
HCM 6th Ctrl Delay	44.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	468	97	124	0	47	0	181	122	37	263	0
Future Volume (veh/h)	69	468	97	124	0	47	0	181	122	37	263	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.88	1.00		0.78	1.00		0.97	0.99		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	75	509	105	135	0	51	0	197	133	40	286	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	611	629	248	164	0	114	0	1132	720	664	1191	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.18	0.18	0.18	0.09	0.00	0.09	0.00	0.55	0.55	0.05	0.64	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	53.4	66.5	58.0	78.5	0.0	69.0	0.0	17.5	17.7	11.9	12.5	0.0
Ln Grp LOS	D	E	E	E	A	E	A	B	B	B	B	A
Approach Vol, veh/h		689			186			330			326	
Approach Delay, s/veh		63.8			75.8			17.6			12.4	
Approach LOS		E			E			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	10.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		103.1	18.7	32.3	13.2	89.9		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 50	54.5	* 35	* 10	* 35		
Max Allow Headway (MAH), s		7.1	4.3	5.8	3.8	7.3		
Max Q Clear (g_c+l1), s		12.1	13.5	23.2	3.4	9.8		
Green Ext Time (g_e), s		3.5	0.7	4.1	0.0	3.7		
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.82	1.00		
Prob of Max Out (p_x)		0.00	0.00	0.37	0.02	0.02		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		2147		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1234	1402		1306		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L	LL (Pr/Pm)				

Lanes in Grp	0	0	1	2	1	0	0	0
Grp Vol (v), veh/h	0	0	135	75	40	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	11.5	2.8	1.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	11.5	2.8	1.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1781	1728	1044	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	86.9	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	77.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	84.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	164	611	664	0	0	0
V/C Ratio (X)	0.00	0.00	0.82	0.12	0.06	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	630	785	684	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.99	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	68.7	53.3	11.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	9.8	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	78.5	53.4	11.9	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	5.2	1.2	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.69	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	9.5	2.2	1.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.60	1.13	0.42	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	286	0	509	0	169	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	10.1	0.0	21.2	0.0	7.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.1	0.0	21.2	0.0	7.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1191	0	629	0	979	0	0
V/C Ratio (X)	0.00	0.24	0.00	0.81	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	0	1191	0	808	0	979	0	0
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	60.9	0.0	17.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	5.6	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.5	0.0	66.5	0.0	17.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	9.5	0.0	3.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.5	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.78	1.00	1.52	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.8	0.0	15.1	0.0	5.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.56	0.00	0.64	0.00	0.42	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	51	105	0	161	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1234	1402	0	1583	0	0
Q Serve Time (g_s), s	0.0	0.0	6.0	10.3	0.0	7.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	6.0	10.3	0.0	7.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	0.83	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	114	248	0	872	0	0
V/C Ratio (X)	0.00	0.00	0.45	0.42	0.00	0.18	0.00	0.00
Avail Cap (c_a), veh/h	0	0	437	319	0	872	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	66.2	56.4	0.0	17.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.8	1.6	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	69.0	58.0	0.0	17.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.9	3.6	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	3.6	6.7	0.0	5.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.22	2.27	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.3
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	699	32	44	149	14	72
Future Vol, veh/h	699	32	44	149	14	72
Conflicting Peds, #/hr	0	70	70	0	18	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	40	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	760	35	48	162	15	78

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	865	0	1106	457
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	276	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	776	-	218	551
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	770	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	733	-	190	517
Mov Cap-2 Maneuver	-	-	-	-	294	-
Stage 1	-	-	-	-	367	-
Stage 2	-	-	-	-	710	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	460	-	-	733	-
HCM Lane V/C Ratio	0.203	-	-	0.065	-
HCM Control Delay (s)	14.8	-	-	10.3	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	446	88	72	142	306	51	780	121	144	472	30
Future Volume (veh/h)	151	446	88	72	142	306	51	780	121	144	472	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.84	0.94		0.83	0.85		0.78	0.99		0.76
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	485	96	78	154	333	55	848	132	157	513	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	387	1005	374	330	518	497	326	1299	574	302	1642	105
Arrive On Green	0.08	0.28	0.28	0.08	0.28	0.28	0.37	0.37	0.37	0.08	0.50	0.50
Sat Flow, veh/h	1781	3554	1324	1781	1870	1319	727	3554	1236	1781	3316	212
Grp Volume(v), veh/h	164	485	96	78	154	333	55	848	132	157	273	273
Grp Sat Flow(s),veh/h/ln	1781	1777	1324	1781	1870	1319	727	1777	1236	1781	1777	1751
Q Serve(g_s), s	7.8	13.6	6.7	3.5	7.8	26.0	6.2	23.9	8.0	6.2	11.0	11.2
Cycle Q Clear(g_c), s	7.8	13.6	6.7	3.5	7.8	26.0	6.2	23.9	8.0	6.2	11.0	11.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	387	1005	374	330	518	497	326	1299	574	302	880	867
V/C Ratio(X)	0.42	0.48	0.26	0.24	0.30	0.67	0.17	0.65	0.23	0.52	0.31	0.31
Avail Cap(c_a), veh/h	393	1036	386	347	552	520	326	1299	574	338	880	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	0.92	0.92	0.92
Uniform Delay (d), s/veh	27.4	35.8	33.3	27.0	34.2	32.9	26.1	31.7	20.9	22.7	18.1	18.1
Incr Delay (d2), s/veh	0.7	0.4	0.4	0.4	0.3	3.1	1.0	2.3	0.8	1.3	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	10.0	4.0	2.8	6.5	13.5	2.1	15.6	4.4	4.8	8.1	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	36.1	33.6	27.3	34.5	36.1	27.1	34.0	21.7	24.0	18.9	19.0
LnGrp LOS	C	D	C	C	C	D	C	C	C	C	B	B
Approach Vol, veh/h		745			565			1035			703	
Approach Delay, s/veh		34.0			34.4			32.0			20.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		65.2	15.6	39.2	15.5	49.7	14.9	39.9
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s		* 57	10.4	* 35	12.4	* 39	10.4	* 35
Max Q Clear Time (g_c+I1), s		13.2	9.8	28.0	8.2	25.9	5.5	15.6
Green Ext Time (p_c), s		3.8	0.0	1.5	0.1	5.8	0.1	3.5

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	446	88	72	142	306	51	780	121	144	472	30
Future Volume (veh/h)	151	446	88	72	142	306	51	780	121	144	472	30
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.93		0.84	0.94		0.83	0.85		0.78	0.99		0.76
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	485	96	78	154	333	55	848	132	157	513	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	387	1005	374	330	518	497	326	1299	574	302	1642	105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.28	0.28	0.08	0.28	0.28	0.37	0.37	0.37	0.08	0.50	0.50
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.1	36.1	33.6	27.3	34.5	36.1	27.1	34.0	21.7	24.0	18.9	19.0
Ln Grp LOS	C	D	C	C	C	D	C	C	C	C	B	B
Approach Vol, veh/h		745			565			1035			703	
Approach Delay, s/veh		34.0			34.4			32.0			20.1	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		4.0	1.1	3.0	1.2	5.3	1.1	3.0
Phs Duration (G+Y+Rc), s		65.2	15.6	39.2	15.5	49.7	14.9	39.9
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s		* 57	10.4	* 35	12.4	* 39	10.4	* 35
Max Allow Headway (MAH), s		5.3	3.8	4.7	3.8	5.2	3.8	5.1
Max Q Clear (g_c+l1), s		13.2	9.8	28.0	8.2	25.9	5.5	15.6
Green Ext Time (g_e), s		3.8	0.0	1.5	0.1	5.8	0.1	3.5
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.99	1.00	0.93	1.00
Prob of Max Out (p_x)		0.00	1.00	0.43	0.71	0.00	0.30	0.03

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			1781		1781	727	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3316		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		212		1319		1236		1324

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		LL (Pr/Pm)		

Lanes in Grp	0	0	1	0	1	1	1	0
Grp Vol (v), veh/h	0	0	164	0	157	55	78	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	1781	727	1781	0
Q Serve Time (g_s), s	0.0	0.0	7.8	0.0	6.2	6.2	3.5	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	7.8	0.0	6.2	6.2	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	845	0	566	727	783	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	33.2	0.0	45.9	43.9	33.2	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	25.4	0.0	20.0	43.9	20.3	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.9	0.0	9.9	6.2	1.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	387	0	302	326	330	0
V/C Ratio (X)	0.00	0.00	0.42	0.00	0.52	0.17	0.24	0.00
Avail Cap (c_a), veh/h	0	0	393	0	338	326	347	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.92	0.88	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	27.4	0.0	22.7	26.1	27.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.0	1.3	1.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	28.1	0.0	24.0	27.1	27.3	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.3	0.0	2.6	1.1	1.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.80	0.00	1.80	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	6.1	0.0	4.8	2.1	2.8	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.59	0.00	1.11	0.36	0.52	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	2	0	2
Grp Vol (v), veh/h	0	273	0	154	0	848	0	485
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	11.0	0.0	7.8	0.0	23.9	0.0	13.6
Cycle Q Clear Time (g_c), s	0.0	11.0	0.0	7.8	0.0	23.9	0.0	13.6
Lane Grp Cap (c), veh/h	0	880	0	518	0	1299	0	1005
V/C Ratio (X)	0.00	0.31	0.00	0.30	0.00	0.65	0.00	0.48
Avail Cap (c_a), veh/h	0	880	0	552	0	1299	0	1036
Upstream Filter (I)	0.00	0.92	0.00	1.00	0.00	0.88	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	34.2	0.0	31.7	0.0	35.8
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.3	0.0	2.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.9	0.0	34.5	0.0	34.0	0.0	36.1
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	3.6	0.0	10.2	0.0	5.9
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.80	0.00	1.47	0.00	1.67
%ile Back of Q (95%), veh/ln	0.0	8.1	0.0	6.5	0.0	15.6	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.87	0.00	0.48	0.00	1.12	0.00	1.70
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	273	0	333	0	132	0	96
Grp Sat Flow (s), veh/h/ln	0	1751	0	1319	0	1236	0	1324
Q Serve Time (g_s), s	0.0	11.2	0.0	26.0	0.0	8.0	0.0	6.7
Cycle Q Clear Time (g_c), s	0.0	11.2	0.0	26.0	0.0	8.0	0.0	6.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.9	0.0	9.3	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	867	0	497	0	574	0	374
V/C Ratio (X)	0.00	0.31	0.00	0.67	0.00	0.23	0.00	0.26
Avail Cap (c_a), veh/h	0	867	0	520	0	574	0	386
Upstream Filter (I)	0.00	0.92	0.00	1.00	0.00	0.88	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	32.9	0.0	20.9	0.0	33.3
Incr Delay (d2), s/veh	0.0	0.9	0.0	3.1	0.0	0.8	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.0	0.0	36.1	0.0	21.7	0.0	33.6
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	8.2	0.0	2.3	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.4	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.56	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.1	0.0	13.5	0.0	4.4	0.0	4.0
%ile Storage Ratio (RQ%)	0.00	0.87	0.00	2.54	0.00	0.32	0.00	0.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	642	48	14	412	6	28
Future Vol, veh/h	642	48	14	412	6	28
Conflicting Peds, #/hr	0	87	87	0	0	11
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	698	52	15	448	7	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	837	0	1289	473
Stage 1	-	-	-	-	811	-
Stage 2	-	-	-	-	478	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	795	-	168	538
Stage 1	-	-	-	-	398	-
Stage 2	-	-	-	-	623	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	740	-	152	496
Mov Cap-2 Maneuver	-	-	-	-	274	-
Stage 1	-	-	-	-	371	-
Stage 2	-	-	-	-	606	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	434	-	-	740	-
HCM Lane V/C Ratio	0.085	-	-	0.021	-
HCM Control Delay (s)	14.1	-	-	10	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	572	7	4	368	92	2	0	5	97	0	103
Future Volume (veh/h)	75	572	7	4	368	92	2	0	5	97	0	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.99		0.95	0.97		0.93	0.95		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	622	8	4	400	100	2	0	5	105	0	112
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	489	2190	28	496	871	218	138	25	278	445	0	416
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	894	3590	46	787	1427	357	317	90	1017	1340	0	1522
Grp Volume(v), veh/h	82	308	322	4	0	500	7	0	0	105	0	112
Grp Sat Flow(s),veh/h/ln	894	1777	1859	787	0	1784	1424	0	0	1340	0	1522
Q Serve(g_s), s	4.9	7.4	7.4	0.2	0.0	13.7	0.0	0.0	0.0	0.5	0.0	5.2
Cycle Q Clear(g_c), s	18.6	7.4	7.4	7.6	0.0	13.7	5.2	0.0	0.0	5.6	0.0	5.2
Prop In Lane	1.00		0.02	1.00		0.20	0.29		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	489	1084	1134	496	0	1088	441	0	0	445	0	416
V/C Ratio(X)	0.17	0.28	0.28	0.01	0.00	0.46	0.02	0.00	0.00	0.24	0.00	0.27
Avail Cap(c_a), veh/h	489	1084	1134	496	0	1088	441	0	0	445	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.00	0.82	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	8.3	8.3	10.1	0.0	9.5	23.9	0.0	0.0	25.8	0.0	25.6
Incr Delay (d2), s/veh	0.7	0.7	0.6	0.0	0.0	1.1	0.1	0.0	0.0	0.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	4.6	4.8	0.1	0.0	8.0	0.2	0.0	0.0	3.2	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.3	8.9	8.9	10.1	0.0	10.7	23.9	0.0	0.0	26.1	0.0	26.0
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		712			504			7			217	
Approach Delay, s/veh		9.7			10.7			23.9			26.0	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	15.7	7.6	20.6	7.2
Green Ext Time (p_c), s	5.9	0.9	7.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	572	7	4	368	92	2	0	5	97	0	103
Future Volume (veh/h)	75	572	7	4	368	92	2	0	5	97	0	103
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.95	0.99		0.95	0.97		0.93	0.95		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	622	8	4	400	100	2	0	5	105	0	112
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	489	2190	28	496	871	218	138	25	278	445	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	15.3	8.9	8.9	10.1	0.0	10.7	23.9	0.0	0.0	26.1	0.0	26.0
Ln Grp LOS	B	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		712			504			7			217	
Approach Delay, s/veh		9.7			10.7			23.9			26.0	
Approach LOS		A			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		4.9		6.3		5.8
Max Q Clear (g_c+l1), s		15.7		7.6		20.6		7.2
Green Ext Time (g_e), s		5.9		0.9		7.3		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.01		0.00		0.04		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		787		1340		894		317
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1427		0		3590		90
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		357		1522		46		1017
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	105	0	82	0	7
Grp Sat Flow (s), veh/h/ln	0	787	0	1340	0	894	0	1424
Q Serve Time (g_s), s	0.0	0.2	0.0	0.5	0.0	4.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.6	0.0	5.6	0.0	18.6	0.0	5.2
Perm LT Sat Flow (s_l), veh/h/ln	0	787	0	1340	0	894	0	1267
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1319	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	47.5	0.0	19.4	0.0	41.2	0.0	19.4
Perm LT Q Serve Time (g_ps), s	0.0	0.2	0.0	0.5	0.0	4.9	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.29
Lane Grp Cap (c), veh/h	0	496	0	445	0	489	0	441
V/C Ratio (X)	0.00	0.01	0.00	0.24	0.00	0.17	0.00	0.02
Avail Cap (c_a), veh/h	0	496	0	445	0	489	0	441
Upstream Filter (I)	0.00	0.82	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.1	0.0	25.8	0.0	14.5	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.1	0.0	26.1	0.0	15.3	0.0	23.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.8	0.0	0.9	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	3.2	0.0	1.8	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	2.17	0.00	0.31	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	308	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	500	0	112	0	322	0	0
Grp Sat Flow (s), veh/h/ln	0	1784	0	1522	0	1859	0	0
Q Serve Time (g_s), s	0.0	13.7	0.0	5.2	0.0	7.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	5.2	0.0	7.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.20	0.00	1.00	0.00	0.02	0.00	0.71
Lane Grp Cap (c), veh/h	0	1088	0	416	0	1134	0	0
V/C Ratio (X)	0.00	0.46	0.00	0.27	0.00	0.28	0.00	0.00
Avail Cap (c_a), veh/h	0	1088	0	416	0	1134	0	0
Upstream Filter (I)	0.00	0.82	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.5	0.0	25.6	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.3	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.7	0.0	26.0	0.0	8.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	1.9	0.0	2.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.68	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	3.4	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	2.30	0.00	0.56	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	444	209	128	965	799	289
Future Volume (veh/h)	444	209	128	965	799	289
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	483	227	139	1049	868	314
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	602	276	166	2612	2162	931
Arrive On Green	0.17	0.17	0.09	0.74	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1530
Grp Volume(v), veh/h	483	227	139	1049	868	314
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1530
Q Serve(g_s), s	16.1	16.6	9.2	13.3	0.0	0.0
Cycle Q Clear(g_c), s	16.1	16.6	9.2	13.3	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	602	276	166	2612	2162	931
V/C Ratio(X)	0.80	0.82	0.84	0.40	0.40	0.34
Avail Cap(c_a), veh/h	950	436	223	2612	2162	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.91	0.91	0.09	0.09	0.85	0.85
Uniform Delay (d), s/veh	47.6	47.8	53.5	6.0	0.0	0.0
Incr Delay (d2), s/veh	2.5	6.3	2.0	0.0	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.3	11.2	5.1	5.1	0.3	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.0	54.1	55.5	6.0	0.5	0.8
LnGrp LOS	D	D	E	A	A	A
Approach Vol, veh/h	710			1188	1182	
Approach Delay, s/veh	51.3			11.8	0.6	
Approach LOS	D			B	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.2	77.9		26.9		93.1
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	11.2	2.0		18.6		15.3
Green Ext Time (p_c), s	0.1	13.1		2.3		4.8

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	444	209	128	965	799	289
Future Volume (veh/h)	444	209	128	965	799	289
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	483	227	139	1049	868	314
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	602	276	166	2612	2162	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.17	0.17	0.09	0.74	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	50.0	54.1	55.5	6.0	0.5	0.8
Ln Grp LOS	D	D	E	A	A	A
Approach Vol, veh/h	710			1188	1182	
Approach Delay, s/veh	51.3			11.8	0.6	
Approach LOS	D			B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	15.2	77.9		26.9		93.1		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.8		3.9		5.0		
Max Q Clear (g_c+I1), s	11.2	2.0		18.6		15.3		
Green Ext Time (g_e), s	0.1	13.1		2.3		4.8		
Prob of Phs Call (p_c)	0.99	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.95	0.48		0.03		0.56		
Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1530		1585		0		
Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	139	0	0	483	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	9.2	0.0	0.0	16.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	9.2	0.0	0.0	16.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	166	0	0	602	0	0	0	0
V/C Ratio (X)	0.84	0.00	0.00	0.80	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.09	0.00	0.00	0.91	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	53.5	0.0	0.0	47.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	55.5	0.0	0.0	50.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.1	0.0	0.0	6.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.24	1.00	0.00	1.59	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	5.1	0.0	0.0	11.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.62	0.00	0.00	2.61	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	868	0	0	0	1049	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	13.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	13.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2162	0	0	0	2612	0	0
V/C Ratio (X)	0.00	0.40	0.00	0.00	0.00	0.40	0.00	0.00
Avail Cap (c_a), veh/h	0	2162	0	0	0	2612	0	0
Upstream Filter (I)	0.00	0.85	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.5	0.0	0.0	0.0	6.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.24	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	5.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	314	0	227	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1530	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	931	0	276	0	0	0	0
V/C Ratio (X)	0.00	0.34	0.00	0.82	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	931	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.85	0.00	0.91	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	47.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	6.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.8	0.0	54.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.59	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	11.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.26	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		16.6						
HCM 6th LOS		B						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	215	44	1211	217	39	874
Future Volume (veh/h)	215	44	1211	217	39	874
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	48	1316	236	42	950
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	265	54	1955	347	56	2537
Arrive On Green	0.19	0.19	1.00	1.00	0.03	0.71
Sat Flow, veh/h	1415	290	3106	534	1781	3647
Grp Volume(v), veh/h	283	0	770	782	42	950
Grp Sat Flow(s),veh/h/ln	1712	0	1777	1769	1781	1777
Q Serve(g_s), s	19.3	0.0	0.0	0.0	2.8	12.5
Cycle Q Clear(g_c), s	19.3	0.0	0.0	0.0	2.8	12.5
Prop In Lane	0.83	0.17		0.30	1.00	
Lane Grp Cap(c), veh/h	320	0	1153	1148	56	2537
V/C Ratio(X)	0.88	0.00	0.67	0.68	0.75	0.37
Avail Cap(c_a), veh/h	328	0	1153	1148	223	2537
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.70	0.70	0.68	0.68
Uniform Delay (d), s/veh	47.5	0.0	0.0	0.0	57.7	6.7
Incr Delay (d2), s/veh	23.3	0.0	2.2	2.3	12.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.5	0.0	1.2	1.3	2.6	6.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	70.8	0.0	2.2	2.3	70.5	7.0
LnGrp LOS	E	A	A	A	E	A
Approach Vol, veh/h	283		1552			992
Approach Delay, s/veh	70.8		2.2			9.7
Approach LOS	E		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.6		27.4	7.8	84.8
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		14.5		21.3	4.8	2.0
Green Ext Time (p_c), s		6.7		0.2	0.0	37.8

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	215	44	1211	217	39	874
Future Volume (veh/h)	215	44	1211	217	39	874
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	48	1316	236	42	950
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	265	54	1955	347	56	2537
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.19	0.19	1.00	1.00	0.03	0.71
Unsig. Movement Delay						
Ln Grp Delay, s/veh	70.8	0.0	2.2	2.3	70.5	7.0
Ln Grp LOS	E	A	A	A	E	A
Approach Vol, veh/h	283		1552			992
Approach Delay, s/veh	70.8		2.2			9.7
Approach LOS	E		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		92.6		27.4	7.8	84.8		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+l1), s		14.5		21.3	4.8	2.0		
Green Ext Time (g_e), s		6.7		0.2	0.0	37.8		
Prob of Phs Call (p_c)		1.00		1.00	0.75	1.00		
Prob of Max Out (p_x)		0.81		1.00	0.00	0.43		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1415	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		6		3106		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		290		534		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	283	42	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1712	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	19.3	2.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.3	2.8	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	77.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.83	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	320	56	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.88	0.75	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	328	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.68	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	47.5	57.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	23.3	12.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	70.8	70.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.2	1.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.1	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.51	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	15.5	2.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.31	0.49	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	950	0	0	0	770	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2537	0	0	0	1153	0	0
V/C Ratio (X)	0.00	0.37	0.00	0.00	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	2537	0	0	0	1153	0	0
Upstream Filter (I)	0.00	0.68	0.00	0.00	0.00	0.70	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	2.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.0	0.0	0.0	0.0	2.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.67	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	6.9	0.0	0.0	0.0	1.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.00	0.00	0.32	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	782	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1769	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.17	0.00	0.30	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1148	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1148	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	48	12	45	49	20	11	71	29	2	54	10
Future Vol, veh/h	18	48	12	45	49	20	11	71	29	2	54	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	52	13	49	53	22	12	77	32	2	59	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	8.3	8.1	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	23%	39%	3%
Vol Thru, %	64%	62%	43%	82%
Vol Right, %	26%	15%	18%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	111	78	114	66
LT Vol	11	18	45	2
Through Vol	71	48	49	54
RT Vol	29	12	20	10
Lane Flow Rate	121	85	124	72
Geometry Grp	1	1	1	1
Degree of Util (X)	0.146	0.105	0.153	0.089
Departure Headway (Hd)	4.358	4.464	4.44	4.463
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	824	804	809	804
Service Time	2.377	2.484	2.459	2.484
HCM Lane V/C Ratio	0.147	0.106	0.153	0.09
HCM Control Delay	8.1	8	8.3	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.4	0.5	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	25	15	82	57	108	45	818	108	51	569	25
Future Volume (veh/h)	12	25	15	82	57	108	45	818	108	51	569	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.97		0.96	0.97		0.85	0.99		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	27	16	89	62	117	49	889	117	55	618	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	162	80	218	136	321	537	2066	272	377	2306	101
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	178	772	380	734	649	1524	765	3085	406	554	3444	150
Grp Volume(v), veh/h	56	0	0	151	0	117	49	512	494	55	318	327
Grp Sat Flow(s),veh/h/ln	1330	0	0	1383	0	1524	765	1777	1715	554	1777	1817
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	5.9	2.5	12.0	12.0	4.6	6.5	6.5
Cycle Q Clear(g_c), s	9.7	0.0	0.0	9.6	0.0	5.9	9.0	12.0	12.0	16.6	6.5	6.5
Prop In Lane	0.23		0.29	0.59		1.00	1.00		0.24	1.00		0.08
Lane Grp Cap(c), veh/h	329	0	0	354	0	321	537	1190	1148	377	1190	1217
V/C Ratio(X)	0.17	0.00	0.00	0.43	0.00	0.37	0.09	0.43	0.43	0.15	0.27	0.27
Avail Cap(c_a), veh/h	489	0	0	510	0	478	537	1190	1148	377	1190	1217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.46	0.46	0.46	0.96	0.96	0.96
Uniform Delay (d), s/veh	29.1	0.0	0.0	31.6	0.0	30.4	7.8	6.9	6.9	10.8	6.0	6.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.8	0.0	0.7	0.2	0.5	0.5	0.8	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	0.0	0.0	5.4	0.0	4.0	0.7	6.1	5.9	1.1	3.9	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.3	0.0	0.0	32.4	0.0	31.1	7.9	7.4	7.4	11.5	6.5	6.5
LnGrp LOS	C	A	A	C	A	C	A	A	A	B	A	A
Approach Vol, veh/h		56			268			1055			700	
Approach Delay, s/veh		29.3			31.8			7.5			6.9	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	65.3	24.7	65.3	24.7
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	18.6	11.6	14.0	11.7
Green Ext Time (p_c), s	4.9	1.2	8.4	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	25	15	82	57	108	45	818	108	51	569	25
Future Volume (veh/h)	12	25	15	82	57	108	45	818	108	51	569	25
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.96	0.97		0.96	0.97		0.85	0.99		0.87
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	27	16	89	62	117	49	889	117	55	618	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	87	162	80	218	136	321	537	2066	272	377	2306	101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.67	0.67	0.67	0.67	0.67	0.67
Unsig. Movement Delay												
Ln Grp Delay, s/veh	29.3	0.0	0.0	32.4	0.0	31.1	7.9	7.4	7.4	11.5	6.5	6.5
Ln Grp LOS	C	A	A	C	A	C	A	A	A	B	A	A
Approach Vol, veh/h		56			268			1055			700	
Approach Delay, s/veh		29.3			31.8			7.5			6.9	
Approach LOS		C			C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		65.3		24.7		65.3		24.7
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.3		4.9		5.2		5.6
Max Q Clear (g_c+I1), s		18.6		11.6		14.0		11.7
Green Ext Time (g_e), s		4.9		1.2		8.4		0.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		554		734		765		178
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3444		649		3085		772
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		150		1524		406		380
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	55	0	151	0	49	0	56
Grp Sat Flow (s), veh/h/ln	0	554	0	1383	0	765	0	1330
Q Serve Time (g_s), s	0.0	4.6	0.0	0.0	0.0	2.5	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	16.6	0.0	9.6	0.0	9.0	0.0	9.7
Perm LT Sat Flow (s_l), veh/h/ln	0	554	0	1348	0	765	0	1197
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1165	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	60.3	0.0	18.9	0.0	60.3	0.0	18.9
Perm LT Serve Time (g_u), s	0.0	48.2	0.0	9.2	0.0	53.8	0.0	9.3
Perm LT Q Serve Time (g_ps), s	0.0	4.6	0.0	0.0	0.0	2.5	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	6.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	2.3
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.59	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	377	0	354	0	537	0	329
V/C Ratio (X)	0.00	0.15	0.00	0.43	0.00	0.09	0.00	0.17
Avail Cap (c_a), veh/h	0	377	0	510	0	537	0	489
Upstream Filter (I)	0.00	0.96	0.00	1.00	0.00	0.46	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.8	0.0	31.6	0.0	7.8	0.0	29.1
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.8	0.0	0.2	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.5	0.0	32.4	0.0	7.9	0.0	29.3
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	2.9	0.0	0.4	0.0	1.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.1	0.0	5.4	0.0	0.7	0.0	1.8
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.29	0.00	0.15	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	318	0	0	0	512	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	6.5	0.0	0.0	0.0	12.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.5	0.0	0.0	0.0	12.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1190	0	0	0	1190	0	0
V/C Ratio (X)	0.00	0.27	0.00	0.00	0.00	0.43	0.00	0.00
Avail Cap (c_a), veh/h	0	1190	0	0	0	1190	0	0
Upstream Filter (I)	0.00	0.96	0.00	0.00	0.00	0.46	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.0	0.0	0.0	0.0	6.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.5	0.0	0.0	0.0	7.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	0.0	0.0	3.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.56	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	3.9	0.0	0.0	0.0	6.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.00	0.00	0.21	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	327	0	117	0	494	0	0
Grp Sat Flow (s), veh/h/ln	0	1817	0	1524	0	1715	0	0
Q Serve Time (g_s), s	0.0	6.5	0.0	5.9	0.0	12.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.5	0.0	5.9	0.0	12.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	1.00	0.00	0.24	0.00	0.29
Lane Grp Cap (c), veh/h	0	1217	0	321	0	1148	0	0
V/C Ratio (X)	0.00	0.27	0.00	0.37	0.00	0.43	0.00	0.00
Avail Cap (c_a), veh/h	0	1217	0	478	0	1148	0	0
Upstream Filter (I)	0.00	0.96	0.00	1.00	0.00	0.46	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.0	0.0	30.4	0.0	6.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.7	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.5	0.0	31.1	0.0	7.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	2.2	0.0	3.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.57	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	4.0	0.0	4.0	0.0	5.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.22	0.00	0.21	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	782	529	319	1336	0	0	0	0	417	2	140
Future Volume (veh/h)	0	782	529	319	1336	0	0	0	0	417	2	140
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	850	575	347	1452	0				304	211	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1303	856	220	2284	0				445	252	181
Arrive On Green	0.00	0.64	0.64	0.64	0.64	0.00				0.25	0.25	0.25
Sat Flow, veh/h	0	2121	1332	376	3647	0				1781	1008	726
Grp Volume(v), veh/h	0	742	683	347	1452	0				304	0	363
Grp Sat Flow(s),veh/h/ln	0	1777	1583	376	1777	0				1781	0	1733
Q Serve(g_s), s	0.0	23.0	24.4	33.4	22.2	0.0				13.9	0.0	17.9
Cycle Q Clear(g_c), s	0.0	23.0	24.4	57.8	22.2	0.0				13.9	0.0	17.9
Prop In Lane	0.00		0.84	1.00		0.00				1.00		0.42
Lane Grp Cap(c), veh/h	0	1142	1017	220	2284	0				445	0	433
V/C Ratio(X)	0.00	0.65	0.67	1.58	0.64	0.00				0.68	0.00	0.84
Avail Cap(c_a), veh/h	0	1142	1017	220	2284	0				653	0	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.55	0.55	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	9.9	10.1	34.4	9.7	0.0				30.6	0.0	32.0
Incr Delay (d2), s/veh	0.0	2.9	3.5	273.1	0.8	0.0				1.9	0.0	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.1	12.6	35.7	10.7	0.0				9.9	0.0	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.7	13.7	307.4	10.5	0.0				32.4	0.0	38.6
LnGrp LOS	A	B	B	F	B	A				C	A	D
Approach Vol, veh/h		1425			1799						667	
Approach Delay, s/veh		13.2			67.8						35.8	
Approach LOS		B			E						D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		62.5		27.5		62.5
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7
Max Green Setting (Gmax), s		* 47		33.0		* 47
Max Q Clear Time (g_c+I1), s		59.8		19.9		26.4
Green Ext Time (p_c), s		0.0		2.6		10.8

Intersection Summary	
HCM 6th Ctrl Delay	42.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	782	529	319	1336	0	0	0	0	417	2	140
Future Volume (veh/h)	0	782	529	319	1336	0	0	0	0	417	2	140
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	850	575	347	1452	0				304	211	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	1303	856	220	2284	0				445	252	181
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.64	0.64	0.64	0.64	0.00				0.25	0.25	0.25
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	12.7	13.7	307.4	10.5	0.0				32.4	0.0	38.6
Ln Grp LOS	A	B	B	F	B	A				C	A	D
Approach Vol, veh/h		1425			1799						667	
Approach Delay, s/veh		13.2			67.8						35.8	
Approach LOS		B			E						D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		62.5		27.5		62.5		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		6.2		4.5		5.3		
Max Q Clear (g_c+I1), s		59.8		19.9		26.4		
Green Ext Time (g_e), s		0.0		2.6		10.8		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		0.11		0.44		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		376		1781		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1008		2121		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		726		1332		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	347	0	304	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	376	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	33.4	0.0	13.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	57.8	0.0	13.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	376	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	57.8	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	33.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	33.4	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	57.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	220	0	445	0	0	0	0
V/C Ratio (X)	0.00	1.58	0.00	0.68	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	220	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.55	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	34.4	0.0	30.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	273.1	0.0	1.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	307.4	0.0	32.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.8	0.0	5.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	16.7	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.66	0.00	1.68	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	35.7	0.0	9.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.76	0.00	0.52	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	31.9	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1452	0	0	0	742	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.2	0.0	0.0	0.0	23.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.2	0.0	0.0	0.0	23.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2284	0	0	0	1142	0	0
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.65	0.00	0.00
Avail Cap (c_a), veh/h	0	2284	0	0	0	1142	0	0
Upstream Filter (I)	0.00	0.55	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.7	0.0	0.0	0.0	9.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	2.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.5	0.0	0.0	0.0	12.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	0.0	0.0	7.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.9	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.00	0.00	1.57	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	10.7	0.0	0.0	0.0	13.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.83	0.00	0.00	0.00	0.70	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	363	0	683	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1733	0	1583	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	17.9	0.0	24.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.9	0.0	24.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.42	0.00	0.84	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	433	0	1017	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.84	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	636	0	1017	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	32.0	0.0	10.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.5	0.0	3.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	38.6	0.0	13.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.1	0.0	7.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	1.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.58	0.00	1.58	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	12.5	0.0	12.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.66	0.00	0.68	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	1036	0	0	1169	563	485	4	406	0	0	0
Future Volume (veh/h)	152	1036	0	0	1169	563	485	4	406	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	165	1126	0	0	1271	612	486	61	441			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	133	2065	0	0	1978	908	523	57	415			
Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Sat Flow, veh/h	241	3647	0	0	3572	1563	1781	196	1414			
Grp Volume(v), veh/h	165	1126	0	0	1271	612	486	0	502			
Grp Sat Flow(s),veh/h/ln	241	1777	0	0	1702	1563	1781	0	1609			
Q Serve(g_s), s	19.6	0.0	0.0	0.0	31.0	32.7	23.9	0.0	26.4			
Cycle Q Clear(g_c), s	52.3	0.0	0.0	0.0	31.0	32.7	23.9	0.0	26.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.88			
Lane Grp Cap(c), veh/h	133	2065	0	0	1978	908	523	0	472			
V/C Ratio(X)	1.24	0.55	0.00	0.00	0.64	0.67	0.93	0.00	1.06			
Avail Cap(c_a), veh/h	133	2065	0	0	1978	908	523	0	472			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.60	0.60	0.00	0.00	0.48	0.48	1.00	0.00	1.00			
Uniform Delay (d), s/veh	22.3	0.0	0.0	0.0	27.8	28.5	30.9	0.0	31.8			
Incr Delay (d2), s/veh	142.2	0.6	0.0	0.0	0.3	1.0	23.4	0.0	59.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	18.1	0.3	0.0	0.0	18.2	17.9	18.9	0.0	25.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	164.5	0.6	0.0	0.0	28.1	29.4	54.3	0.0	91.2			
LnGrp LOS	F	A	A	A	C	C	D	A	F			
Approach Vol, veh/h		1291			1883			988				
Approach Delay, s/veh		21.6			28.5			73.0				
Approach LOS		C			C			E				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	58.0	32.0	58.0
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	54.3	28.4	34.7
Green Ext Time (p_c), s	0.0	0.0	12.3

Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	1036	0	0	1169	563	485	4	406	0	0	0
Future Volume (veh/h)	152	1036	0	0	1169	563	485	4	406	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	165	1126	0	0	1271	612	486	61	441			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	133	2065	0	0	1978	908	523	57	415			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	164.5	0.6	0.0	0.0	28.1	29.4	54.3	0.0	91.2			
Ln Grp LOS	F	A	A	A	C	C	D	A	F			
Approach Vol, veh/h		1291			1883			988				
Approach Delay, s/veh		21.6			28.5			73.0				
Approach LOS		C			C			E				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		6.4		4.5		5.2		
Max Q Clear (g_c+I1), s		54.3		28.4		34.7		
Green Ext Time (g_e), s		0.0		0.0		12.3		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		1.00		0.67		

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		241		1781		0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		196		3572		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1414		1563		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	165	0	486	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	241	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	19.6	0.0	23.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	52.3	0.0	23.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	241	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	52.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	52.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	133	0	523	0	0	0	0
V/C Ratio (X)	0.00	1.24	0.00	0.93	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	133	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.60	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.3	0.0	30.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	142.2	0.0	23.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	164.5	0.0	54.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.6	0.0	9.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	5.2	0.0	3.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.67	0.00	1.46	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	13.1	0.0	18.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.02	0.00	1.05	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1126	0	0	0	1271	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2065	0	0	0	1978	0	0
V/C Ratio (X)	0.00	0.55	0.00	0.00	0.00	0.64	0.00	0.00
Avail Cap (c_a), veh/h	0	2065	0	0	0	1978	0	0
Upstream Filter (I)	0.00	0.60	0.00	0.00	0.00	0.48	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	27.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	0.0	0.0	28.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	13.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.30	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	18.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.51	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	502	0	612	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1609	0	1563	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	26.4	0.0	32.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	26.4	0.0	32.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.88	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	472	0	908	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.06	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	472	0	908	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.48	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.8	0.0	28.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	59.4	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	91.2	0.0	29.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.6	0.0	13.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	7.8	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.45	0.00	1.31	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	25.1	0.0	17.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.40	0.00	0.50	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1090	190	169	1344	10	153	211	136	46	241	226
Future Volume (veh/h)	164	1090	190	169	1344	10	153	211	136	46	241	226
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.98		0.95	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	1185	207	184	1461	11	166	229	148	50	262	246
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	385	1555	270	272	1853	797	209	499	518	242	499	403
Arrive On Green	0.05	0.35	0.35	0.14	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1781	3009	522	1781	3554	1529	877	1870	1512	986	1870	1512
Grp Volume(v), veh/h	178	696	696	184	1461	11	166	229	148	50	262	246
Grp Sat Flow(s),veh/h/ln	1781	1777	1754	1781	1777	1529	877	1870	1512	986	1870	1512
Q Serve(g_s), s	4.1	31.3	31.8	4.4	0.0	0.0	13.2	9.2	6.5	4.0	10.8	12.8
Cycle Q Clear(g_c), s	4.1	31.3	31.8	4.4	0.0	0.0	24.0	9.2	6.5	13.2	10.8	12.8
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	385	918	906	272	1853	797	209	499	518	242	499	403
V/C Ratio(X)	0.46	0.76	0.77	0.68	0.79	0.01	0.79	0.46	0.29	0.21	0.53	0.61
Avail Cap(c_a), veh/h	403	918	906	322	1853	797	209	499	518	242	499	403
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	24.4	24.6	16.4	0.0	0.0	39.8	27.6	21.8	33.1	28.1	28.9
Incr Delay (d2), s/veh	0.7	4.6	4.9	4.4	3.5	0.0	25.9	3.0	1.4	1.9	3.9	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	20.2	20.3	3.6	1.6	0.0	8.9	7.9	4.4	1.9	9.0	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.5	29.1	29.5	20.8	3.5	0.0	65.7	30.6	23.2	35.0	32.1	35.6
LnGrp LOS	A	C	C	C	A	A	E	C	C	D	C	D
Approach Vol, veh/h		1570			1656			543			558	
Approach Delay, s/veh		27.0			5.4			39.3			33.9	
Approach LOS		C			A			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	51.9		29.0	9.5	51.5		29.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	7.0	* 46		* 24	9.0	* 44		* 24
Max Q Clear Time (g_c+I1), s	6.1	2.0		15.2	6.4	33.8		26.0
Green Ext Time (p_c), s	0.0	15.9		1.8	0.1	6.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1090	190	169	1344	10	153	211	136	46	241	226
Future Volume (veh/h)	164	1090	190	169	1344	10	153	211	136	46	241	226
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	1.00		0.96	0.98		0.95	0.98		0.95
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	1185	207	184	1461	11	166	229	148	50	262	246
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	385	1555	270	272	1853	797	209	499	518	242	499	403
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.35	0.35	0.14	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.5	29.1	29.5	20.8	3.5	0.0	65.7	30.6	23.2	35.0	32.1	35.6
Ln Grp LOS	A	C	C	C	A	A	E	C	C	D	C	D
Approach Vol, veh/h		1570			1656			543			558	
Approach Delay, s/veh		27.0			5.4			39.3			33.9	
Approach LOS		C			A			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	9.1	51.9		29.0	9.5	51.5		29.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	7.0	* 46		* 24	9.0	* 44		* 24
Max Allow Headway (MAH), s	3.8	5.1		4.7	3.8	5.2		5.0
Max Q Clear (g_c+I1), s	6.1	2.0		15.2	6.4	33.8		26.0
Green Ext Time (g_e), s	0.0	15.9		1.8	0.1	6.3		0.0
Prob of Phs Call (p_c)	0.99	1.00		1.00	0.99	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			986	1781			877

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3009		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1529		1512		522		1512

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	178	0	0	50	184	0	0	166
Grp Sat Flow (s), veh/h/ln	1781	0	0	986	1781	0	0	877
Q Serve Time (g_s), s	4.1	0.0	0.0	4.0	4.4	0.0	0.0	13.2
Cycle Q Clear Time (g_c), s	4.1	0.0	0.0	13.2	4.4	0.0	0.0	24.0
Perm LT Sat Flow (s_l), veh/h/ln	358	0	0	986	388	0	0	877
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.5	0.0	0.0	24.0	46.5	0.0	0.0	24.0
Perm LT Serve Time (g_u), s	46.5	0.0	0.0	14.8	14.7	0.0	0.0	13.2
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	4.0	14.7	0.0	0.0	13.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	385	0	0	242	272	0	0	209
V/C Ratio (X)	0.46	0.00	0.00	0.21	0.68	0.00	0.00	0.79
Avail Cap (c_a), veh/h	403	0	0	242	322	0	0	209
Upstream Filter (I)	0.78	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	8.8	0.0	0.0	33.1	16.4	0.0	0.0	39.8
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.9	4.4	0.0	0.0	25.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.5	0.0	0.0	35.0	20.8	0.0	0.0	65.7
1st-Term Q (Q1), veh/ln	1.5	0.0	0.0	0.9	1.7	0.0	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.1	0.3	0.0	0.0	1.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.72
%ile Back of Q (95%), veh/ln	2.8	0.0	0.0	1.9	3.6	0.0	0.0	8.9
%ile Storage Ratio (RQ%)	0.47	0.00	0.00	0.28	0.65	0.00	0.00	1.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1461	0	262	0	696	0	229
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	10.8	0.0	31.3	0.0	9.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.8	0.0	31.3	0.0	9.2
Lane Grp Cap (c), veh/h	0	1853	0	499	0	918	0	499
V/C Ratio (X)	0.00	0.79	0.00	0.53	0.00	0.76	0.00	0.46
Avail Cap (c_a), veh/h	0	1853	0	499	0	918	0	499
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.78	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.1	0.0	24.4	0.0	27.6
Incr Delay (d2), s/veh	0.0	3.5	0.0	3.9	0.0	4.6	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.5	0.0	32.1	0.0	29.1	0.0	30.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.7	0.0	13.5	0.0	4.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.5	0.0	1.2	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.72	0.00	1.38	0.00	1.78
%ile Back of Q (95%), veh/ln	0.0	1.6	0.0	9.0	0.0	20.2	0.0	7.9
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.34	0.00	0.57	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	11	0	246	0	696	0	148
Grp Sat Flow (s), veh/h/ln	0	1529	0	1512	0	1754	0	1512
Q Serve Time (g_s), s	0.0	0.0	0.0	12.8	0.0	31.8	0.0	6.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.8	0.0	31.8	0.0	6.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.30	0.00	1.00
Lane Grp Cap (c), veh/h	0	797	0	403	0	906	0	518
V/C Ratio (X)	0.00	0.01	0.00	0.61	0.00	0.77	0.00	0.29
Avail Cap (c_a), veh/h	0	797	0	403	0	906	0	518
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.78	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.9	0.0	24.6	0.0	21.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.7	0.0	4.9	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	35.6	0.0	29.5	0.0	23.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.5	0.0	13.5	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	1.2	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.71	0.00	1.38	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	9.1	0.0	20.3	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.30	0.00	0.57	0.00	1.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	667	229	71	1171	137	171	599	80	100	448	154
Future Volume (veh/h)	217	667	229	71	1171	137	171	599	80	100	448	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.99		0.91	0.94		0.70	1.00		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	236	725	249	77	1273	149	186	651	87	109	487	167
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	977	777	186	1321	538	230	812	108	225	961	326
Arrive On Green	0.11	0.52	0.52	0.37	0.37	0.37	0.27	0.27	0.27	0.06	0.38	0.38
Sat Flow, veh/h	1781	1870	1487	572	3554	1447	728	2980	396	1781	2501	847
Grp Volume(v), veh/h	236	725	249	77	1273	149	186	387	351	109	344	310
Grp Sat Flow(s),veh/h/ln	1781	1870	1487	572	1777	1447	728	1777	1600	1781	1777	1572
Q Serve(g_s), s	11.1	36.3	11.5	14.6	42.1	8.7	28.0	24.3	24.6	5.1	17.8	18.1
Cycle Q Clear(g_c), s	11.1	36.3	11.5	32.7	42.1	8.7	32.7	24.3	24.6	5.1	17.8	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.54
Lane Grp Cap(c), veh/h	256	977	777	186	1321	538	230	484	436	225	683	604
V/C Ratio(X)	0.92	0.74	0.32	0.41	0.96	0.28	0.81	0.80	0.81	0.49	0.50	0.51
Avail Cap(c_a), veh/h	256	979	778	186	1324	539	230	484	436	228	683	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.42	0.42	0.42	0.66	0.66	0.66	0.97	0.97	0.97
Uniform Delay (d), s/veh	33.8	22.3	16.4	42.2	36.9	26.4	47.2	40.6	40.7	30.1	28.2	28.3
Incr Delay (d2), s/veh	35.6	3.1	0.2	0.6	9.2	0.1	18.2	8.9	10.1	1.6	2.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.6	22.9	7.1	3.6	24.3	4.9	10.2	16.2	15.1	4.0	12.5	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.5	25.4	16.7	42.8	46.1	26.5	65.4	49.4	50.8	31.7	30.8	31.3
LnGrp LOS	E	C	B	D	D	C	E	D	D	C	C	C
Approach Vol, veh/h		1210			1499			924			763	
Approach Delay, s/veh		32.2			44.0			53.2			31.1	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	51.6	18.1	50.3	13.4	38.2	68.4
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 46	* 13	* 45	8.0	* 32	* 63
Max Q Clear Time (g_c+I1), s	20.1	13.1	44.1	7.1	34.7	38.3
Green Ext Time (p_c), s	4.3	0.0	0.5	0.0	0.0	6.7

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	667	229	71	1171	137	171	599	80	100	448	154
Future Volume (veh/h)	217	667	229	71	1171	137	171	599	80	100	448	154
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.94	0.99		0.91	0.94		0.70	1.00		0.87
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	236	725	249	77	1273	149	186	651	87	109	487	167
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	256	977	777	186	1321	538	230	812	108	225	961	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.52	0.52	0.37	0.37	0.37	0.27	0.27	0.27	0.06	0.38	0.38
Unsig. Movement Delay												
Ln Grp Delay, s/veh	69.5	25.4	16.7	42.8	46.1	26.5	65.4	49.4	50.8	31.7	30.8	31.3
Ln Grp LOS	E	C	B	D	D	C	E	D	D	C	C	C
Approach Vol, veh/h		1210			1499			924			763	
Approach Delay, s/veh		32.2			44.0			53.2			31.1	
Approach LOS		C			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		51.6	18.1	50.3	13.4	38.2		68.4
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 46	* 13	* 45	8.0	* 32		* 63
Max Allow Headway (MAH), s		5.3	3.8	5.3	3.8	5.4		5.0
Max Q Clear (g_c+I1), s		20.1	13.1	44.1	7.1	34.7		38.3
Green Ext Time (g_e), s		4.3	0.0	0.5	0.0	0.0		6.7
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.97	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		0.09

Left-Turn Movement Data						
Assigned Mvmt			3	7	5	1
Mvmt Sat Flow, veh/h			1781	572	1781	728

Through Movement Data						
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2501		3554		2980		1870

Right-Turn Movement Data						
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		847		1447		396		1487

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment		L (Pr/Pm)		LL (Pr/Pm)		L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	236	77	109	186	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	572	1781	728	0	0
Q Serve Time (g_s), s	0.0	0.0	11.1	14.6	5.1	28.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	11.1	32.7	5.1	32.7	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	377	572	720	728	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	46.6	44.6	34.7	32.7	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.5	26.4	8.2	28.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.5	14.6	4.7	28.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	256	186	225	230	0	0
V/C Ratio (X)	0.00	0.00	0.92	0.41	0.49	0.81	0.00	0.00
Avail Cap (c_a), veh/h	0	0	256	186	228	230	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.42	0.97	0.66	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.8	42.2	30.1	47.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	35.6	0.6	1.6	18.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	69.5	42.8	31.7	65.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	7.0	2.1	2.1	5.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.5	0.0	0.1	1.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.53	1.74	1.80	1.51	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	14.6	3.6	4.0	10.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.47	0.46	1.13	1.24	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	344	0	1273	0	387	0	725
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	17.8	0.0	42.1	0.0	24.3	0.0	36.3
Cycle Q Clear Time (g_c), s	0.0	17.8	0.0	42.1	0.0	24.3	0.0	36.3
Lane Grp Cap (c), veh/h	0	683	0	1321	0	484	0	977
V/C Ratio (X)	0.00	0.50	0.00	0.96	0.00	0.80	0.00	0.74
Avail Cap (c_a), veh/h	0	683	0	1324	0	484	0	979
Upstream Filter (I)	0.00	0.97	0.00	0.42	0.00	0.66	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.2	0.0	36.9	0.0	40.6	0.0	22.3
Incr Delay (d2), s/veh	0.0	2.6	0.0	9.2	0.0	8.9	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.8	0.0	46.1	0.0	49.4	0.0	25.4
1st-Term Q (Q1), veh/ln	0.0	7.4	0.0	17.9	0.0	10.4	0.0	15.4
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	1.7	0.0	1.2	0.0	0.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	0.00	1.24	0.00	1.39	0.00	1.41
%ile Back of Q (95%), veh/ln	0.0	12.5	0.0	24.3	0.0	16.2	0.0	22.9
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.52	0.00	0.15	0.00	0.77
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	310	0	149	0	351	0	249
Grp Sat Flow (s), veh/h/ln	0	1572	0	1447	0	1600	0	1487
Q Serve Time (g_s), s	0.0	18.1	0.0	8.7	0.0	24.6	0.0	11.5
Cycle Q Clear Time (g_c), s	0.0	18.1	0.0	8.7	0.0	24.6	0.0	11.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.54	0.00	1.00	0.00	0.25	0.00	1.00
Lane Grp Cap (c), veh/h	0	604	0	538	0	436	0	777
V/C Ratio (X)	0.00	0.51	0.00	0.28	0.00	0.81	0.00	0.32
Avail Cap (c_a), veh/h	0	604	0	539	0	436	0	778
Upstream Filter (I)	0.00	0.97	0.00	0.42	0.00	0.66	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	26.4	0.0	40.7	0.0	16.4
Incr Delay (d2), s/veh	0.0	3.0	0.0	0.1	0.0	10.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.3	0.0	26.5	0.0	50.8	0.0	16.7
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	3.0	0.0	9.5	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	1.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.60	0.00	1.61	0.00	1.41	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.6	0.0	4.9	0.0	15.1	0.0	7.1
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	1.03	0.00	0.14	0.00	1.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	671	35	113	977	162	197	746	142	287	616	172
Future Volume (veh/h)	70	671	35	113	977	162	197	746	142	287	616	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.90	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	729	38	123	1062	176	214	811	154	312	670	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	827	648	140	1332	220	222	869	348	220	877	326
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.12	0.24	0.24	0.12	0.25	0.25
Sat Flow, veh/h	448	1870	1465	700	3012	498	1781	3554	1426	1781	3554	1322
Grp Volume(v), veh/h	76	729	38	123	625	613	214	811	154	312	670	187
Grp Sat Flow(s),veh/h/ln	448	1870	1465	700	1777	1733	1781	1777	1426	1781	1777	1322
Q Serve(g_s), s	12.3	32.1	1.3	7.7	27.2	27.5	10.8	20.1	8.2	11.1	15.8	11.2
Cycle Q Clear(g_c), s	39.8	32.1	1.3	39.8	27.2	27.5	10.8	20.1	8.2	11.1	15.8	11.2
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	827	648	140	786	766	222	869	348	220	877	326
V/C Ratio(X)	0.54	0.88	0.06	0.88	0.80	0.80	0.97	0.93	0.44	1.42	0.76	0.57
Avail Cap(c_a), veh/h	141	827	648	140	786	766	222	869	348	220	877	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	1.00	1.00	1.00	0.63	0.63	0.63	0.66	0.66	0.66
Uniform Delay (d), s/veh	40.0	22.9	14.4	43.1	21.6	21.7	39.2	33.3	28.8	39.4	31.5	29.7
Incr Delay (d2), s/veh	7.7	7.6	0.1	48.8	8.2	8.6	38.7	11.8	0.6	205.9	2.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	19.3	0.8	8.1	18.0	17.8	10.3	13.6	4.9	26.1	10.2	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	30.6	14.5	91.9	29.8	30.2	77.9	45.1	29.4	245.3	34.2	31.4
LnGrp LOS	D	C	B	F	C	C	E	D	C	F	C	C
Approach Vol, veh/h		843			1361			1179			1169	
Approach Delay, s/veh		31.4			35.6			49.0			90.1	
Approach LOS		C			D			D			F	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.8	16.8	27.4		45.8	17.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green Setting (Gmax), s		* 40	11.2	* 22		* 40	11.1	* 22
Max Q Clear Time (g_c+I1), s		41.8	12.8	17.8		41.8	13.1	22.1
Green Ext Time (p_c), s		0.0	0.0	2.0		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	671	35	113	977	162	197	746	142	287	616	172
Future Volume (veh/h)	70	671	35	113	977	162	197	746	142	287	616	172
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.92	1.00		0.92	1.00		0.90	1.00		0.83
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	729	38	123	1062	176	214	811	154	312	670	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	141	827	648	140	1332	220	222	869	348	220	877	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.12	0.24	0.24	0.12	0.25	0.25
Unsig. Movement Delay												
Ln Grp Delay, s/veh	47.8	30.6	14.5	91.9	29.8	30.2	77.9	45.1	29.4	245.3	34.2	31.4
Ln Grp LOS	D	C	B	F	C	C	E	D	C	F	C	C
Approach Vol, veh/h		843			1361			1179			1169	
Approach Delay, s/veh		31.4			35.6			49.0			90.1	
Approach LOS		C			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		45.8	16.8	27.4		45.8	17.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 40	11.2	* 22		* 40	11.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.9		5.4	3.7	4.9
Max Q Clear (g_c+I1), s		41.8	12.8	17.8		41.8	13.1	22.1
Green Ext Time (g_e), s		0.0	0.0	2.0		0.0	0.0	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		700	1781			448	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3012		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		498		1322		1465		1426

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	123	214	0	0	76	312	0
Grp Sat Flow (s), veh/h/ln	0	700	1781	0	0	448	1781	0
Q Serve Time (g_s), s	0.0	7.7	10.8	0.0	0.0	12.3	11.1	0.0
Cycle Q Clear Time (g_c), s	0.0	39.8	10.8	0.0	0.0	39.8	11.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	700	0	0	0	448	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	39.8	0.0	0.0	0.0	39.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	7.7	0.0	0.0	0.0	12.3	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	7.7	0.0	0.0	0.0	12.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	140	222	0	0	141	220	0
V/C Ratio (X)	0.00	0.88	0.97	0.00	0.00	0.54	1.42	0.00
Avail Cap (c_a), veh/h	0	140	222	0	0	141	220	0
Upstream Filter (I)	0.00	1.00	0.63	0.00	0.00	0.54	0.66	0.00
Uniform Delay (d1), s/veh	0.0	43.1	39.2	0.0	0.0	40.0	39.4	0.0
Incr Delay (d2), s/veh	0.0	48.8	38.7	0.0	0.0	7.7	205.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	91.9	77.9	0.0	0.0	47.8	245.3	0.0
1st-Term Q (Q1), veh/ln	0.0	2.7	4.5	0.0	0.0	1.7	4.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.9	2.4	0.0	0.0	0.3	12.6	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	1.50	0.00	0.00	1.80	1.51	0.00
%ile Back of Q (95%), veh/ln	0.0	8.1	10.3	0.0	0.0	3.5	26.1	0.0
%ile Storage Ratio (RQ%)	0.00	1.18	2.62	0.00	0.00	0.51	4.41	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	23.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	625	0	670	0	729	0	811
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	27.2	0.0	15.8	0.0	32.1	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	27.2	0.0	15.8	0.0	32.1	0.0	20.1
Lane Grp Cap (c), veh/h	0	786	0	877	0	827	0	869
V/C Ratio (X)	0.00	0.80	0.00	0.76	0.00	0.88	0.00	0.93
Avail Cap (c_a), veh/h	0	786	0	877	0	827	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.66	0.00	0.54	0.00	0.63
Uniform Delay (d1), s/veh	0.0	21.6	0.0	31.5	0.0	22.9	0.0	33.3
Incr Delay (d2), s/veh	0.0	8.2	0.0	2.7	0.0	7.6	0.0	11.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	0.0	34.2	0.0	30.6	0.0	45.1
1st-Term Q (Q1), veh/ln	0.0	10.4	0.0	6.4	0.0	12.9	0.0	8.2
2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	0.3	0.0	1.8	0.0	1.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.47	0.00	1.51	0.00	1.31	0.00	1.42
%ile Back of Q (95%), veh/ln	0.0	18.0	0.0	10.2	0.0	19.3	0.0	13.6
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.23	0.00	0.42	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	613	0	187	0	38	0	154
Grp Sat Flow (s), veh/h/ln	0	1733	0	1322	0	1465	0	1426
Q Serve Time (g_s), s	0.0	27.5	0.0	11.2	0.0	1.3	0.0	8.2
Cycle Q Clear Time (g_c), s	0.0	27.5	0.0	11.2	0.0	1.3	0.0	8.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	766	0	326	0	648	0	348
V/C Ratio (X)	0.00	0.80	0.00	0.57	0.00	0.06	0.00	0.44
Avail Cap (c_a), veh/h	0	766	0	326	0	648	0	348
Upstream Filter (I)	0.00	1.00	0.00	0.66	0.00	0.54	0.00	0.63
Uniform Delay (d1), s/veh	0.0	21.7	0.0	29.7	0.0	14.4	0.0	28.8
Incr Delay (d2), s/veh	0.0	8.6	0.0	1.6	0.0	0.1	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.2	0.0	31.4	0.0	14.5	0.0	29.4
1st-Term Q (Q1), veh/ln	0.0	10.3	0.0	3.4	0.0	0.4	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	1.8	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.47	0.00	1.71	0.00	1.80	0.00	1.79
%ile Back of Q (95%), veh/ln	0.0	17.8	0.0	6.0	0.0	0.8	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	0.50	0.00	1.02	0.00	0.20	0.00	0.99
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.3
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	190	563	0	0	391
Future Vol, veh/h	70	190	563	0	0	391
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	207	612	0	0	425

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	825	612	0	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	213	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	326	492	-	0	0	-
Stage 1	540	-	-	0	0	-
Stage 2	803	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	326	492	-	-	-	-
Mov Cap-2 Maneuver	432	-	-	-	-	-
Stage 1	540	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	432	492	-
HCM Lane V/C Ratio	-	0.176	0.42	-
HCM Control Delay (s)	-	15.1	17.5	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.6	2.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	346	104	494	566	428	83	839	317	92	724	31
Future Volume (veh/h)	152	346	104	494	566	428	83	839	317	92	724	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	165	376	113	537	615	465	90	912	345	100	787	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	612	182	487	1170	520	274	1143	506	227	1147	508
Arrive On Green	0.09	0.23	0.23	0.19	0.33	0.33	0.07	0.32	0.32	0.07	0.32	0.32
Sat Flow, veh/h	1781	2697	800	1781	3554	1578	1781	3554	1573	1781	3554	1573
Grp Volume(v), veh/h	165	246	243	537	615	465	90	912	345	100	787	34
Grp Sat Flow(s),veh/h/ln	1781	1777	1720	1781	1777	1578	1781	1777	1573	1781	1777	1573
Q Serve(g_s), s	8.4	14.9	15.3	22.7	16.8	33.6	3.9	28.1	22.9	4.3	23.1	1.8
Cycle Q Clear(g_c), s	8.4	14.9	15.3	22.7	16.8	33.6	3.9	28.1	22.9	4.3	23.1	1.8
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	403	390	487	1170	520	274	1143	506	227	1147	508
V/C Ratio(X)	0.53	0.61	0.62	1.10	0.53	0.90	0.33	0.80	0.68	0.44	0.69	0.07
Avail Cap(c_a), veh/h	334	503	487	487	1330	590	280	1143	506	232	1147	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	0.16	0.16	0.16	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	31.3	41.6	41.8	30.8	32.6	38.3	25.8	37.1	35.4	27.6	35.4	28.1
Incr Delay (d2), s/veh	0.9	1.0	1.1	51.6	0.1	3.0	0.7	5.8	7.3	1.1	2.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.2	10.0	9.9	21.4	8.8	15.3	3.0	18.6	14.6	3.3	14.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	42.6	42.9	82.4	32.7	41.2	26.5	43.0	42.6	28.7	38.0	28.3
LnGrp LOS	C	D	D	F	C	D	C	D	D	C	D	C
Approach Vol, veh/h		654			1617			1347			921	
Approach Delay, s/veh		40.1			51.7			41.8			36.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	44.1	16.0	45.4	14.6	44.0	28.3	33.1
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	31.5	11.8	44.9	9.0	31.5	22.7	34.0
Max Q Clear Time (g_c+I1), s	5.9	25.1	10.4	35.6	6.3	30.1	24.7	17.3
Green Ext Time (p_c), s	0.0	2.7	0.1	3.9	0.0	1.0	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	44.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	346	104	494	566	428	83	839	317	92	724	31
Future Volume (veh/h)	152	346	104	494	566	428	83	839	317	92	724	31
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	165	376	113	537	615	465	90	912	345	100	787	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	313	612	182	487	1170	520	274	1143	506	227	1147	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.23	0.23	0.19	0.33	0.33	0.07	0.32	0.32	0.07	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.2	42.6	42.9	82.4	32.7	41.2	26.5	43.0	42.6	28.7	38.0	28.3
Ln Grp LOS	C	D	D	F	C	D	C	D	D	C	D	C
Approach Vol, veh/h		654			1617			1347			921	
Approach Delay, s/veh		40.1			51.7			41.8			36.6	
Approach LOS		D			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	14.5	44.1	16.0	45.4	14.6	44.0	28.3	33.1
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	31.5	11.8	44.9	9.0	31.5	22.7	34.0
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.7	3.7	5.1
Max Q Clear (g_c+l1), s	5.9	25.1	10.4	35.6	6.3	30.1	24.7	17.3
Green Ext Time (g_e), s	0.0	2.7	0.1	3.9	0.0	1.0	0.0	2.5
Prob of Phs Call (p_c)	0.95	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.50	1.00	0.00	1.00	0.04

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		2697

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1573		1578		1573		800

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	90	0	165	0	100	0	537	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.9	0.0	8.4	0.0	4.3	0.0	22.7	0.0
Cycle Q Clear Time (g_c), s	3.9	0.0	8.4	0.0	4.3	0.0	22.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	666	0	522	0	442	0	905	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	38.6	0.0	27.2	0.0	38.6	0.0	29.2	0.0
Perm LT Serve Time (g_u), s	15.6	0.0	22.7	0.0	10.5	0.0	12.0	0.0
Perm LT Q Serve Time (g_ps), s	3.6	0.0	2.1	0.0	8.2	0.0	12.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	274	0	313	0	227	0	487	0
V/C Ratio (X)	0.33	0.00	0.53	0.00	0.44	0.00	1.10	0.00
Avail Cap (c_a), veh/h	280	0	334	0	232	0	487	0
Upstream Filter (I)	1.00	0.00	0.68	0.00	0.79	0.00	0.16	0.00
Uniform Delay (d1), s/veh	25.8	0.0	31.3	0.0	27.6	0.0	30.8	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.9	0.0	1.1	0.0	51.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.5	0.0	32.2	0.0	28.7	0.0	82.4	0.0
1st-Term Q (Q1), veh/ln	1.6	0.0	3.5	0.0	1.8	0.0	10.4	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.1	0.0	7.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.71	0.00	1.80	0.00	1.23	0.00
%ile Back of Q (95%), veh/ln	3.0	0.0	6.2	0.0	3.3	0.0	21.4	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	1.97	0.00	0.38	0.00	4.53	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	12.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	787	0	615	0	912	0	246
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	23.1	0.0	16.8	0.0	28.1	0.0	14.9
Cycle Q Clear Time (g_c), s	0.0	23.1	0.0	16.8	0.0	28.1	0.0	14.9
Lane Grp Cap (c), veh/h	0	1147	0	1170	0	1143	0	403
V/C Ratio (X)	0.00	0.69	0.00	0.53	0.00	0.80	0.00	0.61
Avail Cap (c_a), veh/h	0	1147	0	1330	0	1143	0	503
Upstream Filter (I)	0.00	0.79	0.00	0.16	0.00	1.00	0.00	0.68
Uniform Delay (d1), s/veh	0.0	35.4	0.0	32.6	0.0	37.1	0.0	41.6
Incr Delay (d2), s/veh	0.0	2.7	0.0	0.1	0.0	5.8	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.0	0.0	32.7	0.0	43.0	0.0	42.6
1st-Term Q (Q1), veh/ln	0.0	9.7	0.0	7.1	0.0	11.8	0.0	6.4
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.9	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.46	0.00	1.25	0.00	1.46	0.00	1.53
%ile Back of Q (95%), veh/ln	0.0	14.8	0.0	8.8	0.0	18.6	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.27	0.00	1.49	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	34	0	465	0	345	0	243
Grp Sat Flow (s), veh/h/ln	0	1573	0	1578	0	1573	0	1720
Q Serve Time (g_s), s	0.0	1.8	0.0	33.6	0.0	22.9	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	1.8	0.0	33.6	0.0	22.9	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.47
Lane Grp Cap (c), veh/h	0	508	0	520	0	506	0	390
V/C Ratio (X)	0.00	0.07	0.00	0.90	0.00	0.68	0.00	0.62
Avail Cap (c_a), veh/h	0	508	0	590	0	506	0	487
Upstream Filter (I)	0.00	0.79	0.00	0.16	0.00	1.00	0.00	0.68
Uniform Delay (d1), s/veh	0.0	28.1	0.0	38.3	0.0	35.4	0.0	41.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	3.0	0.0	7.3	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.3	0.0	41.2	0.0	42.6	0.0	42.9
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	12.5	0.0	8.5	0.0	6.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.18	0.00	1.53	0.00	1.53
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	15.3	0.0	14.6	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	3.25	0.00	2.32	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	434	0	351	1	874	0	0	753	0
Future Volume (veh/h)	0	0	0	434	0	351	1	874	0	0	753	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	472	0	382	1	950	0	0	818	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Cap, veh/h	0	612	0	703	0	516	60	1799	0	0	1834	0
Arrive On Green	0.00	0.00	0.00	0.33	0.00	0.33	0.52	0.52	0.00	0.00	0.52	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1578	0	3571	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	472	0	382	510	441	0	0	818	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1578	1870	1617	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	14.6	0.0	12.9	0.0	10.9	0.0	0.0	8.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	14.6	0.0	12.9	10.9	10.9	0.0	0.0	8.7	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	612	0	703	0	516	1025	835	0	0	1834	0
V/C Ratio(X)	0.00	0.00	0.00	0.67	0.00	0.74	0.50	0.53	0.00	0.00	0.45	0.00
Avail Cap(c_a), veh/h	0	832	0	913	0	702	1025	835	0	0	1834	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.65	0.65	0.00	0.00	0.81	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.5	0.0	17.9	9.7	9.7	0.0	0.0	9.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	2.8	1.1	1.6	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	9.5	0.0	8.1	6.4	5.8	0.0	0.0	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	19.7	0.0	20.7	10.8	11.2	0.0	0.0	9.8	0.0
LnGrp LOS	A	A	A	B	A	C	B	B	A	A	A	A
Approach Vol, veh/h		0			854			951			818	
Approach Delay, s/veh		0.0			20.2			11.0			9.8	
Approach LOS					C			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.9	24.1	35.9	24.1
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	23.9	26.7	23.9	26.7
Max Q Clear Time (g_c+I1), s	12.9	16.6	10.7	0.0
Green Ext Time (p_c), s	4.4	3.1	4.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	434	0	351	1	874	0	0	753	0
Future Volume (veh/h)	0	0	0	434	0	351	1	874	0	0	753	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	472	0	382	1	950	0	0	818	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			Yes			No		
Cap, veh/h	0	612	0	703	0	516	60	1799	0	0	1834	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.33	0.00	0.33	0.52	0.52	0.00	0.00	0.52	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	19.7	0.0	20.7	10.8	11.2	0.0	0.0	9.8	0.0
Ln Grp LOS	A	A	A	B	A	C	B	B	A	A	A	A
Approach Vol, veh/h		0			854			951			818	
Approach Delay, s/veh		0.0			20.2			11.0			9.8	
Approach LOS					C			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		35.9		24.1		35.9		24.1
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		23.9		26.7		23.9		26.7
Max Allow Headway (MAH), s		5.1		4.5		5.1		0.0
Max Q Clear (g_c+I1), s		12.9		16.6		10.7		0.0
Green Ext Time (g_e), s		4.4		3.1		4.6		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		0.35		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3571		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1578		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L+T		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	510	0	472	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.9	0.0	14.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	679	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	31.0	0.0	19.6	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	22.3	0.0	19.6	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	27.6	0.0	0.0	0.0	31.0	0.0	19.6
Serve Time pre Blk (g_fs), s	0.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1025	0	703	0	0	0	0
V/C Ratio (X)	0.00	0.50	0.00	0.67	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1025	0	913	0	0	0	0
Upstream Filter (I)	0.00	0.65	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.7	0.0	18.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	1.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.8	0.0	19.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	5.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.68	0.00	1.69	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.4	0.0	9.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.46	0.00	0.50	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	2	0	1
Grp Vol (v), veh/h	0	441	0	0	0	818	0	0
Grp Sat Flow (s), veh/h/ln	0	1617	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	10.9	0.0	0.0	0.0	8.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.9	0.0	0.0	0.0	8.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	835	0	0	0	1834	0	612
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	0.45	0.00	0.00
Avail Cap (c_a), veh/h	0	835	0	0	0	1834	0	832
Upstream Filter (I)	0.00	0.65	0.00	0.00	0.00	0.81	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.7	0.0	0.0	0.0	9.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.2	0.0	0.0	0.0	9.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.0	0.0	0.0	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	5.8	0.0	0.0	0.0	5.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	382	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1578	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	516	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	702	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.77	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	8.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	347	84	96	948	146	247	691	110	154	584	453
Future Volume (veh/h)	53	347	84	96	948	146	247	691	110	154	584	453
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	377	91	104	1030	159	268	751	120	167	635	492
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	893	213	400	1008	155	311	1174	516	314	1174	516
Arrive On Green	0.06	0.32	0.32	0.07	0.33	0.33	0.08	0.33	0.33	0.08	0.33	0.33
Sat Flow, veh/h	1781	2832	675	1781	3075	474	1781	3554	1561	1781	3554	1561
Grp Volume(v), veh/h	58	235	233	104	594	595	268	751	120	167	635	492
Grp Sat Flow(s),veh/h/ln	1781	1777	1730	1781	1777	1772	1781	1777	1561	1781	1777	1561
Q Serve(g_s), s	1.9	9.4	9.6	3.4	29.5	29.5	7.0	16.1	5.0	5.5	13.1	27.7
Cycle Q Clear(g_c), s	1.9	9.4	9.6	3.4	29.5	29.5	7.0	16.1	5.0	5.5	13.1	27.7
Prop In Lane	1.00		0.39	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	560	546	400	582	581	311	1174	516	314	1174	516
V/C Ratio(X)	0.31	0.42	0.43	0.26	1.02	1.02	0.86	0.64	0.23	0.53	0.54	0.95
Avail Cap(c_a), veh/h	219	582	567	410	582	581	311	1174	516	314	1174	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	0.65	0.65	0.65	0.67	0.67	0.67
Uniform Delay (d), s/veh	22.7	24.3	24.4	18.5	30.3	30.3	25.0	25.6	21.9	19.4	24.6	29.5
Incr Delay (d2), s/veh	0.8	0.4	0.4	0.3	42.6	43.4	15.0	1.7	0.7	1.1	1.2	23.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	6.6	6.6	2.4	26.0	26.1	6.2	10.2	3.3	4.0	8.6	17.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	24.7	24.8	18.9	72.9	73.6	39.9	27.3	22.5	20.5	25.8	52.4
LnGrp LOS	C	C	C	B	F	F	D	C	C	C	C	D
Approach Vol, veh/h		526			1293			1139			1294	
Approach Delay, s/veh		24.6			68.9			29.8			35.2	
Approach LOS		C			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	35.1	9.4	34.5	11.0	35.1	10.5	33.4
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	9.6	29.7	3.9	31.5	7.5	18.1	5.4	11.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.8	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	347	84	96	948	146	247	691	110	154	584	453
Future Volume (veh/h)	53	347	84	96	948	146	247	691	110	154	584	453
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	377	91	104	1030	159	268	751	120	167	635	492
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	186	893	213	400	1008	155	311	1174	516	314	1174	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.32	0.32	0.07	0.33	0.33	0.08	0.33	0.33	0.08	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.4	24.7	24.8	18.9	72.9	73.6	39.9	27.3	22.5	20.5	25.8	52.4
Ln Grp LOS	C	C	C	B	F	F	D	C	C	C	C	D
Approach Vol, veh/h		526			1293			1139			1294	
Approach Delay, s/veh		24.6			68.9			29.8			35.2	
Approach LOS		C			E			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	11.0	35.1	9.4	34.5	11.0	35.1	10.5	33.4
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.6	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+l1), s	9.0	29.7	3.9	31.5	7.5	18.1	5.4	11.6
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	3.8	0.0	2.4
Prob of Phs Call (p_c)	1.00	1.00	0.77	1.00	0.98	1.00	0.93	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.02

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3075		3554		2832

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1561		474		1561		675

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	268	0	58	0	167	0	104	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	1.9	0.0	5.5	0.0	3.4	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	1.9	0.0	5.5	0.0	3.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	498	0	471	0	635	0	918	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	29.7	0.0	28.4	0.0	29.7	0.0	28.4	0.0
Perm LT Serve Time (g_u), s	16.6	0.0	0.0	0.0	13.6	0.0	18.8	0.0
Perm LT Q Serve Time (g_ps), s	16.6	0.0	0.0	0.0	5.8	0.0	1.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	311	0	186	0	314	0	400	0
V/C Ratio (X)	0.86	0.00	0.31	0.00	0.53	0.00	0.26	0.00
Avail Cap (c_a), veh/h	311	0	219	0	314	0	410	0
Upstream Filter (I)	0.65	0.00	0.80	0.00	0.67	0.00	1.00	0.00
Uniform Delay (d1), s/veh	25.0	0.0	22.7	0.0	19.4	0.0	18.5	0.0
Incr Delay (d2), s/veh	15.0	0.0	0.8	0.0	1.1	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	39.9	0.0	23.4	0.0	20.5	0.0	18.9	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.7	0.0	2.1	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	1.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.69	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	6.2	0.0	1.4	0.0	4.0	0.0	2.4	0.0
%ile Storage Ratio (RQ%)	0.91	0.00	0.29	0.00	0.59	0.00	0.62	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	635	0	594	0	751	0	235
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	13.1	0.0	29.5	0.0	16.1	0.0	9.4
Cycle Q Clear Time (g_c), s	0.0	13.1	0.0	29.5	0.0	16.1	0.0	9.4
Lane Grp Cap (c), veh/h	0	1174	0	582	0	1174	0	560
V/C Ratio (X)	0.00	0.54	0.00	1.02	0.00	0.64	0.00	0.42
Avail Cap (c_a), veh/h	0	1174	0	582	0	1174	0	582
Upstream Filter (I)	0.00	0.67	0.00	1.00	0.00	0.65	0.00	0.80
Uniform Delay (d1), s/veh	0.0	24.6	0.0	30.3	0.0	25.6	0.0	24.3
Incr Delay (d2), s/veh	0.0	1.2	0.0	42.6	0.0	1.7	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.8	0.0	72.9	0.0	27.3	0.0	24.7
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	11.7	0.0	6.5	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	6.9	0.0	0.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	0.00	1.40	0.00	1.51	0.00	1.75
%ile Back of Q (95%), veh/ln	0.0	8.6	0.0	26.0	0.0	10.2	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.62	0.00	0.52	0.00	0.40	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	492	0	595	0	120	0	233
Grp Sat Flow (s), veh/h/ln	0	1561	0	1772	0	1561	0	1730
Q Serve Time (g_s), s	0.0	27.7	0.0	29.5	0.0	5.0	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	27.7	0.0	29.5	0.0	5.0	0.0	9.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.27	0.00	1.00	0.00	0.39
Lane Grp Cap (c), veh/h	0	516	0	581	0	516	0	546
V/C Ratio (X)	0.00	0.95	0.00	1.02	0.00	0.23	0.00	0.43
Avail Cap (c_a), veh/h	0	516	0	581	0	516	0	567
Upstream Filter (I)	0.00	0.67	0.00	1.00	0.00	0.65	0.00	0.80
Uniform Delay (d1), s/veh	0.0	29.5	0.0	30.3	0.0	21.9	0.0	24.4
Incr Delay (d2), s/veh	0.0	23.0	0.0	43.4	0.0	0.7	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	52.4	0.0	73.6	0.0	22.5	0.0	24.8
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	11.6	0.0	1.7	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	3.3	0.0	7.0	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.37	0.00	1.40	0.00	1.80	0.00	1.75
%ile Back of Q (95%), veh/ln	0.0	17.7	0.0	26.1	0.0	3.3	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	3.47	0.00	0.53	0.00	0.65	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	348	93	59	483	64	178	910	39	22	609	141
Future Volume (veh/h)	74	348	93	59	483	64	178	910	39	22	609	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	378	101	64	525	70	193	989	42	24	662	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	548	146	269	723	605	300	1527	65	238	1254	290
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	820	1418	379	912	1870	1567	667	3469	147	546	2850	658
Grp Volume(v), veh/h	80	0	479	64	525	70	193	507	524	24	412	403
Grp Sat Flow(s),veh/h/ln	820	0	1797	912	1870	1567	667	1777	1839	546	1777	1731
Q Serve(g_s), s	5.5	0.0	13.4	3.8	14.4	1.7	16.2	13.4	13.4	2.2	10.2	10.2
Cycle Q Clear(g_c), s	19.9	0.0	13.4	17.2	14.4	1.7	26.4	13.4	13.4	15.6	10.2	10.2
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.08	1.00		0.38
Lane Grp Cap(c), veh/h	241	0	695	269	723	605	300	782	810	238	782	762
V/C Ratio(X)	0.33	0.00	0.69	0.24	0.73	0.12	0.64	0.65	0.65	0.10	0.53	0.53
Avail Cap(c_a), veh/h	265	0	749	297	779	653	300	782	810	238	782	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	24.2	0.0	15.4	22.6	15.7	11.8	22.4	13.2	13.2	19.2	12.2	12.3
Incr Delay (d2), s/veh	0.8	0.0	2.5	0.5	3.1	0.1	10.1	4.1	4.0	0.7	2.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	8.8	1.4	9.8	1.0	5.9	9.1	9.3	0.5	6.6	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	0.0	17.9	23.0	18.8	11.9	32.5	17.3	17.1	19.9	14.3	14.3
LnGrp LOS	C	A	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		559			659			1224			839	
Approach Delay, s/veh		18.9			18.5			19.6			14.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	31.4	28.6	31.4	28.6
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	28.4	21.9	17.6	19.2
Green Ext Time (p_c), s	0.0	1.0	3.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	348	93	59	483	64	178	910	39	22	609	141
Future Volume (veh/h)	74	348	93	59	483	64	178	910	39	22	609	141
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	0.99		0.97	1.00		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	378	101	64	525	70	193	989	42	24	662	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	241	548	146	269	723	605	300	1527	65	238	1254	290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.44	0.44	0.44	0.44	0.44	0.44
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.0	0.0	17.9	23.0	18.8	11.9	32.5	17.3	17.1	19.9	14.3	14.3
Ln Grp LOS	C	A	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		559			659			1224			839	
Approach Delay, s/veh		18.9			18.5			19.6			14.5	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		31.4		28.6		31.4		28.6
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		5.3		5.2		5.3		5.0
Max Q Clear (g_c+I1), s		28.4		21.9		17.6		19.2
Green Ext Time (g_e), s		0.0		1.0		3.0		1.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.85

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		667		820		546		912

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3469		1418		2850		1870

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		147		379		658		1567

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	193	0	80	0	24	0	64
Grp Sat Flow (s), veh/h/ln	0	667	0	820	0	546	0	912
Q Serve Time (g_s), s	0.0	16.2	0.0	5.5	0.0	2.2	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	26.4	0.0	19.9	0.0	15.6	0.0	17.2
Perm LT Sat Flow (s_l), veh/h/ln	0	667	0	820	0	546	0	912
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	26.4	0.0	23.2	0.0	26.4	0.0	23.2
Perm LT Serve Time (g_u), s	0.0	16.2	0.0	8.8	0.0	13.0	0.0	9.8
Perm LT Q Serve Time (g_ps), s	0.0	16.2	0.0	5.5	0.0	2.2	0.0	3.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	300	0	241	0	238	0	269
V/C Ratio (X)	0.00	0.64	0.00	0.33	0.00	0.10	0.00	0.24
Avail Cap (c_a), veh/h	0	300	0	265	0	238	0	297
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.80	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.4	0.0	24.2	0.0	19.2	0.0	22.6
Incr Delay (d2), s/veh	0.0	10.1	0.0	0.8	0.0	0.7	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.5	0.0	25.0	0.0	19.9	0.0	23.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	1.0	0.0	0.2	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	5.9	0.0	1.9	0.0	0.5	0.0	1.4
%ile Storage Ratio (RQ%)	0.00	1.51	0.00	0.47	0.00	0.13	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	507	0	0	0	412	0	525
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	13.4	0.0	0.0	0.0	10.2	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	13.4	0.0	0.0	0.0	10.2	0.0	14.4
Lane Grp Cap (c), veh/h	0	782	0	0	0	782	0	723
V/C Ratio (X)	0.00	0.65	0.00	0.00	0.00	0.53	0.00	0.73
Avail Cap (c_a), veh/h	0	782	0	0	0	782	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.80	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.2	0.0	0.0	0.0	12.2	0.0	15.7
Incr Delay (d2), s/veh	0.0	4.1	0.0	0.0	0.0	2.0	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.3	0.0	0.0	0.0	14.3	0.0	18.8
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	0.0	0.0	3.3	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.4	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.00	0.00	1.75	0.00	1.68
%ile Back of Q (95%), veh/ln	0.0	9.1	0.0	0.0	0.0	6.6	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.00	0.00	0.26	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	524	0	479	0	403	0	70
Grp Sat Flow (s), veh/h/ln	0	1839	0	1797	0	1731	0	1567
Q Serve Time (g_s), s	0.0	13.4	0.0	13.4	0.0	10.2	0.0	1.7
Cycle Q Clear Time (g_c), s	0.0	13.4	0.0	13.4	0.0	10.2	0.0	1.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	0.21	0.00	0.38	0.00	1.00
Lane Grp Cap (c), veh/h	0	810	0	695	0	762	0	605
V/C Ratio (X)	0.00	0.65	0.00	0.69	0.00	0.53	0.00	0.12
Avail Cap (c_a), veh/h	0	810	0	749	0	762	0	653
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.80	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.2	0.0	15.4	0.0	12.3	0.0	11.8
Incr Delay (d2), s/veh	0.0	4.0	0.0	2.5	0.0	2.1	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.1	0.0	17.9	0.0	14.3	0.0	11.9
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	4.7	0.0	3.3	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.5	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	0.00	1.72	0.00	1.76	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.3	0.0	8.8	0.0	6.5	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	0.26	0.00	0.25	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/10/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	166	226	431	142	12	137	384	126	22	466	20	99
Future Volume (vph)	166	226	431	142	12	137	384	126	22	466	20	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.98	0.96			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		0.99	1.00		
Frt	1.00	0.92	0.85			1.00	0.96		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1650	2851	1287			1649	3161		1640	3175		
Flt Permitted	0.22	1.00	1.00			0.21	1.00		0.46	1.00		
Satd. Flow (perm)	379	2851	1287			365	3161		794	3175		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	180	246	468	154	13	149	417	137	24	507	22	108
RTOR Reduction (vph)	0	0	146	0	0	0	23	0	0	12	0	0
Lane Group Flow (vph)	180	555	167	0	0	162	531	0	24	625	0	0
Confl. Peds. (#/hr)	9		11	8	11	8		9	9		7	11
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	41.4	30.0	30.0			39.1	29.4		28.4	28.4		
Effective Green, g (s)	41.4	30.0	30.0			39.1	29.4		28.4	28.4		
Actuated g/C Ratio	0.30	0.21	0.21			0.28	0.21		0.20	0.20		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	215	610	275			190	663		161	644		
v/s Ratio Prot	c0.07	c0.19				0.06	0.17			c0.20		
v/s Ratio Perm	0.18		0.13			0.18			0.03			
v/c Ratio	0.84	1.05dr	0.61			0.85	0.80		0.15	0.97		
Uniform Delay, d1	40.9	53.7	49.7			43.1	52.5		45.9	55.4		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	23.7	20.0	9.6			29.0	9.8		1.9	28.9		
Delay (s)	64.5	73.6	59.3			72.1	62.4		47.8	84.3		
Level of Service	E	E	E			E	E		D	F		
Approach Delay (s)		67.8					64.6			83.0		
Approach LOS		E					E			F		

Intersection Summary			
HCM 2000 Control Delay	63.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	106.4%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	21	59	377	100	44	415	166	15
Future Volume (vph)	21	59	377	100	44	415	166	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	0.99			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.97			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1652	3182			3196	1345	
Flt Permitted		0.12	1.00			0.95	1.00	
Satd. Flow (perm)		201	3182			3196	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	64	410	109	48	451	180	16
RTOR Reduction (vph)	0	0	17	0	0	0	144	0
Lane Group Flow (vph)	0	87	502	0	0	517	34	0
Confl. Peds. (#/hr)	7	11		9	8	9	9	7
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		46.6	46.6			26.9	26.9	
Effective Green, g (s)		46.6	46.6			26.9	26.9	
Actuated g/C Ratio		0.33	0.33			0.19	0.19	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		191	1059			614	258	
v/s Ratio Prot		0.04	c0.16			c0.16	0.03	
v/s Ratio Perm		0.11						
v/c Ratio		0.46	0.47			0.84	0.13	
Uniform Delay, d1		35.6	37.0			54.5	46.9	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.7	1.5			11.0	0.4	
Delay (s)		37.3	38.5			65.5	47.3	
Level of Service		D	D			E	D	
Approach Delay (s)			38.3			60.8		
Approach LOS			D			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	20	57	239	71	65	20	47	314	56	40	70	131
Future Volume (vph)	20	57	239	71	65	20	47	314	56	40	70	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.98				1.00	0.99			1.00	1.00
Flpb, ped/bikes		0.98	1.00				0.98	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.96			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1614	3066				1620	3141			1652	1652
Flt Permitted		0.28	1.00				0.32	1.00			0.95	0.95
Satd. Flow (perm)		483	3066				553	3141			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	62	260	77	71	22	51	341	61	43	76	142
RTOR Reduction (vph)	0	0	10	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	84	398	0	0	0	73	440	0	0	76	142
Confl. Peds. (#/hr)	12	27		17	13	17	13		12	27	24	12
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		35.0	35.0				35.0	35.0			20.0	20.0
Effective Green, g (s)		35.0	35.0				35.0	35.0			20.0	20.0
Actuated g/C Ratio		0.19	0.19				0.19	0.19			0.11	0.11
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		93	596				107	610			183	183
v/s Ratio Prot			0.13					0.14			0.05	0.09
v/s Ratio Perm		c0.17					0.13					
v/c Ratio		0.90	0.67				0.68	0.72			0.42	0.78
Uniform Delay, d1		70.8	67.1				67.3	67.9			74.6	77.8
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		62.4	2.8				16.5	4.2			1.5	18.4
Delay (s)		133.2	69.9				83.8	72.1			76.1	96.2
Level of Service		F	E				F	E			E	F
Approach Delay (s)			80.7					73.8				
Approach LOS			F					E				

Intersection Summary			
HCM 2000 Control Delay	67.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	157.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SEL2	SEL	SET	SER
Lane Configurations												
Traffic Volume (vph)	494	45	22	28	122	427	65	6	6	60	380	169
Future Volume (vph)	494	45	22	28	122	427	65	6	6	60	380	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Lane Util. Factor	0.95	1.00			1.00	0.95	1.00			1.00	0.91	0.91
Frpb, ped/bikes	1.00	0.88			1.00	1.00	0.95			1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00			0.98	1.00	1.00
Frt	1.00	0.85			1.00	1.00	0.85			1.00	0.99	0.85
Flt Protected	1.00	1.00			0.95	1.00	1.00			0.95	1.00	1.00
Satd. Flow (prot)	3303	1300			1652	3303	1400			1626	3141	1312
Flt Permitted	1.00	1.00			0.95	1.00	1.00			0.23	1.00	1.00
Satd. Flow (perm)	3303	1300			1652	3303	1400			387	3141	1312
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	537	49	24	30	133	464	71	7	7	65	413	184
RTOR Reduction (vph)	0	57	0	0	0	0	60	0	0	0	0	0
Lane Group Flow (vph)	537	16	0	0	163	464	18	0	0	72	431	166
Confl. Peds. (#/hr)		24	17	24	17		24	12	27	24		13
Turn Type	NA	Perm		Prot	Prot	NA	Perm		Perm	Perm	NA	Perm
Protected Phases	6			5	5	2					10	
Permitted Phases		6					2		10	10		10
Actuated Green, G (s)	40.1	40.1			20.7	41.0	41.0			56.3	56.3	56.3
Effective Green, g (s)	40.1	40.1			20.7	41.0	41.0			56.3	56.3	56.3
Actuated g/C Ratio	0.22	0.22			0.11	0.23	0.23			0.31	0.31	0.31
Clearance Time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	735	289			189	752	318			121	982	410
v/s Ratio Prot	c0.16				c0.10	0.14					0.14	
v/s Ratio Perm		0.01					0.01			0.19		0.13
v/c Ratio	0.73	0.06			0.86	0.62	0.06			0.60	0.44	0.40
Uniform Delay, d1	64.9	55.1			78.3	62.4	54.4			52.2	49.3	48.7
Progression Factor	1.00	1.00			1.24	0.79	3.53			1.00	1.00	1.00
Incremental Delay, d2	6.3	0.4			16.6	1.7	0.2			7.6	0.3	0.7
Delay (s)	71.2	55.4			114.0	51.1	192.0			59.9	49.6	49.3
Level of Service	E	E			F	D	F			E	D	D
Approach Delay (s)	74.6					81.2					50.5	
Approach LOS	E					F					D	

Intersection Summary

Movement	SER2	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	7	68	569	258	42
Future Volume (vph)	7	68	569	258	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	7.6	7.6	7.6	7.6	
Lane Util. Factor	1.00	1.00	0.91	0.91	
Frpb, ped/bikes	0.94	1.00	1.00	0.94	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	
Frt	0.85	1.00	0.99	0.85	
Flt Protected	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1393	1649	3127	1264	
Flt Permitted	1.00	0.39	1.00	1.00	
Satd. Flow (perm)	1393	685	3127	1264	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	74	618	280	46
RTOR Reduction (vph)	5	0	0	71	0
Lane Group Flow (vph)	3	74	660	213	0
Confl. Peds. (#/hr)	24	2		27	24
Turn Type	Perm	Perm	NA	Perm	
Protected Phases			14		
Permitted Phases	10	14		14	
Actuated Green, G (s)	56.3	56.3	56.3	56.3	
Effective Green, g (s)	56.3	56.3	56.3	56.3	
Actuated g/C Ratio	0.31	0.31	0.31	0.31	
Clearance Time (s)	7.6	7.6	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	435	214	978	395	
v/s Ratio Prot			c0.21		
v/s Ratio Perm	0.00	0.11		0.17	
v/c Ratio	0.01	0.35	0.67	0.54	
Uniform Delay, d1	42.6	47.7	53.9	51.1	
Progression Factor	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.0	1.9	1.4	
Delay (s)	42.6	48.6	55.7	52.5	
Level of Service	D	D	E	D	
Approach Delay (s)			54.3		
Approach LOS			D		

Intersection Summary

Future with Phase 1 Conditions – Year 2026

Morning Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1633	6	0	1307	0	1	0	64	827	28	240
Future Volume (veh/h)	0	1633	6	0	1307	0	1	0	64	827	28	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1775	7	0	1421	0	1	0	70	595	456	261
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2125	8	0	1438	0	2	0	128	590	369	211
Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Sat Flow, veh/h	0	5418	21	0	3741	0	22	0	1547	1781	1115	638
Grp Volume(v), veh/h	0	1151	631	0	1421	0	71	0	0	595	0	717
Grp Sat Flow(s),veh/h/ln	0	1702	1867	0	1777	0	1569	0	0	1781	0	1753
Q Serve(g_s), s	0.0	27.4	27.4	0.0	35.7	0.0	3.9	0.0	0.0	29.8	0.0	29.8
Cycle Q Clear(g_c), s	0.0	27.4	27.4	0.0	35.7	0.0	3.9	0.0	0.0	29.8	0.0	29.8
Prop In Lane	0.00		0.01	0.00		0.00	0.01		0.99	1.00		0.36
Lane Grp Cap(c), veh/h	0	1378	755	0	1438	0	130	0	0	590	0	580
V/C Ratio(X)	0.00	0.84	0.84	0.00	0.99	0.00	0.54	0.00	0.00	1.01	0.00	1.24
Avail Cap(c_a), veh/h	0	1378	755	0	1438	0	157	0	0	590	0	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.1	24.1	0.0	26.6	0.0	39.6	0.0	0.0	30.1	0.0	30.1
Incr Delay (d2), s/veh	0.0	6.1	10.6	0.0	21.0	0.0	3.5	0.0	0.0	39.3	0.0	120.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	16.7	19.2	0.0	24.8	0.0	2.9	0.0	0.0	25.4	0.0	45.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	30.2	34.7	0.0	47.6	0.0	43.1	0.0	0.0	69.4	0.0	150.4
LnGrp LOS	A	C	C	A	D	A	D	A	A	F	A	F
Approach Vol, veh/h		1782			1421			71			1312	
Approach Delay, s/veh		31.8			47.6			43.1			113.6	
Approach LOS		C			D			D			F	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	41.5	35.0	41.5	13.5
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	29.4	31.8	37.7	5.9
Green Ext Time (p_c), s	4.4	0.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	60.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1633	6	0	1307	0	1	0	64	827	28	240
Future Volume (veh/h)	0	1633	6	0	1307	0	1	0	64	827	28	240
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1775	7	0	1421	0	1	0	70	595	456	261
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2125	8	0	1438	0	2	0	128	590	369	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	30.2	34.7	0.0	47.6	0.0	43.1	0.0	0.0	69.4	0.0	150.4
Ln Grp LOS	A	C	C	A	D	A	D	A	A	F	A	F
Approach Vol, veh/h		1782			1421			71			1312	
Approach Delay, s/veh		31.8			47.6			43.1			113.6	
Approach LOS		C			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		41.5	13.5	35.0		41.5		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		29.4	5.9	31.8		37.7		
Green Ext Time (g_e), s		4.4	0.1	0.0		0.0		
Prob of Phs Call (p_c)		1.00	0.84	1.00		1.00		
Prob of Max Out (p_x)		0.98	1.00	1.00		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	22	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5418	0	1115		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		21	1547	638		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	71	595	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1569	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	3.9	29.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	3.9	29.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	36.4	0.0	0.0	0.0	36.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	130	590	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.54	1.01	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	157	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	39.6	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.5	39.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	43.1	69.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.5	11.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	6.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.39	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	2.9	25.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.27	2.72	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1151	0	0	0	1421	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	27.4	0.0	0.0	0.0	35.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.4	0.0	0.0	0.0	35.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1378	0	0	0	1438	0	0
V/C Ratio (X)	0.00	0.84	0.00	0.00	0.00	0.99	0.00	0.00
Avail Cap (c_a), veh/h	0	1378	0	0	0	1438	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.1	0.0	0.0	0.0	26.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.1	0.0	0.0	0.0	21.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.2	0.0	0.0	0.0	47.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.0	0.0	0.0	0.0	13.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	0.0	0.0	4.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	1.00	1.00	0.00	1.39	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	16.7	0.0	0.0	0.0	24.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.71	0.00	0.00	0.00	3.54	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	631	0	717	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1867	0	1753	0	0	0	0
Q Serve Time (g_s), s	0.0	27.4	0.0	29.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.4	0.0	29.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.99	0.36	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	755	0	580	0	0	0	0
V/C Ratio (X)	0.00	0.84	0.00	1.24	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	755	0	580	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.1	0.0	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.6	0.0	120.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.7	0.0	150.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.0	0.0	11.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.2	0.0	19.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	1.00	1.47	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	19.2	0.0	45.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.82	0.00	4.88	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	34.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	60.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	1169	184	82	1562	39	165	344	114	77	356	256
Future Volume (veh/h)	67	1169	184	82	1562	39	165	344	114	77	356	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.95	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	1271	200	89	1698	42	179	374	124	84	387	278
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	1955	858	188	1955	858	193	607	486	217	607	486
Arrive On Green	0.55	0.55	0.55	1.00	1.00	1.00	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	277	3554	1559	360	3554	1559	759	1870	1499	883	1870	1499
Grp Volume(v), veh/h	73	1271	200	89	1698	42	179	374	124	84	387	278
Grp Sat Flow(s),veh/h/ln	277	1777	1559	360	1777	1559	759	1870	1499	883	1870	1499
Q Serve(g_s), s	14.5	22.6	6.0	18.4	0.0	0.0	13.3	15.2	5.5	8.0	15.9	13.8
Cycle Q Clear(g_c), s	14.5	22.6	6.0	41.0	0.0	0.0	29.2	15.2	5.5	23.2	15.9	13.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	1955	858	188	1955	858	193	607	486	217	607	486
V/C Ratio(X)	0.31	0.65	0.23	0.47	0.87	0.05	0.93	0.62	0.26	0.39	0.64	0.57
Avail Cap(c_a), veh/h	232	1955	858	188	1955	858	193	607	486	217	607	486
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.54	0.54	0.54	0.63	0.63	0.63	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	14.2	10.5	9.3	0.0	0.0	40.8	25.7	22.4	35.5	25.9	25.2
Incr Delay (d2), s/veh	3.5	1.7	0.6	4.6	3.1	0.1	33.6	1.2	0.2	1.1	2.2	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	13.0	3.5	2.0	1.5	0.0	8.8	9.9	3.3	3.1	11.3	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	15.9	11.1	13.9	3.1	0.1	74.4	26.9	22.6	36.6	28.1	26.8
LnGrp LOS	B	B	B	B	A	A	E	C	C	D	C	C
Approach Vol, veh/h		1544			1829			677			749	
Approach Delay, s/veh		15.3			3.6			38.6			28.6	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.0	35.0	55.0	35.0
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 50	29.2	* 50	29.2
Max Q Clear Time (g_c+I1), s	24.6	31.2	43.0	25.2
Green Ext Time (p_c), s	13.0	0.0	5.5	1.5

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	1169	184	82	1562	39	165	344	114	77	356	256
Future Volume (veh/h)	67	1169	184	82	1562	39	165	344	114	77	356	256
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	0.99		0.95	0.98		0.95
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	1271	200	89	1698	42	179	374	124	84	387	278
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	232	1955	858	188	1955	858	193	607	486	217	607	486
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.55	0.55	0.55	1.00	1.00	1.00	0.32	0.32	0.32	0.32	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	15.9	15.9	11.1	13.9	3.1	0.1	74.4	26.9	22.6	36.6	28.1	26.8
Ln Grp LOS	B	B	B	B	A	A	E	C	C	D	C	C
Approach Vol, veh/h		1544			1829			677			749	
Approach Delay, s/veh		15.3			3.6			38.6			28.6	
Approach LOS		B			A			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		55.0		35.0		55.0		35.0
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 50		29.2		* 50		29.2
Max Allow Headway (MAH), s		5.3		5.1		5.2		4.7
Max Q Clear (g_c+I1), s		24.6		31.2		43.0		25.2
Green Ext Time (g_e), s		13.0		0.0		5.5		1.5
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		277		759		360		883
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1559		1499		1559		1499
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	73	0	179	0	89	0	84
Grp Sat Flow (s), veh/h/ln	0	277	0	759	0	360	0	883
Q Serve Time (g_s), s	0.0	14.5	0.0	13.3	0.0	18.4	0.0	8.0
Cycle Q Clear Time (g_c), s	0.0	14.5	0.0	29.2	0.0	41.0	0.0	23.2
Perm LT Sat Flow (s_l), veh/h/ln	0	277	0	759	0	360	0	883
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	49.5	0.0	29.2	0.0	49.5	0.0	29.2
Perm LT Serve Time (g_u), s	0.0	49.5	0.0	13.3	0.0	26.9	0.0	14.0
Perm LT Q Serve Time (g_ps), s	0.0	14.5	0.0	13.3	0.0	18.4	0.0	8.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	232	0	193	0	188	0	217
V/C Ratio (X)	0.00	0.31	0.00	0.93	0.00	0.47	0.00	0.39
Avail Cap (c_a), veh/h	0	232	0	193	0	188	0	217
Upstream Filter (I)	0.00	1.00	0.00	0.63	0.00	0.54	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.4	0.0	40.8	0.0	9.3	0.0	35.5
Incr Delay (d2), s/veh	0.0	3.5	0.0	33.6	0.0	4.6	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.9	0.0	74.4	0.0	13.9	0.0	36.6
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	3.9	0.0	0.9	0.0	1.6
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.8	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.55	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.8	0.0	8.8	0.0	2.0	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	3.43	0.00	0.36	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1271	0	374	0	1698	0	387
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	22.6	0.0	15.2	0.0	0.0	0.0	15.9
Cycle Q Clear Time (g_c), s	0.0	22.6	0.0	15.2	0.0	0.0	0.0	15.9
Lane Grp Cap (c), veh/h	0	1955	0	607	0	1955	0	607
V/C Ratio (X)	0.00	0.65	0.00	0.62	0.00	0.87	0.00	0.64
Avail Cap (c_a), veh/h	0	1955	0	607	0	1955	0	607
Upstream Filter (I)	0.00	1.00	0.00	0.63	0.00	0.54	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.2	0.0	25.7	0.0	0.0	0.0	25.9
Incr Delay (d2), s/veh	0.0	1.7	0.0	1.2	0.0	3.1	0.0	2.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.9	0.0	26.9	0.0	3.1	0.0	28.1
1st-Term Q (Q1), veh/ln	0.0	7.8	0.0	6.3	0.0	0.0	0.0	6.6
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.2	0.0	0.8	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	0.00	1.51	0.00	1.80	0.00	1.62
%ile Back of Q (95%), veh/ln	0.0	13.0	0.0	9.9	0.0	1.5	0.0	11.3
%ile Storage Ratio (RQ%)	0.00	2.79	0.00	0.20	0.00	0.13	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	200	0	124	0	42	0	278
Grp Sat Flow (s), veh/h/ln	0	1559	0	1499	0	1559	0	1499
Q Serve Time (g_s), s	0.0	6.0	0.0	5.5	0.0	0.0	0.0	13.8
Cycle Q Clear Time (g_c), s	0.0	6.0	0.0	5.5	0.0	0.0	0.0	13.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	858	0	486	0	858	0	486
V/C Ratio (X)	0.00	0.23	0.00	0.26	0.00	0.05	0.00	0.57
Avail Cap (c_a), veh/h	0	858	0	486	0	858	0	486
Upstream Filter (I)	0.00	1.00	0.00	0.63	0.00	0.54	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.5	0.0	22.4	0.0	0.0	0.0	25.2
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.2	0.0	0.1	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.1	0.0	22.6	0.0	0.1	0.0	26.8
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	1.8	0.0	0.0	0.0	4.6
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.75
%ile Back of Q (95%), veh/ln	0.0	3.5	0.0	3.3	0.0	0.0	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.82	0.00	0.89	0.00	0.01	0.00	2.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1402	0	0	1021	3	466	22	230	13	0	55
Future Volume (veh/h)	11	1402	0	0	1021	3	466	22	230	13	0	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1524	0	0	1110	3	390	187	250	14	0	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	190	1642	0	0	1642	726	477	194	260	29	0	123
Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.27	0.27	0.27	0.09	0.00	0.09
Sat Flow, veh/h	506	3647	0	0	3647	1571	1781	725	969	306	0	1310
Grp Volume(v), veh/h	12	1524	0	0	1110	3	390	0	437	74	0	0
Grp Sat Flow(s),veh/h/ln	506	1777	0	0	1777	1571	1781	0	1695	1615	0	0
Q Serve(g_s), s	1.3	20.7	0.0	0.0	22.0	0.1	18.5	0.0	22.9	3.9	0.0	0.0
Cycle Q Clear(g_c), s	23.3	20.7	0.0	0.0	22.0	0.1	18.5	0.0	22.9	3.9	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.57	0.19		0.81
Lane Grp Cap(c), veh/h	190	1642	0	0	1642	726	477	0	454	151	0	0
V/C Ratio(X)	0.06	0.93	0.00	0.00	0.68	0.00	0.82	0.00	0.96	0.49	0.00	0.00
Avail Cap(c_a), veh/h	190	1642	0	0	1642	726	477	0	454	179	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.00	0.00	0.25	0.25	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.3	2.6	0.0	0.0	18.9	13.1	30.9	0.0	32.5	38.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	8.2	0.0	0.0	0.6	0.0	10.7	0.0	32.8	2.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	5.4	0.0	0.0	10.7	0.1	13.8	0.0	18.8	3.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	10.8	0.0	0.0	19.5	13.1	41.6	0.0	65.3	41.2	0.0	0.0
LnGrp LOS	A	B	A	A	B	B	D	A	E	D	A	A
Approach Vol, veh/h		1536			1113			827			74	
Approach Delay, s/veh		10.8			19.5			54.1			41.2	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	46.7	13.8	46.7	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	25.3	5.9	24.0	24.9
Green Ext Time (p_c), s	12.1	0.1	10.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1402	0	0	1021	3	466	22	230	13	0	55
Future Volume (veh/h)	11	1402	0	0	1021	3	466	22	230	13	0	55
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1524	0	0	1110	3	390	187	250	14	0	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	190	1642	0	0	1642	726	477	194	260	29	0	123
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.27	0.27	0.27	0.09	0.00	0.09
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.7	10.8	0.0	0.0	19.5	13.1	41.6	0.0	65.3	41.2	0.0	0.0
Ln Grp LOS	A	B	A	A	B	B	D	A	E	D	A	A
Approach Vol, veh/h		1536			1113			827			74	
Approach Delay, s/veh		10.8			19.5			54.1			41.2	
Approach LOS		B			B			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		46.7	29.5	13.8		46.7		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.8	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		25.3	24.9	5.9		24.0		
Green Ext Time (g_e), s		12.1	0.0	0.1		10.2		
Prob of Phs Call (p_c)		1.00	1.00	0.84		1.00		
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		506	1781	306		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	725	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	969	1310		1571		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	12	390	74	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	506	1781	1615	0	0	0	0
Q Serve Time (g_s), s	0.0	1.3	18.5	3.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.3	18.5	3.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	506	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.6	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	41.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.19	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	190	477	151	0	0	0	0
V/C Ratio (X)	0.00	0.06	0.82	0.49	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	190	477	179	0	0	0	0
Upstream Filter (I)	0.00	0.72	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.3	30.9	38.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	10.7	2.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.7	41.6	41.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.1	7.5	1.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.4	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.55	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.2	13.8	3.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.08	1.06	0.19	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1524	0	0	0	1110	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	20.7	0.0	0.0	0.0	22.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	0.0	0.0	22.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1642	0	0	0	1642	0	0
V/C Ratio (X)	0.00	0.93	0.00	0.00	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	1642	0	0	0	1642	0	0
Upstream Filter (I)	0.00	0.72	0.00	0.00	0.00	0.25	0.00	0.00
Uniform Delay (d1), s/veh	0.0	2.6	0.0	0.0	0.0	18.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.2	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.8	0.0	0.0	0.0	19.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	0.0	0.0	8.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.00	0.00	1.28	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	5.4	0.0	0.0	0.0	10.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	437	0	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1695	0	0	1571	0	0
Q Serve Time (g_s), s	0.0	0.0	22.9	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	22.9	0.0	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.57	0.81	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	454	0	0	726	0	0
V/C Ratio (X)	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	454	0	0	726	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.25	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	32.5	0.0	0.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	32.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	65.3	0.0	0.0	13.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.46	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	18.8	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.45	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	717	634	136	663	81	197	514	89	104	1223	47
Future Volume (veh/h)	159	717	634	136	663	81	197	514	89	104	1223	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	173	779	689	148	721	88	214	559	97	113	1329	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	581	604	164	912	111	194	701	571	260	1272	49
Arrive On Green	0.08	0.31	0.31	0.06	0.29	0.29	0.08	0.37	0.37	0.07	0.37	0.37
Sat Flow, veh/h	1781	1870	1562	1781	3182	388	1781	1870	1524	1781	3486	134
Grp Volume(v), veh/h	173	779	689	148	402	407	214	559	97	113	677	703
Grp Sat Flow(s),veh/h/ln	1781	1870	1562	1781	1777	1793	1781	1870	1524	1781	1777	1842
Q Serve(g_s), s	8.1	37.3	37.3	7.0	25.1	25.1	9.0	32.0	5.1	4.6	43.8	43.8
Cycle Q Clear(g_c), s	8.1	37.3	37.3	7.0	25.1	25.1	9.0	32.0	5.1	4.6	43.8	43.8
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	259	581	604	164	509	514	194	701	571	260	649	672
V/C Ratio(X)	0.67	1.34	1.14	0.90	0.79	0.79	1.11	0.80	0.17	0.43	1.04	1.05
Avail Cap(c_a), veh/h	259	581	604	164	509	514	194	701	571	263	649	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.17	0.17	0.17	0.48	0.48	0.48	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	41.3	36.9	33.4	39.5	39.5	33.3	33.4	25.0	25.4	38.1	38.1
Incr Delay (d2), s/veh	1.1	155.0	66.8	26.0	6.0	6.0	95.7	9.2	0.6	1.1	47.1	47.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.7	55.4	35.1	6.5	15.3	15.5	14.3	22.5	3.5	3.6	36.5	37.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	196.4	103.7	59.4	45.5	45.5	129.0	42.6	25.7	26.6	85.2	85.4
LnGrp LOS	C	F	F	E	D	D	F	D	C	C	F	F
Approach Vol, veh/h		1641			957			870			1493	
Approach Delay, s/veh		140.1			47.6			62.0			80.9	
Approach LOS		F			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	43.0	15.0	49.5	15.4	40.1	13.8	50.7
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 7	* 37	9.0	* 44	* 9.9	* 34	8.0	* 45
Max Q Clear Time (g_c+I1), s	9.0	39.3	11.0	45.8	10.1	27.1	6.6	34.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.9

Intersection Summary	
HCM 6th Ctrl Delay	90.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	717	634	136	663	81	197	514	89	104	1223	47
Future Volume (veh/h)	159	717	634	136	663	81	197	514	89	104	1223	47
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	173	779	689	148	721	88	214	559	97	113	1329	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	259	581	604	164	912	111	194	701	571	260	1272	49
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.31	0.31	0.06	0.29	0.29	0.08	0.37	0.37	0.07	0.37	0.37
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.1	196.4	103.7	59.4	45.5	45.5	129.0	42.6	25.7	26.6	85.2	85.4
Ln Grp LOS	C	F	F	E	D	D	F	D	C	C	F	F
Approach Vol, veh/h		1641			957			870			1493	
Approach Delay, s/veh		140.1			47.6			62.0			80.9	
Approach LOS		F			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	12.5	43.0	15.0	49.5	15.4	40.1	13.8	50.7
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 7	* 37	9.0	* 44	* 9.9	* 34	8.0	* 45
Max Allow Headway (MAH), s	3.7	4.5	3.8	5.1	3.7	5.0	3.8	5.0
Max Q Clear (g_c+l1), s	9.0	39.3	11.0	45.8	10.1	27.1	6.6	34.0
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.9
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	1.00	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1870	3486	3182	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1562	134	388	1524

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	148	0	214	0	173	0	113	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	9.0	0.0	8.1	0.0	4.6	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	9.0	0.0	8.1	0.0	4.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	361	0	393	0	674	0	777	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	34.4	0.0	43.8	0.0	34.4	0.0	43.8	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	9.3	0.0	13.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	8.7	0.0	5.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	164	0	194	0	259	0	260	0
V/C Ratio (X)	0.90	0.00	1.11	0.00	0.67	0.00	0.43	0.00
Avail Cap (c_a), veh/h	164	0	194	0	259	0	263	0
Upstream Filter (I)	0.48	0.00	1.00	0.00	0.17	0.00	1.00	0.00
Uniform Delay (d1), s/veh	33.4	0.0	33.3	0.0	30.0	0.0	25.4	0.0
Incr Delay (d2), s/veh	26.0	0.0	95.7	0.0	1.1	0.0	1.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.4	0.0	129.0	0.0	31.1	0.0	26.6	0.0
1st-Term Q (Q1), veh/ln	3.0	0.0	3.8	0.0	3.4	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	5.1	0.0	0.1	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.56	0.00	1.60	0.00	1.36	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	6.5	0.0	14.3	0.0	4.7	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	1.03	0.00	5.05	0.00	0.43	0.00	0.71	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	779	0	677	0	402	0	559
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	37.3	0.0	43.8	0.0	25.1	0.0	32.0
Cycle Q Clear Time (g_c), s	0.0	37.3	0.0	43.8	0.0	25.1	0.0	32.0
Lane Grp Cap (c), veh/h	0	581	0	649	0	509	0	701
V/C Ratio (X)	0.00	1.34	0.00	1.04	0.00	0.79	0.00	0.80
Avail Cap (c_a), veh/h	0	581	0	649	0	509	0	701
Upstream Filter (I)	0.00	0.17	0.00	1.00	0.00	0.48	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.3	0.0	38.1	0.0	39.5	0.0	33.4
Incr Delay (d2), s/veh	0.0	155.0	0.0	47.1	0.0	6.0	0.0	9.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	196.4	0.0	85.2	0.0	45.5	0.0	42.6
1st-Term Q (Q1), veh/ln	0.0	16.6	0.0	18.4	0.0	10.6	0.0	14.1
2nd-Term Q (Q2), veh/ln	0.0	25.0	0.0	8.5	0.0	0.8	0.0	1.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.33	0.00	1.36	0.00	1.34	0.00	1.41
%ile Back of Q (95%), veh/ln	0.0	55.4	0.0	36.5	0.0	15.3	0.0	22.5
%ile Storage Ratio (RQ%)	0.00	0.64	0.00	7.24	0.00	0.15	0.00	7.93
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	49.4	0.0	7.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	689	0	703	0	407	0	97
Grp Sat Flow (s), veh/h/ln	0	1562	0	1842	0	1793	0	1524
Q Serve Time (g_s), s	0.0	37.3	0.0	43.8	0.0	25.1	0.0	5.1
Cycle Q Clear Time (g_c), s	0.0	37.3	0.0	43.8	0.0	25.1	0.0	5.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.07	0.00	0.22	0.00	1.00
Lane Grp Cap (c), veh/h	0	604	0	672	0	514	0	571
V/C Ratio (X)	0.00	1.14	0.00	1.05	0.00	0.79	0.00	0.17
Avail Cap (c_a), veh/h	0	604	0	672	0	514	0	571
Upstream Filter (I)	0.00	0.17	0.00	1.00	0.00	0.48	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.9	0.0	38.1	0.0	39.5	0.0	25.0
Incr Delay (d2), s/veh	0.0	66.8	0.0	47.3	0.0	6.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	103.7	0.0	85.4	0.0	45.5	0.0	25.7
1st-Term Q (Q1), veh/ln	0.0	17.1	0.0	19.1	0.0	10.8	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	11.2	0.0	8.8	0.0	0.9	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.24	0.00	1.35	0.00	1.33	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	35.1	0.0	37.8	0.0	15.5	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	7.50	0.00	0.15	0.00	1.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	21.1	0.0	7.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	90.7
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	616	275	120	497	50	90	585	132	120	1229	140
Future Volume (veh/h)	100	616	275	120	497	50	90	585	132	120	1229	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.87	0.97		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	670	299	130	540	54	98	636	143	130	1336	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	798	656	142	798	656	94	1599	621	302	1424	160
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	821	1870	1538	580	1870	1538	354	3554	1381	674	3165	356
Grp Volume(v), veh/h	109	670	299	130	540	54	98	636	143	130	744	744
Grp Sat Flow(s),veh/h/ln	821	1870	1538	580	1870	1538	354	1777	1381	674	1777	1744
Q Serve(g_s), s	11.1	28.8	12.4	9.6	20.9	1.9	3.7	10.8	5.7	14.4	35.6	36.8
Cycle Q Clear(g_c), s	32.1	28.8	12.4	38.4	20.9	1.9	40.5	10.8	5.7	25.2	35.6	36.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	239	798	656	142	798	656	94	1599	621	302	800	785
V/C Ratio(X)	0.46	0.84	0.46	0.92	0.68	0.08	1.04	0.40	0.23	0.43	0.93	0.95
Avail Cap(c_a), veh/h	239	798	656	142	798	656	94	1599	621	302	800	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	23.0	18.4	42.7	20.8	15.3	44.7	16.6	15.2	25.0	23.4	23.7
Incr Delay (d2), s/veh	0.6	1.0	0.2	55.9	4.6	0.2	96.1	0.1	0.2	1.0	17.3	20.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	13.4	5.1	8.7	14.4	1.2	8.0	7.1	3.0	4.0	23.9	24.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.3	24.1	18.6	98.6	25.4	15.6	140.8	16.7	15.3	26.0	40.7	44.3
LnGrp LOS	C	C	B	F	C	B	F	B	B	C	D	D
Approach Vol, veh/h		1078			724			877			1618	
Approach Delay, s/veh		23.6			37.8			30.4			41.1	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	44.0	46.0	44.0	46.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 38	* 41	* 38	* 41
Max Q Clear Time (g_c+I1), s	34.1	42.5	40.4	38.8
Green Ext Time (p_c), s	2.3	0.0	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	616	275	120	497	50	90	585	132	120	1229	140
Future Volume (veh/h)	100	616	275	120	497	50	90	585	132	120	1229	140
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.87	0.97		0.87
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	670	299	130	540	54	98	636	143	130	1336	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	239	798	656	142	798	656	94	1599	621	302	1424	160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.3	24.1	18.6	98.6	25.4	15.6	140.8	16.7	15.3	26.0	40.7	44.3
Ln Grp LOS	C	C	B	F	C	B	F	B	B	C	D	D
Approach Vol, veh/h		1078			724			877			1618	
Approach Delay, s/veh		23.6			37.8			30.4			41.1	
Approach LOS		C			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		44.0		46.0		44.0		46.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 38		* 41		* 38		* 41
Max Allow Headway (MAH), s		4.8		5.6		5.3		5.2
Max Q Clear (g_c+l1), s		34.1		42.5		40.4		38.8
Green Ext Time (g_e), s		2.3		0.0		0.0		1.4
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		821		354		580		674

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		3165

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1538		1381		1538		356

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	109	0	98	0	130	0	130
Grp Sat Flow (s), veh/h/ln	0	821	0	354	0	580	0	674
Q Serve Time (g_s), s	0.0	11.1	0.0	3.7	0.0	9.6	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	32.1	0.0	40.5	0.0	38.4	0.0	25.2
Perm LT Sat Flow (s_l), veh/h/ln	0	821	0	354	0	580	0	674
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.4	0.0	40.5	0.0	38.4	0.0	40.5
Perm LT Serve Time (g_u), s	0.0	17.5	0.0	3.7	0.0	9.6	0.0	29.7
Perm LT Q Serve Time (g_ps), s	0.0	11.1	0.0	3.7	0.0	9.6	0.0	14.4
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	239	0	94	0	142	0	302
V/C Ratio (X)	0.00	0.46	0.00	1.04	0.00	0.92	0.00	0.43
Avail Cap (c_a), veh/h	0	239	0	94	0	142	0	302
Upstream Filter (I)	0.00	0.09	0.00	0.85	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	33.7	0.0	44.7	0.0	42.7	0.0	25.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	96.1	0.0	55.9	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.3	0.0	140.8	0.0	98.6	0.0	26.0
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	2.0	0.0	2.8	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.5	0.0	2.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.34	0.00	1.75	0.00	1.73	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.9	0.0	8.0	0.0	8.7	0.0	4.0
%ile Storage Ratio (RQ%)	0.00	0.46	0.00	2.89	0.00	1.63	0.00	1.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	670	0	636	0	540	0	744
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	28.8	0.0	10.8	0.0	20.9	0.0	35.6
Cycle Q Clear Time (g_c), s	0.0	28.8	0.0	10.8	0.0	20.9	0.0	35.6
Lane Grp Cap (c), veh/h	0	798	0	1599	0	798	0	800
V/C Ratio (X)	0.00	0.84	0.00	0.40	0.00	0.68	0.00	0.93
Avail Cap (c_a), veh/h	0	798	0	1599	0	798	0	800
Upstream Filter (I)	0.00	0.09	0.00	0.85	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.0	0.0	16.6	0.0	20.8	0.0	23.4
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.1	0.0	4.6	0.0	17.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.1	0.0	16.7	0.0	25.4	0.0	40.7
1st-Term Q (Q1), veh/ln	0.0	11.5	0.0	4.0	0.0	8.3	0.0	13.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	1.0	0.0	3.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.14	0.00	1.75	0.00	1.54	0.00	1.40
%ile Back of Q (95%), veh/ln	0.0	13.4	0.0	7.1	0.0	14.4	0.0	23.9
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.15	0.00	1.01	0.00	1.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	299	0	143	0	54	0	744
Grp Sat Flow (s), veh/h/ln	0	1538	0	1381	0	1538	0	1744
Q Serve Time (g_s), s	0.0	12.4	0.0	5.7	0.0	1.9	0.0	36.8
Cycle Q Clear Time (g_c), s	0.0	12.4	0.0	5.7	0.0	1.9	0.0	36.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	656	0	621	0	656	0	785
V/C Ratio (X)	0.00	0.46	0.00	0.23	0.00	0.08	0.00	0.95
Avail Cap (c_a), veh/h	0	656	0	621	0	656	0	785
Upstream Filter (I)	0.00	0.09	0.00	0.85	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.4	0.0	15.2	0.0	15.3	0.0	23.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.2	0.0	20.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.6	0.0	15.3	0.0	15.6	0.0	44.3
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	1.7	0.0	0.6	0.0	13.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.24	0.00	1.80	0.00	1.80	0.00	1.39
%ile Back of Q (95%), veh/ln	0.0	5.1	0.0	3.0	0.0	1.2	0.0	24.9
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.70	0.00	0.30	0.00	1.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.0
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	58	67	329	638	35
Future Vol, veh/h	8	58	67	329	638	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	63	73	358	693	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1037	712	731	0	-	0
Stage 1	712	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	241	431	871	-	-	-
Stage 1	485	-	-	-	-	-
Stage 2	705	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	221	431	871	-	-	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	444	-	-	-	-	-
Stage 2	705	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	871	-	418	-	-
HCM Lane V/C Ratio	0.084	-	0.172	-	-
HCM Control Delay (s)	9.5	-	15.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	71	7	84	256	19	602
Future Vol, veh/h	71	7	84	256	19	602
Conflicting Peds, #/hr	10	6	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	8	91	278	21	654

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	798	98	0	0	370	0
Stage 1	92	-	-	-	-	-
Stage 2	706	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	355	958	-	-	1189	-
Stage 1	932	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	345	953	-	-	1188	-
Mov Cap-2 Maneuver	413	-	-	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	476	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	435	1188	-
HCM Lane V/C Ratio	-	-	0.195	0.017	-
HCM Control Delay (s)	-	-	15.3	8.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	80	100	86	42	168	20	483	72	120	1260	45
Future Volume (veh/h)	120	80	100	86	42	168	20	483	72	120	1260	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	87	109	93	46	183	22	525	78	130	1370	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	211	265	301	92	364	208	2124	906	463	2088	75
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.20	0.20	0.20	0.60	0.60	0.60
Sat Flow, veh/h	1143	748	937	1176	324	1291	378	3554	1516	810	3493	125
Grp Volume(v), veh/h	130	0	196	93	0	229	22	525	78	130	696	723
Grp Sat Flow(s),veh/h/ln	1143	0	1685	1176	0	1615	378	1777	1516	810	1777	1841
Q Serve(g_s), s	9.7	0.0	8.5	6.3	0.0	10.7	4.7	11.2	3.8	9.1	23.3	23.4
Cycle Q Clear(g_c), s	20.3	0.0	8.5	14.8	0.0	10.7	28.2	11.2	3.8	20.3	23.3	23.4
Prop In Lane	1.00		0.56	1.00		0.80	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	267	0	476	301	0	456	208	2124	906	463	1062	1100
V/C Ratio(X)	0.49	0.00	0.41	0.31	0.00	0.50	0.11	0.25	0.09	0.28	0.66	0.66
Avail Cap(c_a), veh/h	430	0	715	468	0	686	208	2124	906	463	1062	1100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	0.0	26.2	32.2	0.0	27.0	36.5	19.0	16.1	14.9	12.0	12.0
Incr Delay (d2), s/veh	1.4	0.0	0.6	0.6	0.0	0.9	1.0	0.3	0.2	1.5	3.2	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.0	0.0	6.2	3.3	0.0	7.5	1.0	9.0	2.3	3.2	13.8	14.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	0.0	26.8	32.8	0.0	27.9	37.5	19.3	16.2	16.4	15.1	15.1
LnGrp LOS	D	A	C	C	A	C	D	B	B	B	B	B
Approach Vol, veh/h		326			322			625			1549	
Approach Delay, s/veh		30.8			29.3			19.6			15.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	58.8	31.2	58.8	31.2
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	25.4	22.3	30.2	16.8
Green Ext Time (p_c), s	9.2	1.6	3.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	80	100	86	42	168	20	483	72	120	1260	45
Future Volume (veh/h)	120	80	100	86	42	168	20	483	72	120	1260	45
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.99	0.99		0.99	1.00		0.96	0.99		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	87	109	93	46	183	22	525	78	130	1370	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	267	211	265	301	92	364	208	2124	906	463	2088	75
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.20	0.20	0.20	0.60	0.60	0.60
Unsig. Movement Delay												
Ln Grp Delay, s/veh	36.9	0.0	26.8	32.8	0.0	27.9	37.5	19.3	16.2	16.4	15.1	15.1
Ln Grp LOS	D	A	C	C	A	C	D	B	B	B	B	B
Approach Vol, veh/h		326			322			625			1549	
Approach Delay, s/veh		30.8			29.3			19.6			15.2	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		58.8		31.2		58.8		31.2
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.2		5.1		5.2		5.3
Max Q Clear (g_c+I1), s		25.4		22.3		30.2		16.8
Green Ext Time (g_e), s		9.2		1.6		3.0		1.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.02		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		810		1143		378		1176
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3493		748		3554		324
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		125		937		1516		1291
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	130	0	130	0	22	0	93
Grp Sat Flow (s), veh/h/ln	0	810	0	1143	0	378	0	1176
Q Serve Time (g_s), s	0.0	9.1	0.0	9.7	0.0	4.7	0.0	6.3
Cycle Q Clear Time (g_c), s	0.0	20.3	0.0	20.3	0.0	28.2	0.0	14.8
Perm LT Sat Flow (s_l), veh/h/ln	0	810	0	1143	0	378	0	1176
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	53.8	0.0	25.4	0.0	53.8	0.0	25.4
Perm LT Serve Time (g_u), s	0.0	42.6	0.0	14.7	0.0	30.4	0.0	16.9
Perm LT Q Serve Time (g_ps), s	0.0	9.1	0.0	9.7	0.0	4.7	0.0	6.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	463	0	267	0	208	0	301
V/C Ratio (X)	0.00	0.28	0.00	0.49	0.00	0.11	0.00	0.31
Avail Cap (c_a), veh/h	0	463	0	430	0	208	0	468
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.98	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.9	0.0	35.5	0.0	36.5	0.0	32.2
Incr Delay (d2), s/veh	0.0	1.5	0.0	1.4	0.0	1.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.4	0.0	36.9	0.0	37.5	0.0	32.8
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	2.7	0.0	0.5	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.2	0.0	5.0	0.0	1.0	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	3.17	0.00	0.24	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	696	0	0	0	525	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	23.3	0.0	0.0	0.0	11.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.3	0.0	0.0	0.0	11.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1062	0	0	0	2124	0	0
V/C Ratio (X)	0.00	0.66	0.00	0.00	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	1062	0	0	0	2124	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.98	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	0.0	0.0	19.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.2	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.1	0.0	0.0	0.0	19.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.0	0.0	0.0	0.0	5.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.55	0.00	1.00	0.00	1.71	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	13.8	0.0	0.0	0.0	9.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	0.00	0.00	0.72	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	723	0	196	0	78	0	229
Grp Sat Flow (s), veh/h/ln	0	1841	0	1685	0	1516	0	1615
Q Serve Time (g_s), s	0.0	23.4	0.0	8.5	0.0	3.8	0.0	10.7
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	8.5	0.0	3.8	0.0	10.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.07	0.00	0.56	0.00	1.00	0.00	0.80
Lane Grp Cap (c), veh/h	0	1100	0	476	0	906	0	456
V/C Ratio (X)	0.00	0.66	0.00	0.41	0.00	0.09	0.00	0.50
Avail Cap (c_a), veh/h	0	1100	0	715	0	906	0	686
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.98	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	26.2	0.0	16.1	0.0	27.0
Incr Delay (d2), s/veh	0.0	3.1	0.0	0.6	0.0	0.2	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.1	0.0	26.8	0.0	16.2	0.0	27.9
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	3.4	0.0	1.2	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.54	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	14.2	0.0	6.2	0.0	2.3	0.0	7.5
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	0.58	0.00	0.57	0.00	0.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	76	177	5	0	250	11	1	0	0	32	0	54
Future Vol, veh/h	76	177	5	0	250	11	1	0	0	32	0	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	83	192	5	0	272	12	1	0	0	35	0	59
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.4	11	8.7	8.7
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	100%	0%	0%	0%	37%
Vol Thru, %	0%	0%	97%	100%	96%	0%
Vol Right, %	0%	0%	3%	0%	4%	63%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	76	182	0	261	86
LT Vol	1	76	0	0	0	32
Through Vol	0	0	177	0	250	0
RT Vol	0	0	5	0	11	54
Lane Flow Rate	1	83	198	0	284	93
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.002	0.126	0.274	0	0.394	0.129
Departure Headway (Hd)	5.626	5.511	4.989	5.025	4.996	4.968
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	633	650	720	0	721	721
Service Time	3.684	3.245	2.723	2.758	2.729	3.008
HCM Lane V/C Ratio	0.002	0.128	0.275	0	0.394	0.129
HCM Control Delay	8.7	9	9.6	7.8	11	8.7
HCM Lane LOS	A	A	A	N	B	A
HCM 95th-tile Q	0	0.4	1.1	0	1.9	0.4

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	141	74	1	146	66	33	3	0	14	3	65
Future Vol, veh/h	41	141	74	1	146	66	33	3	0	14	3	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	153	80	1	159	72	36	3	0	15	3	71
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.5	9.8	8.8	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	92%	100%	0%	100%	0%	17%
Vol Thru, %	8%	0%	66%	0%	69%	4%
Vol Right, %	0%	0%	34%	0%	31%	79%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	41	215	1	212	82
LT Vol	33	41	0	1	0	14
Through Vol	3	0	141	0	146	3
RT Vol	0	0	74	0	66	65
Lane Flow Rate	39	45	234	1	230	89
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.059	0.069	0.312	0.002	0.312	0.117
Departure Headway (Hd)	5.431	5.553	4.808	5.603	4.88	4.735
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	657	645	748	638	735	754
Service Time	3.483	3.288	2.543	3.34	2.618	2.78
HCM Lane V/C Ratio	0.059	0.07	0.313	0.002	0.313	0.118
HCM Control Delay	8.8	8.7	9.7	8.4	9.8	8.4
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.2	1.3	0	1.3	0.4

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	11	127	59	104	3	92	2	12	6	46	34
Future Vol, veh/h	0	11	127	59	104	3	92	2	12	6	46	34
Conflicting Peds, #/hr	41	0	57	57	0	41	13	0	50	50	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	138	64	113	3	100	2	13	7	50	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	207	0	0	368	354	119	423	491	169
Stage 1	-	-	-	-	-	-	69	69	-	284	284	-
Stage 2	-	-	-	-	-	-	299	285	-	139	207	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1364	-	-	588	571	933	541	478	875
Stage 1	0	-	-	-	-	-	941	837	-	723	676	-
Stage 2	0	-	-	-	-	-	710	676	-	864	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1302	-	-	470	501	855	475	420	838
Mov Cap-2 Maneuver	-	-	-	-	-	-	515	536	-	553	478	-
Stage 1	-	-	-	-	-	-	941	799	-	723	622	-
Stage 2	-	-	-	-	-	-	587	622	-	815	698	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.8	13.2	12.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	515	855	-	-	1302	-	-	585
HCM Lane V/C Ratio	0.194	0.015	-	-	0.049	-	-	0.149
HCM Control Delay (s)	13.7	9.3	-	-	7.9	-	-	12.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0.2	-	-	0.5

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	10	58	0	29	9	39	20	11	233	0
Future Vol, veh/h	0	0	10	58	0	29	9	39	20	11	233	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	63	0	32	10	42	22	12	253	0
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	7.4	8.4	8	10
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	67%	100%	0%
Vol Thru, %	0%	66%	0%	0%	0%	100%
Vol Right, %	0%	34%	100%	33%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	59	10	87	11	233
LT Vol	9	0	0	58	11	0
Through Vol	0	39	0	0	0	233
RT Vol	0	20	10	29	0	0
Lane Flow Rate	10	64	11	95	12	253
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.015	0.085	0.013	0.124	0.018	0.342
Departure Headway (Hd)	5.513	4.772	4.28	4.704	5.37	4.868
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	650	752	836	763	671	745
Service Time	3.236	2.495	2.307	2.724	3.07	2.568
HCM Lane V/C Ratio	0.015	0.085	0.013	0.125	0.018	0.34
HCM Control Delay	8.3	7.9	7.4	8.4	8.2	10.1
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	0	0.3	0	0.4	0.1	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	892	179	137	357	78	136	413	81	133	507	23
Future Volume (veh/h)	120	892	179	137	357	78	136	413	81	133	507	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	1.00		0.84	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	970	195	149	388	85	148	449	88	145	551	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	1135	447	175	1170	463	174	581	413	172	579	411
Arrive On Green	0.09	0.32	0.32	0.10	0.33	0.33	0.10	0.31	0.31	0.10	0.31	0.31
Sat Flow, veh/h	1781	3554	1399	1781	3554	1405	1781	1870	1330	1781	1870	1328
Grp Volume(v), veh/h	130	970	195	149	388	85	148	449	88	145	551	25
Grp Sat Flow(s),veh/h/ln	1781	1777	1399	1781	1777	1405	1781	1870	1330	1781	1870	1328
Q Serve(g_s), s	8.6	30.7	13.2	9.9	9.9	5.2	9.8	26.1	5.9	9.6	34.6	1.6
Cycle Q Clear(g_c), s	8.6	30.7	13.2	9.9	9.9	5.2	9.8	26.1	5.9	9.6	34.6	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	1135	447	175	1170	463	174	581	413	172	579	411
V/C Ratio(X)	0.82	0.85	0.44	0.85	0.33	0.18	0.85	0.77	0.21	0.85	0.95	0.06
Avail Cap(c_a), veh/h	257	1135	447	178	1170	463	178	581	413	189	592	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	53.8	38.2	32.3	53.2	30.3	28.7	53.3	37.5	30.5	53.3	40.6	29.2
Incr Delay (d2), s/veh	10.7	8.3	3.1	30.1	0.8	0.9	29.8	6.4	0.3	22.4	22.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.6	20.4	8.4	9.8	7.6	3.3	9.7	18.6	3.4	8.7	25.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.4	46.5	35.4	83.3	31.1	29.6	83.1	43.8	30.8	75.8	62.6	29.2
LnGrp LOS	E	D	D	F	C	C	F	D	C	E	E	C
Approach Vol, veh/h		1295			622			685			721	
Approach Delay, s/veh		46.6			43.4			50.6			64.1	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	44.5	16.7	42.1	17.8	43.3	16.6	42.3
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	17.3	* 32	12.0	* 38	12.0	* 37	12.7	* 37
Max Q Clear Time (g_c+I1), s	10.6	11.9	11.8	36.6	11.9	32.7	11.6	28.1
Green Ext Time (p_c), s	0.2	2.6	0.0	0.5	0.0	2.6	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	50.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	892	179	137	357	78	136	413	81	133	507	23
Future Volume (veh/h)	120	892	179	137	357	78	136	413	81	133	507	23
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.88	1.00		0.89	1.00		0.84	1.00		0.84
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	970	195	149	388	85	148	449	88	145	551	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	158	1135	447	175	1170	463	174	581	413	172	579	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.32	0.32	0.10	0.33	0.33	0.10	0.31	0.31	0.10	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	64.4	46.5	35.4	83.3	31.1	29.6	83.1	43.8	30.8	75.8	62.6	29.2
Ln Grp LOS	E	D	D	F	C	C	F	D	C	E	E	C
Approach Vol, veh/h		1295			622			685			721	
Approach Delay, s/veh		46.6			43.4			50.6			64.1	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.6	44.5	16.7	42.1	17.8	43.3	16.6	42.3
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	17.3	* 32	12.0	* 38	12.0	* 37	12.7	* 37
Max Allow Headway (MAH), s	3.7	4.9	3.8	5.1	3.7	4.9	3.8	5.0
Max Q Clear (g_c+l1), s	10.6	11.9	11.8	36.6	11.9	32.7	11.6	28.1
Green Ext Time (g_e), s	0.2	2.6	0.0	0.5	0.0	2.6	0.0	2.1
Prob of Phs Call (p_c)	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	0.06	0.00	1.00	1.00	1.00	0.00	1.00	0.35

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1405		1328		1399		1330

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	130	0	148	0	149	0	145	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	8.6	0.0	9.8	0.0	9.9	0.0	9.6	0.0
Cycle Q Clear Time (g_c), s	8.6	0.0	9.8	0.0	9.9	0.0	9.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	158	0	174	0	175	0	172	0
V/C Ratio (X)	0.82	0.00	0.85	0.00	0.85	0.00	0.85	0.00
Avail Cap (c_a), veh/h	257	0	178	0	178	0	189	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.81	0.00
Uniform Delay (d1), s/veh	53.8	0.0	53.3	0.0	53.2	0.0	53.3	0.0
Incr Delay (d2), s/veh	10.7	0.0	29.8	0.0	30.1	0.0	22.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.4	0.0	83.1	0.0	83.3	0.0	75.8	0.0
1st-Term Q (Q1), veh/ln	3.8	0.0	4.3	0.0	4.3	0.0	4.3	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	1.4	0.0	1.5	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.68	0.00	1.68	0.00	1.64	0.00
%ile Back of Q (95%), veh/ln	7.6	0.0	9.7	0.0	9.8	0.0	8.7	0.0
%ile Storage Ratio (RQ%)	0.90	0.00	1.98	0.00	1.24	0.00	2.47	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	388	0	551	0	970	0	449
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	9.9	0.0	34.6	0.0	30.7	0.0	26.1
Cycle Q Clear Time (g_c), s	0.0	9.9	0.0	34.6	0.0	30.7	0.0	26.1
Lane Grp Cap (c), veh/h	0	1170	0	579	0	1135	0	581
V/C Ratio (X)	0.00	0.33	0.00	0.95	0.00	0.85	0.00	0.77
Avail Cap (c_a), veh/h	0	1170	0	592	0	1135	0	581
Upstream Filter (I)	0.00	1.00	0.00	0.81	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.3	0.0	40.6	0.0	38.2	0.0	37.5
Incr Delay (d2), s/veh	0.0	0.8	0.0	22.1	0.0	8.3	0.0	6.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.1	0.0	62.6	0.0	46.5	0.0	43.8
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	15.6	0.0	12.9	0.0	11.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	3.5	0.0	1.3	0.0	1.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.34	0.00	1.44	0.00	1.46
%ile Back of Q (95%), veh/ln	0.0	7.6	0.0	25.5	0.0	20.4	0.0	18.6
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.53	0.00	0.63	0.00	0.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	85	0	25	0	195	0	88
Grp Sat Flow (s), veh/h/ln	0	1405	0	1328	0	1399	0	1330
Q Serve Time (g_s), s	0.0	5.2	0.0	1.6	0.0	13.2	0.0	5.9
Cycle Q Clear Time (g_c), s	0.0	5.2	0.0	1.6	0.0	13.2	0.0	5.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	463	0	411	0	447	0	413
V/C Ratio (X)	0.00	0.18	0.00	0.06	0.00	0.44	0.00	0.21
Avail Cap (c_a), veh/h	0	463	0	421	0	447	0	413
Upstream Filter (I)	0.00	1.00	0.00	0.81	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.7	0.0	29.2	0.0	32.3	0.0	30.5
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	3.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.6	0.0	29.2	0.0	35.4	0.0	30.8
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.5	0.0	4.4	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.75	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.3	0.0	0.9	0.0	8.4	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.85	0.00	0.21	0.00	2.14	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.6
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	164	338	129	0	290	29	0	475	245
Future Volume (veh/h)	0	0	0	164	338	129	0	290	29	0	475	245
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				178	367	140	0	315	32	0	516	266
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				195	403	501	0	1923	194	0	683	352
Arrive On Green				0.32	0.32	0.32	0.00	1.00	1.00	0.00	0.59	0.59
Sat Flow, veh/h				601	1239	1541	0	3343	327	0	1154	595
Grp Volume(v), veh/h				545	0	140	0	171	176	0	0	782
Grp Sat Flow(s),veh/h/ln				1840	0	1541	0	1777	1800	0	0	1748
Q Serve(g_s), s				34.1	0.0	8.1	0.0	0.0	0.0	0.0	0.0	39.6
Cycle Q Clear(g_c), s				34.1	0.0	8.1	0.0	0.0	0.0	0.0	0.0	39.6
Prop In Lane				0.33		1.00	0.00		0.18	0.00		0.34
Lane Grp Cap(c), veh/h				598	0	501	0	1052	1065	0	0	1035
V/C Ratio(X)				0.91	0.00	0.28	0.00	0.16	0.17	0.00	0.00	0.76
Avail Cap(c_a), veh/h				721	0	604	0	1052	1065	0	0	1035
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				0.37	0.00	0.37	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				38.9	0.0	30.1	0.0	0.0	0.0	0.0	0.0	18.1
Incr Delay (d2), s/veh				6.1	0.0	0.1	0.0	0.3	0.3	0.0	0.0	5.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				19.8	0.0	4.7	0.0	0.2	0.2	0.0	0.0	22.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.0	0.0	30.2	0.0	0.3	0.3	0.0	0.0	23.2
LnGrp LOS				D	A	C	A	A	A	A	A	C
Approach Vol, veh/h					685			347			782	
Approach Delay, s/veh					42.0			0.3			23.2	
Approach LOS					D			A			C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.0	44.0	76.0
Change Period (Y+Rc), s	* 5	* 5	* 5
Max Green Setting (Gmax), s	* 63	* 47	* 63
Max Q Clear Time (g_c+I1), s	41.6	36.1	2.0
Green Ext Time (p_c), s	8.2	2.9	3.2

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	164	338	129	0	290	29	0	475	245
Future Volume (veh/h)	0	0	0	164	338	129	0	290	29	0	475	245
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				178	367	140	0	315	32	0	516	266
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Opposing Right Turn Influence				Yes			No			No		
Cap, veh/h				195	403	501	0	1923	194	0	683	352
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green				0.32	0.32	0.32	0.00	1.00	1.00	0.00	0.59	0.59
Unsig. Movement Delay												
Ln Grp Delay, s/veh				45.0	0.0	30.2	0.0	0.3	0.3	0.0	0.0	23.2
Ln Grp LOS				D	A	C	A	A	A	A	A	C
Approach Vol, veh/h					685			347			782	
Approach Delay, s/veh					42.0			0.3			23.2	
Approach LOS					D			A			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		8.0		11.0		8.0		
Phs Duration (G+Y+Rc), s		76.0		44.0		76.0		
Change Period (Y+Rc), s		* 5		* 5		* 5		
Max Green (Gmax), s		* 63		* 47		* 63		
Max Allow Headway (MAH), s		6.2		4.8		6.2		
Max Q Clear (g_c+I1), s		41.6		36.1		2.0		
Green Ext Time (g_e), s		8.2		2.9		3.2		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.26		0.28		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		0		601		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1154		1239		3343		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		595		1541		327		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment				L+T				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	545	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1840	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	34.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	34.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	71.0	0.0	0.0	0.0	71.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	598	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	721	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	38.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	45.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.25	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	19.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	171	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1052	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1052	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	782	0	140	0	176	0	0
Grp Sat Flow (s), veh/h/ln	0	1748	0	1541	0	1800	0	0
Q Serve Time (g_s), s	0.0	39.6	0.0	8.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	39.6	0.0	8.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	0.00	1.00	0.00	0.18	0.00	0.00
Lane Grp Cap (c), veh/h	0	1035	0	501	0	1065	0	0
V/C Ratio (X)	0.00	0.76	0.00	0.28	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	0	1035	0	604	0	1065	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.37	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.1	0.0	0.1	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.2	0.0	30.2	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.8	0.0	3.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.41	0.00	1.58	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	22.9	0.0	4.7	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.54	0.00	0.26	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	16	317	566	1315	151
Future Volume (veh/h)	13	16	317	566	1315	151
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.80	1.00			0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	17	345	615	1429	164
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	100	121	356	2622	1508	170
Arrive On Green	0.16	0.16	0.20	0.74	0.16	0.16
Sat Flow, veh/h	641	778	1781	3647	3235	354
Grp Volume(v), veh/h	32	0	345	615	796	797
Grp Sat Flow(s),veh/h/ln	1465	0	1781	1777	1777	1719
Q Serve(g_s), s	1.7	0.0	17.3	4.9	39.8	41.4
Cycle Q Clear(g_c), s	1.7	0.0	17.3	4.9	39.8	41.4
Prop In Lane	0.44	0.53	1.00			0.21
Lane Grp Cap(c), veh/h	228	0	356	2622	853	825
V/C Ratio(X)	0.14	0.00	0.97	0.23	0.93	0.97
Avail Cap(c_a), veh/h	293	0	356	2622	853	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.86	0.86	0.74	0.74
Uniform Delay (d), s/veh	32.8	0.0	35.7	3.7	36.5	37.1
Incr Delay (d2), s/veh	0.3	0.0	35.9	0.2	14.7	19.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	0.0	15.9	2.6	29.0	30.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.1	0.0	71.6	3.9	51.2	57.0
LnGrp LOS	C	A	E	A	D	E
Approach Vol, veh/h	32			960	1593	
Approach Delay, s/veh	33.1			28.3	54.1	
Approach LOS	C			C	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		71.5		18.5	23.2	48.3
Change Period (Y+Rc), s		5.1		4.5	* 5.2	5.1
Max Green Setting (Gmax), s		62.4		18.0	* 18	39.2
Max Q Clear Time (g_c+I1), s		6.9		3.7	19.3	43.4
Green Ext Time (p_c), s		4.9		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	16	317	566	1315	151
Future Volume (veh/h)	13	16	317	566	1315	151
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.80	1.00			0.83
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	17	345	615	1429	164
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	100	121	356	2622	1508	170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Prop Arrive On Green	0.16	0.16	0.20	0.74	0.16	0.16
Unsig. Movement Delay						
Ln Grp Delay, s/veh	33.1	0.0	71.6	3.9	51.2	57.0
Ln Grp LOS	C	A	E	A	D	E
Approach Vol, veh/h	32			960	1593	
Approach Delay, s/veh	33.1			28.3	54.1	
Approach LOS	C			C	D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		71.5		18.5	23.2	48.3		
Change Period (Y+Rc), s		5.1		4.5	* 5.2	5.1		
Max Green (Gmax), s		62.4		18.0	* 18	39.2		
Max Allow Headway (MAH), s		5.2		4.2	3.8	5.3		
Max Q Clear (g_c+I1), s		6.9		3.7	19.3	43.4		
Green Ext Time (g_e), s		4.9		0.0	0.0	0.0		
Prob of Phs Call (p_c)		1.00		0.88	1.00	1.00		
Prob of Max Out (p_x)		0.00		0.00	1.00	1.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				641	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		46		3235		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		778		354		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	32	345	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1465	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	1.7	17.3	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.7	17.3	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	43.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.44	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	228	356	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.14	0.97	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	293	356	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.86	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	32.8	35.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	35.9	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	33.1	71.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.6	7.3	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.46	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	1.1	15.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	8.07	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	615	0	0	0	796	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	4.9	0.0	0.0	0.0	39.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.9	0.0	0.0	0.0	39.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	2622	0	0	0	853	0	0
V/C Ratio (X)	0.00	0.23	0.00	0.00	0.00	0.93	0.00	0.00
Avail Cap (c_a), veh/h	0	2622	0	0	0	853	0	0
Upstream Filter (I)	0.00	0.86	0.00	0.00	0.00	0.74	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.7	0.0	0.0	0.0	36.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	14.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.9	0.0	0.0	0.0	51.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	0.0	0.0	18.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	3.5	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.30	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.6	0.0	0.0	0.0	29.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.00	0.00	2.34	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	797	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1719	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	41.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	41.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.53	0.00	0.21	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	825	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	825	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	37.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	19.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	57.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	18.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.29	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	30.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	2.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.2
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	14	1	0	14	0	0	239	4	0	604	0
Future Volume (veh/h)	0	14	1	0	14	0	0	239	4	0	604	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	15	1	0	15	0	0	260	4	0	657	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Cap, veh/h	0	42	3	0	45	0	0	3137	48	0	1638	0
Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	0	1734	116	0	1870	0	0	3675	55	0	1870	0
Grp Volume(v), veh/h	0	0	16	0	15	0	0	129	135	0	657	0
Grp Sat Flow(s),veh/h/ln	0	0	1850	0	1870	0	0	1777	1860	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.00		0.06	0.00		0.00	0.00		0.03	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	45	0	45	0	0	1556	1629	0	1638	0
V/C Ratio(X)	0.00	0.00	0.36	0.00	0.33	0.00	0.00	0.08	0.08	0.00	0.40	0.00
Avail Cap(c_a), veh/h	0	0	108	0	109	0	0	1556	1629	0	1638	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.98	0.98	0.00	0.40	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.6	0.0	57.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	21.0	0.0	18.7	0.0	0.0	0.1	0.1	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.3	0.0	1.2	0.0	0.0	0.1	0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	78.7	0.0	76.3	0.0	0.0	0.1	0.1	0.0	0.3	0.0
LnGrp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		16			15			264			657	
Approach Delay, s/veh		78.7			76.3			0.1			0.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.1	9.9	110.1	9.9
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	2.0	3.0	2.0	2.9
Green Ext Time (p_c), s	2.4	0.0	8.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	2.8
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	14	1	0	14	0	0	239	4	0	604	0
Future Volume (veh/h)	0	14	1	0	14	0	0	239	4	0	604	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	15	1	0	15	0	0	260	4	0	657	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	42	3	0	45	0	0	3137	48	0	1638	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	78.7	0.0	76.3	0.0	0.0	0.1	0.1	0.0	0.3	0.0
Ln Grp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		16			15			264			657	
Approach Delay, s/veh		78.7			76.3			0.1			0.3	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.1		9.9		110.1		9.9
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+I1), s		2.0		3.0		2.0		2.9
Green Ext Time (g_e), s		2.4		0.0		8.0		0.0
Prob of Phs Call (p_c)		1.00		0.41		1.00		0.39
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3675		1734		1870		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		55		116		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.1	0.0	2.9	0.0	105.1	0.0	2.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	129	0	0	0	657	0	15
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Lane Grp Cap (c), veh/h	0	1556	0	0	0	1638	0	45
V/C Ratio (X)	0.00	0.08	0.00	0.00	0.00	0.40	0.00	0.33
Avail Cap (c_a), veh/h	0	1556	0	0	0	1638	0	109
Upstream Filter (I)	0.00	0.98	0.00	0.00	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.3	0.0	18.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	0.0	0.0	0.3	0.0	76.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.09	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	135	0	16	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1860	0	1850	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.03	0.00	0.06	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1629	0	45	0	0	0	0
V/C Ratio (X)	0.00	0.08	0.00	0.36	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1629	0	108	0	0	0	0
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	57.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	21.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	78.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	2.8
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	743	269	0	0	29	0	168	164	40	575	0
Future Volume (veh/h)	102	743	269	0	0	29	0	168	164	40	575	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.94	1.00		0.94	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	111	808	292	0	0	32	0	183	178	43	625	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	2	2	0
Cap, veh/h	921	947	383	0	0	41	0	853	718	588	1095	0
Arrive On Green	0.27	0.27	0.27	0.00	0.00	0.03	0.00	0.48	0.48	0.13	1.00	0.00
Sat Flow, veh/h	3456	3554	1439	0	0	1494	0	1870	1494	1781	1870	0
Grp Volume(v), veh/h	111	808	292	0	0	32	0	183	178	43	625	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1439	0	0	1494	0	1777	1494	1781	1870	0
Q Serve(g_s), s	2.9	25.9	22.4	0.0	0.0	2.6	0.0	7.2	8.4	1.2	0.0	0.0
Cycle Q Clear(g_c), s	2.9	25.9	22.4	0.0	0.0	2.6	0.0	7.2	8.4	1.2	0.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	921	947	383	0	0	41	0	853	718	588	1095	0
V/C Ratio(X)	0.12	0.85	0.76	0.00	0.00	0.78	0.00	0.21	0.25	0.07	0.57	0.00
Avail Cap(c_a), veh/h	979	1007	408	0	0	224	0	853	718	623	1095	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	33.4	41.8	40.5	0.0	0.0	58.0	0.0	18.1	18.4	11.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	7.2	8.5	0.0	0.0	27.0	0.0	0.6	0.8	0.0	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	17.7	24.7	0.0	0.0	2.3	0.0	5.5	5.5	0.9	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	49.0	49.0	0.0	0.0	85.1	0.0	18.6	19.2	11.6	2.0	0.0
LnGrp LOS	C	D	D	A	A	F	A	B	B	B	A	A
Approach Vol, veh/h		1211			32			361			668	
Approach Delay, s/veh		47.6			85.1			18.9			2.6	
Approach LOS		D			F			B			A	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	75.2		37.0	12.6	62.6		7.8
Change Period (Y+Rc), s	* 5		* 5	* 5	* 5		4.5
Max Green Setting (Gmax), s	* 54		* 34	* 10	* 39		18.0
Max Q Clear Time (g_c+I1), s	2.0		27.9	3.2	10.4		4.6
Green Ext Time (p_c), s	10.3		4.1	0.0	4.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	743	269	0	0	29	0	168	164	40	575	0
Future Volume (veh/h)	102	743	269	0	0	29	0	168	164	40	575	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.91	1.00		0.94	1.00		0.94	0.99		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	111	808	292	0	0	32	0	183	178	43	625	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			No			No			Yes		
Cap, veh/h	921	947	383	0	0	41	0	853	718	588	1095	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.27	0.27	0.27	0.00	0.00	0.03	0.00	0.48	0.48	0.13	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	33.4	49.0	49.0	0.0	0.0	85.1	0.0	18.6	19.2	11.6	2.0	0.0
Ln Grp LOS	C	D	D	A	A	F	A	B	B	B	A	A
Approach Vol, veh/h		1211			32			361			668	
Approach Delay, s/veh		47.6			85.1			18.9			2.6	
Approach LOS		D			F			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	8.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		75.2	7.8	37.0	12.6	62.6		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 54	18.0	* 34	* 10	* 39		
Max Allow Headway (MAH), s		7.1	5.5	5.7	3.8	7.4		
Max Q Clear (g_c+I1), s		2.0	4.6	27.9	3.2	10.4		
Green Ext Time (g_e), s		10.3	0.1	4.1	0.0	4.3		
Prob of Phs Call (p_c)		1.00	0.70	1.00	0.76	1.00		
Prob of Max Out (p_x)		0.01	0.00	0.97	0.01	0.02		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			0	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		1870		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1494	1439		1494		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment				LL (Pr/Pm)				

Lanes in Grp	0	0	0	2	1	0	0	0
Grp Vol (v), veh/h	0	0	0	111	43	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	2.9	1.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.9	1.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	1011	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	59.6	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	49.2	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	3.3	0.0	0.0	57.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	921	588	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.12	0.07	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	979	623	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.92	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	33.4	11.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	33.4	11.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.2	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	2.2	0.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.12	0.36	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	625	0	808	0	183	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	25.9	0.0	7.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	25.9	0.0	7.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1095	0	947	0	853	0	0
V/C Ratio (X)	0.00	0.57	0.00	0.85	0.00	0.21	0.00	0.00
Avail Cap (c_a), veh/h	0	1095	0	1007	0	853	0	0
Upstream Filter (I)	0.00	0.92	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	41.8	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	7.2	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	2.0	0.0	49.0	0.0	18.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	11.0	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	1.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.47	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.1	0.0	17.7	0.0	5.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.75	0.00	0.41	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	32	292	0	178	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1494	1439	0	1494	0	0
Q Serve Time (g_s), s	0.0	0.0	2.6	22.4	0.0	8.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	2.6	22.4	0.0	8.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	41	383	0	718	0	0
V/C Ratio (X)	0.00	0.00	0.78	0.76	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	0	224	408	0	718	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	58.0	40.5	0.0	18.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	27.0	8.5	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	85.1	49.0	0.0	19.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.0	16.9	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.9	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.39	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	2.3	24.7	0.0	5.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.14	8.36	0.00	0.41	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱		↑		↱
Traffic Vol, veh/h	776	74	0	36	0	124
Future Vol, veh/h	776	74	0	36	0	124
Conflicting Peds, #/hr	0	53	53	0	14	32
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	843	80	0	39	0	135

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	507
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	-	-	0	-	0	512
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	478
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	478	-	-	-
HCM Lane V/C Ratio	0.282	-	-	-
HCM Control Delay (s)	15.5	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	538	121	431	6	236	19	442	86	165	1091	11
Future Volume (veh/h)	245	538	121	431	6	236	19	442	86	165	1091	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.89		0.86	0.92		0.85	1.00		0.86	0.96		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	266	585	132	468	7	257	21	480	93	179	1186	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	518	1002	386	617	468	467	37	1267	623	415	1488	532
Arrive On Green	0.16	0.38	0.38	0.09	0.25	0.25	0.02	0.36	0.36	0.08	0.42	0.42
Sat Flow, veh/h	1781	3554	1368	3456	1870	1340	1781	3554	1364	1781	3554	1271
Grp Volume(v), veh/h	266	585	132	468	7	257	21	480	93	179	1186	12
Grp Sat Flow(s),veh/h/ln	1781	1777	1368	1728	1870	1340	1781	1777	1364	1781	1777	1271
Q Serve(g_s), s	13.5	15.8	8.3	10.4	0.3	19.0	1.4	12.1	4.9	7.3	34.9	0.7
Cycle Q Clear(g_c), s	13.5	15.8	8.3	10.4	0.3	19.0	1.4	12.1	4.9	7.3	34.9	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	518	1002	386	617	468	467	37	1267	623	415	1488	532
V/C Ratio(X)	0.51	0.58	0.34	0.76	0.01	0.55	0.56	0.38	0.15	0.43	0.80	0.02
Avail Cap(c_a), veh/h	518	1007	387	617	477	473	74	1267	623	491	1488	532
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	26.8	31.9	29.5	33.8	33.8	33.0	58.2	28.7	20.0	20.8	30.4	20.5
Incr Delay (d2), s/veh	0.9	0.9	0.5	5.4	0.0	1.3	12.2	0.8	0.5	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.3	10.6	4.9	3.5	0.3	10.4	1.4	9.0	3.0	3.9	16.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	32.7	30.0	39.2	33.9	34.3	70.4	29.6	20.5	20.8	30.9	20.5
LnGrp LOS	C	C	C	D	C	C	E	C	C	C	C	C
Approach Vol, veh/h		983			732			594			1377	
Approach Delay, s/veh		31.0			37.4			29.6			29.5	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	56.0	19.8	36.0	15.6	48.6	16.0	39.8
Change Period (Y+Rc), s	5.6	* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s	5.0	* 48	14.2	* 31	15.1	* 38	10.4	* 34
Max Q Clear Time (g_c+I1), s	3.4	36.9	15.5	21.0	9.3	14.1	12.4	17.8
Green Ext Time (p_c), s	0.0	6.1	0.0	0.7	0.2	3.7	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	538	121	431	6	236	19	442	86	165	1091	11
Future Volume (veh/h)	245	538	121	431	6	236	19	442	86	165	1091	11
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.89		0.86	0.92		0.85	1.00		0.86	0.96		0.80
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	266	585	132	468	7	257	21	480	93	179	1186	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	518	1002	386	617	468	467	37	1267	623	415	1488	532
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.16	0.38	0.38	0.09	0.25	0.25	0.02	0.36	0.36	0.08	0.42	0.42
Unsig. Movement Delay												
Ln Grp Delay, s/veh	27.6	32.7	30.0	39.2	33.9	34.3	70.4	29.6	20.5	20.8	30.9	20.5
Ln Grp LOS	C	C	C	D	C	C	E	C	C	C	C	C
Approach Vol, veh/h		983			732			594			1377	
Approach Delay, s/veh		31.0			37.4			29.6			29.5	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	8.1	56.0	19.8	36.0	15.6	48.6	16.0	39.8
Change Period (Y+Rc), s	5.6	* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s	5.0	* 48	14.2	* 31	15.1	* 38	10.4	* 34
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.5	3.8	5.1	3.8	5.1
Max Q Clear (g_c+l1), s	3.4	36.9	15.5	21.0	9.3	14.1	12.4	17.8
Green Ext Time (g_e), s	0.0	6.1	0.0	0.7	0.2	3.7	0.0	4.1
Prob of Phs Call (p_c)	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.07	0.19	0.00	1.00	0.11

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		3456	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1271		1340		1364		1368

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	21	0	266	0	179	0	468	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1728	0
Q Serve Time (g_s), s	1.4	0.0	13.5	0.0	7.3	0.0	10.4	0.0
Cycle Q Clear Time (g_c), s	1.4	0.0	13.5	0.0	7.3	0.0	10.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	998	0	807	0	658	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	30.2	0.0	44.8	0.0	30.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	29.7	0.0	30.7	0.0	18.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.2	0.0	4.0	0.0	13.9	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	37	0	518	0	415	0	617	0
V/C Ratio (X)	0.56	0.00	0.51	0.00	0.43	0.00	0.76	0.00
Avail Cap (c_a), veh/h	74	0	518	0	491	0	617	0
Upstream Filter (I)	0.97	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.2	0.0	26.8	0.0	20.8	0.0	33.8	0.0
Incr Delay (d2), s/veh	12.2	0.0	0.9	0.0	0.1	0.0	5.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	70.4	0.0	27.6	0.0	20.8	0.0	39.2	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	5.4	0.0	3.0	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.70	0.00	1.28	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.4	0.0	9.3	0.0	3.9	0.0	3.5	0.0
%ile Storage Ratio (RQ%)	0.23	0.00	3.95	0.00	0.90	0.00	0.66	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	2
Grp Vol (v), veh/h	0	1186	0	7	0	480	0	585
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	34.9	0.0	0.3	0.0	12.1	0.0	15.8
Cycle Q Clear Time (g_c), s	0.0	34.9	0.0	0.3	0.0	12.1	0.0	15.8
Lane Grp Cap (c), veh/h	0	1488	0	468	0	1267	0	1002
V/C Ratio (X)	0.00	0.80	0.00	0.01	0.00	0.38	0.00	0.58
Avail Cap (c_a), veh/h	0	1488	0	477	0	1267	0	1007
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.97	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.4	0.0	33.8	0.0	28.7	0.0	31.9
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.8	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.9	0.0	33.9	0.0	29.6	0.0	32.7
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	0.2	0.0	5.2	0.0	6.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.13	0.00	1.80	0.00	1.70	0.00	1.64
%ile Back of Q (95%), veh/ln	0.0	16.7	0.0	0.3	0.0	9.0	0.0	10.6
%ile Storage Ratio (RQ%)	0.00	1.86	0.00	0.02	0.00	0.66	0.00	2.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	12	0	257	0	93	0	132
Grp Sat Flow (s), veh/h/ln	0	1271	0	1340	0	1364	0	1368
Q Serve Time (g_s), s	0.0	0.7	0.0	19.0	0.0	4.9	0.0	8.3
Cycle Q Clear Time (g_c), s	0.0	0.7	0.0	19.0	0.0	4.9	0.0	8.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	10.0	0.0	10.4	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	532	0	467	0	623	0	386
V/C Ratio (X)	0.00	0.02	0.00	0.55	0.00	0.15	0.00	0.34
Avail Cap (c_a), veh/h	0	532	0	473	0	623	0	387
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.97	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.5	0.0	33.0	0.0	20.0	0.0	29.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.5	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.5	0.0	34.3	0.0	20.5	0.0	30.0
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	6.1	0.0	1.6	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.65	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	10.4	0.0	3.0	0.0	4.9
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	1.96	0.00	0.22	0.00	0.93
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	144	699	29	14	466	57	1	0	22	32	0	126
Future Vol, veh/h	144	699	29	14	466	57	1	0	22	32	0	126
Conflicting Peds, #/hr	0	0	39	39	0	0	2	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	157	760	32	15	507	62	1	0	24	35	0	137

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	569	0	0	831	0	0	1415	1728	435	1262	1713	287
Stage 1	-	-	-	-	-	-	1129	1129	-	568	568	-
Stage 2	-	-	-	-	-	-	286	599	-	694	1145	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	999	-	-	797	-	-	97	88	569	127	89	710
Stage 1	-	-	-	-	-	-	217	277	-	475	505	-
Stage 2	-	-	-	-	-	-	697	489	-	399	272	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	999	-	-	772	-	-	66	70	551	105	71	709
Mov Cap-2 Maneuver	-	-	-	-	-	-	66	70	-	105	71	-
Stage 1	-	-	-	-	-	-	177	226	-	400	495	-
Stage 2	-	-	-	-	-	-	551	480	-	322	222	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0.3	14.2	27.6
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	418	999	-	-	772	-	-	327
HCM Lane V/C Ratio	0.06	0.157	-	-	0.02	-	-	0.525
HCM Control Delay (s)	14.2	9.3	-	-	9.8	-	-	27.6
HCM Lane LOS	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0.1	-	-	2.9

HCM 6th Signalized Intersection Summary
22: Driveway/Fair Ave & Chandler Blvd/Chandler Blvd (W)

02/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	625	5	2	431	118	2	1	6	125	1	125
Future Volume (veh/h)	168	625	5	2	431	118	2	1	6	125	1	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.99		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	679	5	2	468	128	2	1	7	136	1	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	420	2205	16	471	855	234	105	69	294	457	3	420
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	822	3615	27	752	1401	383	208	253	1076	1374	11	1537
Grp Volume(v), veh/h	183	334	350	2	0	596	10	0	0	136	0	137
Grp Sat Flow(s),veh/h/ln	822	1777	1864	752	0	1784	1538	0	0	1374	0	1549
Q Serve(g_s), s	15.1	8.1	8.1	0.1	0.0	17.6	0.0	0.0	0.0	6.7	0.0	6.3
Cycle Q Clear(g_c), s	32.7	8.1	8.1	8.2	0.0	17.6	0.4	0.0	0.0	7.1	0.0	6.3
Prop In Lane	1.00		0.01	1.00		0.21	0.20		0.70	1.00		0.99
Lane Grp Cap(c), veh/h	420	1084	1137	471	0	1089	468	0	0	457	0	423
V/C Ratio(X)	0.44	0.31	0.31	0.00	0.00	0.55	0.02	0.00	0.00	0.30	0.00	0.32
Avail Cap(c_a), veh/h	420	1084	1137	471	0	1089	468	0	0	457	0	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.78	0.00	0.78	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.9	8.4	8.4	10.4	0.0	10.3	23.9	0.0	0.0	26.3	0.0	26.1
Incr Delay (d2), s/veh	3.3	0.7	0.7	0.0	0.0	1.5	0.1	0.0	0.0	0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.5	5.1	5.4	0.0	0.0	9.8	0.3	0.0	0.0	4.3	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	9.2	9.1	10.4	0.0	11.8	24.0	0.0	0.0	26.6	0.0	26.5
LnGrp LOS	C	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		867			598			10			273	
Approach Delay, s/veh		12.1			11.8			24.0			26.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	19.6	9.1	34.7	2.4
Green Ext Time (p_c), s	7.3	1.1	7.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	625	5	2	431	118	2	1	6	125	1	125
Future Volume (veh/h)	168	625	5	2	431	118	2	1	6	125	1	125
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	0.99		0.96	0.99		0.98	0.98		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	679	5	2	468	128	2	1	7	136	1	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	420	2205	16	471	855	234	105	69	294	457	3	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.1	9.2	9.1	10.4	0.0	11.8	24.0	0.0	0.0	26.6	0.0	26.5
Ln Grp LOS	C	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		867			598			10			273	
Approach Delay, s/veh		12.1			11.8			24.0			26.6	
Approach LOS		B			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		4.8		6.4		5.7
Max Q Clear (g_c+l1), s		19.6		9.1		34.7		2.4
Green Ext Time (g_e), s		7.3		1.1		7.7		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.03		0.01		0.30		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		752		1374		822		208
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1401		11		3615		253
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		383		1537		27		1076
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	2	0	136	0	183	0	10
Grp Sat Flow (s), veh/h/ln	0	752	0	1374	0	822	0	1538
Q Serve Time (g_s), s	0.0	0.1	0.0	6.7	0.0	15.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.2	0.0	7.1	0.0	32.7	0.0	0.4
Perm LT Sat Flow (s_l), veh/h/ln	0	752	0	1374	0	822	0	1254
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1739	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	46.8	0.0	24.2	0.0	37.3	0.0	18.3
Perm LT Q Serve Time (g_ps), s	0.0	0.1	0.0	6.7	0.0	15.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	471	0	457	0	420	0	468
V/C Ratio (X)	0.00	0.00	0.00	0.30	0.00	0.44	0.00	0.02
Avail Cap (c_a), veh/h	0	471	0	457	0	420	0	468
Upstream Filter (I)	0.00	0.78	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.4	0.0	26.3	0.0	19.9	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	3.3	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.4	0.0	26.6	0.0	23.1	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.3	0.0	2.7	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	4.3	0.0	5.5	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	3.75	0.00	0.93	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	334	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	8.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	8.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	9.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	596	0	137	0	350	0	0
Grp Sat Flow (s), veh/h/ln	0	1784	0	1549	0	1864	0	0
Q Serve Time (g_s), s	0.0	17.6	0.0	6.3	0.0	8.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	17.6	0.0	6.3	0.0	8.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.21	0.00	0.99	0.00	0.01	0.00	0.70
Lane Grp Cap (c), veh/h	0	1089	0	423	0	1137	0	0
V/C Ratio (X)	0.00	0.55	0.00	0.32	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	1089	0	423	0	1137	0	0
Upstream Filter (I)	0.00	0.78	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.3	0.0	26.1	0.0	8.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.4	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.8	0.0	26.5	0.0	9.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	2.3	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.58	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	9.8	0.0	4.3	0.0	5.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	3.75	0.00	0.63	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	431	309	139	570	1148	357
Future Volume (veh/h)	431	309	139	570	1148	357
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	468	336	151	620	1248	388
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	818	375	178	2389	1915	834
Arrive On Green	0.24	0.24	0.10	0.67	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1548
Grp Volume(v), veh/h	468	336	151	620	1248	388
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1548
Q Serve(g_s), s	14.3	24.6	10.0	8.3	0.0	0.0
Cycle Q Clear(g_c), s	14.3	24.6	10.0	8.3	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	818	375	178	2389	1915	834
V/C Ratio(X)	0.57	0.90	0.85	0.26	0.65	0.47
Avail Cap(c_a), veh/h	950	436	223	2389	1915	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.80	0.80	0.75	0.75
Uniform Delay (d), s/veh	40.4	44.4	53.1	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.6	17.6	17.5	0.2	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.1	16.8	8.6	5.2	0.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.0	61.9	70.6	8.0	1.3	1.4
LnGrp LOS	D	E	E	A	A	A
Approach Vol, veh/h	804			771	1636	
Approach Delay, s/veh	49.8			20.3	1.3	
Approach LOS	D			C	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.0	69.6		34.4		85.6
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	12.0	2.0		26.6		10.3
Green Ext Time (p_c), s	0.1	17.6		1.8		3.4

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	431	309	139	570	1148	357
Future Volume (veh/h)	431	309	139	570	1148	357
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	468	336	151	620	1248	388
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	818	375	178	2389	1915	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.24	0.24	0.10	0.67	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	41.0	61.9	70.6	8.0	1.3	1.4
Ln Grp LOS	D	E	E	A	A	A
Approach Vol, veh/h	804			771	1636	
Approach Delay, s/veh	49.8			20.3	1.3	
Approach LOS	D			C	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	16.0	69.6		34.4		85.6		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.8		3.9		5.0		
Max Q Clear (g_c+l1), s	12.0	2.0		26.6		10.3		
Green Ext Time (g_e), s	0.1	17.6		1.8		3.4		
Prob of Phs Call (p_c)	0.99	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.73		0.49		0.10		
Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1548		1585		0		
Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	151	0	0	468	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	10.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	10.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	64.7	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	178	0	0	818	0	0	0	0
V/C Ratio (X)	0.85	0.00	0.00	0.57	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.80	0.00	0.00	0.92	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	53.1	0.0	0.0	40.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	17.5	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	70.6	0.0	0.0	41.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.4	0.0	0.0	6.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.9	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.64	1.00	0.00	1.63	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	8.6	0.0	0.0	10.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.04	0.00	0.00	2.33	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1248	0	0	0	620	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1915	0	0	0	2389	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.00	0.00	0.26	0.00	0.00
Avail Cap (c_a), veh/h	0	1915	0	0	0	2389	0	0
Upstream Filter (I)	0.00	0.75	0.00	0.00	0.00	0.80	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.3	0.0	0.0	0.0	8.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.6	0.0	0.0	0.0	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	388	0	336	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1548	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	24.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	24.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	834	0	375	0	0	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.90	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	834	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.75	0.00	0.92	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	44.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	17.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.4	0.0	61.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	1.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.46	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.6	0.0	16.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.39	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		18.0						
HCM 6th LOS		B						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	106	30	781	197	45	1431
Future Volume (veh/h)	106	30	781	197	45	1431
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.92		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	33	849	214	49	1555
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	190	54	1928	486	64	2687
Arrive On Green	0.14	0.14	1.00	1.00	0.04	0.76
Sat Flow, veh/h	1311	376	2900	707	1781	3647
Grp Volume(v), veh/h	149	0	537	526	49	1555
Grp Sat Flow(s),veh/h/ln	1698	0	1777	1737	1781	1777
Q Serve(g_s), s	9.9	0.0	0.0	0.0	3.3	22.8
Cycle Q Clear(g_c), s	9.9	0.0	0.0	0.0	3.3	22.8
Prop In Lane	0.77	0.22		0.41	1.00	
Lane Grp Cap(c), veh/h	246	0	1221	1193	64	2687
V/C Ratio(X)	0.61	0.00	0.44	0.44	0.77	0.58
Avail Cap(c_a), veh/h	325	0	1221	1193	223	2687
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.85	0.85	0.18	0.18
Uniform Delay (d), s/veh	48.1	0.0	0.0	0.0	57.4	6.3
Incr Delay (d2), s/veh	2.4	0.0	1.0	1.0	3.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.8	0.0	0.6	0.6	2.4	8.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.5	0.0	1.0	1.0	61.0	6.5
LnGrp LOS	D	A	A	A	E	A
Approach Vol, veh/h	149		1063			1604
Approach Delay, s/veh	50.5		1.0			8.2
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		97.6		22.4	8.3	89.3
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		24.8		11.9	5.3	2.0
Green Ext Time (p_c), s		0.3		0.3	0.0	19.8

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	106	30	781	197	45	1431
Future Volume (veh/h)	106	30	781	197	45	1431
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.92		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	33	849	214	49	1555
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	190	54	1928	486	64	2687
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	1.00	1.00	0.04	0.76
Unsig. Movement Delay						
Ln Grp Delay, s/veh	50.5	0.0	1.0	1.0	61.0	6.5
Ln Grp LOS	D	A	A	A	E	A
Approach Vol, veh/h	149		1063			1604
Approach Delay, s/veh	50.5		1.0			8.2
Approach LOS	D		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		97.6		22.4	8.3	89.3		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+l1), s		24.8		11.9	5.3	2.0		
Green Ext Time (g_e), s		0.3		0.3	0.0	19.8		
Prob of Phs Call (p_c)		1.00		1.00	0.80	1.00		
Prob of Max Out (p_x)		1.00		0.00	0.00	0.08		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1311	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		11		2900		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		376		707		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	149	49	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1698	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	9.9	3.3	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.9	3.3	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	82.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.77	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	246	64	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.61	0.77	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	325	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.18	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	48.1	57.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.4	3.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.5	61.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.2	1.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.79	1.57	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.8	2.4	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.15	0.45	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1555	0	0	0	537	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2687	0	0	0	1221	0	0
V/C Ratio (X)	0.00	0.58	0.00	0.00	0.00	0.44	0.00	0.00
Avail Cap (c_a), veh/h	0	2687	0	0	0	1221	0	0
Upstream Filter (I)	0.00	0.18	0.00	0.00	0.00	0.85	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.5	0.0	0.0	0.0	1.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.27	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.5	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.00	0.00	0.16	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	526	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1737	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.22	0.00	0.41	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1193	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1193	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	233	32	118	130	7	35	75	53	56	11	73
Future Vol, veh/h	7	233	32	118	130	7	35	75	53	56	11	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	253	35	128	141	8	38	82	58	61	12	79
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.2	12.3	10.8	10.3
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	21%	3%	46%	40%
Vol Thru, %	46%	86%	51%	8%
Vol Right, %	33%	12%	3%	52%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	163	272	255	140
LT Vol	35	7	118	56
Through Vol	75	233	130	11
RT Vol	53	32	7	73
Lane Flow Rate	177	296	277	152
Geometry Grp	1	1	1	1
Degree of Util (X)	0.275	0.431	0.416	0.235
Departure Headway (Hd)	5.587	5.245	5.404	5.557
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	641	686	665	644
Service Time	3.639	3.288	3.448	3.612
HCM Lane V/C Ratio	0.276	0.431	0.417	0.236
HCM Control Delay	10.8	12.2	12.3	10.3
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.1	2.2	2	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	36	36	54	47	69	81	513	87	59	1529	182
Future Volume (veh/h)	21	36	36	54	47	69	81	513	87	59	1529	182
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	1.00		0.93	0.98		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	39	39	59	51	75	88	558	95	64	1662	198
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	106	85	164	124	213	190	2227	377	602	2359	274
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	213	769	618	741	899	1544	247	3001	509	765	3178	369
Grp Volume(v), veh/h	101	0	0	110	0	75	88	329	324	64	911	949
Grp Sat Flow(s),veh/h/ln	1600	0	0	1639	0	1544	247	1777	1733	765	1777	1771
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	4.0	27.7	5.3	5.3	2.6	24.4	26.8
Cycle Q Clear(g_c), s	5.0	0.0	0.0	5.0	0.0	4.0	54.6	5.3	5.3	7.9	24.4	26.8
Prop In Lane	0.23		0.39	0.54		1.00	1.00		0.29	1.00		0.21
Lane Grp Cap(c), veh/h	270	0	0	287	0	213	190	1319	1286	602	1319	1314
V/C Ratio(X)	0.37	0.00	0.00	0.38	0.00	0.35	0.46	0.25	0.25	0.11	0.69	0.72
Avail Cap(c_a), veh/h	544	0	0	553	0	484	190	1319	1286	602	1319	1314
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.70	0.70	0.70	0.56	0.56	0.56
Uniform Delay (d), s/veh	35.5	0.0	0.0	35.6	0.0	35.2	21.6	3.7	3.7	4.9	6.1	6.5
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.8	0.0	1.0	5.6	0.3	0.3	0.2	1.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	0.0	4.1	0.0	2.8	3.2	2.6	2.6	0.7	10.1	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	0.0	0.0	36.4	0.0	36.1	27.2	4.0	4.0	5.1	7.8	8.4
LnGrp LOS	D	A	A	D	A	D	C	A	A	A	A	A
Approach Vol, veh/h		101			185			741			1924	
Approach Delay, s/veh		36.4			36.3			6.8			8.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	71.8	18.2	71.8	18.2
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	28.8	7.0	56.6	7.0
Green Ext Time (p_c), s	15.5	0.8	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	36	36	54	47	69	81	513	87	59	1529	182
Future Volume (veh/h)	21	36	36	54	47	69	81	513	87	59	1529	182
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.97	0.98		0.97	1.00		0.93	0.98		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	39	39	59	51	75	88	558	95	64	1662	198
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	79	106	85	164	124	213	190	2227	377	602	2359	274
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.74	0.74	0.74	0.74	0.74	0.74
Unsig. Movement Delay												
Ln Grp Delay, s/veh	36.4	0.0	0.0	36.4	0.0	36.1	27.2	4.0	4.0	5.1	7.8	8.4
Ln Grp LOS	D	A	A	D	A	D	C	A	A	A	A	A
Approach Vol, veh/h		101			185			741			1924	
Approach Delay, s/veh		36.4			36.3			6.8			8.0	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		71.8		18.2		71.8		18.2
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.2		5.0		6.4		5.6
Max Q Clear (g_c+I1), s		28.8		7.0		56.6		7.0
Green Ext Time (g_e), s		15.5		0.8		0.0		0.5
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		765		741		247		213
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3178		899		3001		769
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		369		1544		509		618
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	64	0	110	0	88	0	101
Grp Sat Flow (s), veh/h/ln	0	765	0	1639	0	247	0	1600
Q Serve Time (g_s), s	0.0	2.6	0.0	0.0	0.0	27.7	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	7.9	0.0	5.0	0.0	54.6	0.0	5.0
Perm LT Sat Flow (s_l), veh/h/ln	0	765	0	1317	0	247	0	1262
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1803	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	66.8	0.0	12.4	0.0	66.8	0.0	12.4
Perm LT Serve Time (g_u), s	0.0	61.5	0.0	7.4	0.0	40.0	0.0	7.4
Perm LT Q Serve Time (g_ps), s	0.0	2.6	0.0	0.0	0.0	27.7	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	4.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	4.8
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.54	0.00	1.00	0.00	0.23
Lane Grp Cap (c), veh/h	0	602	0	287	0	190	0	270
V/C Ratio (X)	0.00	0.11	0.00	0.38	0.00	0.46	0.00	0.37
Avail Cap (c_a), veh/h	0	602	0	553	0	190	0	544
Upstream Filter (I)	0.00	0.56	0.00	1.00	0.00	0.70	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.9	0.0	35.6	0.0	21.6	0.0	35.5
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.8	0.0	5.6	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.1	0.0	36.4	0.0	27.2	0.0	36.4
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	2.2	0.0	1.5	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.7	0.0	4.1	0.0	3.2	0.0	3.8
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.22	0.00	0.68	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	911	0	0	0	329	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	24.4	0.0	0.0	0.0	5.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.4	0.0	0.0	0.0	5.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1319	0	0	0	1319	0	0
V/C Ratio (X)	0.00	0.69	0.00	0.00	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	1319	0	0	0	1319	0	0
Upstream Filter (I)	0.00	0.56	0.00	0.00	0.00	0.70	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.1	0.0	0.0	0.0	3.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.8	0.0	0.0	0.0	4.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	0.0	0.0	1.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.47	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	10.1	0.0	0.0	0.0	2.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.74	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	949	0	75	0	324	0	0
Grp Sat Flow (s), veh/h/ln	0	1771	0	1544	0	1733	0	0
Q Serve Time (g_s), s	0.0	26.8	0.0	4.0	0.0	5.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	26.8	0.0	4.0	0.0	5.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.21	0.00	1.00	0.00	0.29	0.00	0.39
Lane Grp Cap (c), veh/h	0	1314	0	213	0	1286	0	0
V/C Ratio (X)	0.00	0.72	0.00	0.35	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	1314	0	484	0	1286	0	0
Upstream Filter (I)	0.00	0.56	0.00	1.00	0.00	0.70	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.5	0.0	35.2	0.0	3.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	1.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.4	0.0	36.1	0.0	4.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	1.5	0.0	1.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	11.0	0.0	2.8	0.0	2.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.80	0.00	1.77	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	636	642	319	1075	0	0	0	0	831	368	293
Future Volume (veh/h)	0	636	642	319	1075	0	0	0	0	831	368	293
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	691	698	347	1168	0				810	529	318
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	934	808	131	1868	0				653	401	241
Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	1870	1537	389	3647	0				1781	1092	657
Grp Volume(v), veh/h	0	691	698	347	1168	0				810	0	847
Grp Sat Flow(s),veh/h/ln	0	1777	1537	389	1777	0				1781	0	1749
Q Serve(g_s), s	0.0	27.2	35.5	11.8	20.9	0.0				33.0	0.0	33.0
Cycle Q Clear(g_c), s	0.0	27.2	35.5	47.3	20.9	0.0				33.0	0.0	33.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	934	808	131	1868	0				653	0	641
V/C Ratio(X)	0.00	0.74	0.86	2.65	0.63	0.00				1.24	0.00	1.32
Avail Cap(c_a), veh/h	0	934	808	131	1868	0				653	0	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.72	0.72	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.6	18.6	42.7	15.1	0.0				28.5	0.0	28.5
Incr Delay (d2), s/veh	0.0	5.2	11.9	758.5	1.2	0.0				120.8	0.0	155.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	16.7	20.0	54.1	11.8	0.0				50.9	0.0	59.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.8	30.4	801.2	16.2	0.0				149.3	0.0	183.6
LnGrp LOS	A	C	C	F	B	A				F	A	F
Approach Vol, veh/h		1389			1515						1657	
Approach Delay, s/veh		26.2			196.0						166.8	
Approach LOS		C			F						F	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7
Max Green Setting (Gmax), s		* 47		33.0		* 47
Max Q Clear Time (g_c+I1), s		49.3		35.0		37.5
Green Ext Time (p_c), s		0.0		0.0		6.3

Intersection Summary	
HCM 6th Ctrl Delay	133.7
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	636	642	319	1075	0	0	0	0	831	368	293
Future Volume (veh/h)	0	636	642	319	1075	0	0	0	0	831	368	293
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	691	698	347	1168	0				810	529	318
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	934	808	131	1868	0				653	401	241
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	21.8	30.4	801.2	16.2	0.0				149.3	0.0	183.6
Ln Grp LOS	A	C	C	F	B	A				F	A	F
Approach Vol, veh/h		1389			1515						1657	
Approach Delay, s/veh		26.2			196.0						166.8	
Approach LOS		C			F						F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		6.3		4.5		5.3		
Max Q Clear (g_c+I1), s		49.3		35.0		37.5		
Green Ext Time (g_e), s		0.0		0.0		6.3		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		1.00		0.78		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		389		1781		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1092		1870		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		657		1537		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	347	0	810	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	389	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	11.8	0.0	33.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	47.3	0.0	33.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	389	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	47.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	131	0	653	0	0	0	0
V/C Ratio (X)	0.00	2.65	0.00	1.24	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	131	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.72	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	42.7	0.0	28.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	758.5	0.0	120.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	801.2	0.0	149.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	12.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	27.6	0.0	21.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.78	0.00	1.46	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	54.1	0.0	50.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	4.19	0.00	2.68	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	54.0	0.0	39.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.7	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1168	0	0	0	691	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	20.9	0.0	0.0	0.0	27.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.9	0.0	0.0	0.0	27.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1868	0	0	0	934	0	0
V/C Ratio (X)	0.00	0.63	0.00	0.00	0.00	0.74	0.00	0.00
Avail Cap (c_a), veh/h	0	1868	0	0	0	934	0	0
Upstream Filter (I)	0.00	0.72	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	15.1	0.0	0.0	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	5.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.2	0.0	0.0	0.0	21.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	0.0	0.0	9.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	1.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	0.00	1.00	0.00	1.49	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	11.8	0.0	0.0	0.0	16.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.92	0.00	0.00	0.00	0.90	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	847	0	698	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1749	0	1537	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	33.0	0.0	35.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	33.0	0.0	35.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.38	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	641	0	808	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.32	0.00	0.86	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	641	0	808	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.5	0.0	18.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	155.1	0.0	11.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	183.6	0.0	30.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.6	0.0	11.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	27.6	0.0	2.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.49	0.00	1.44	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	59.9	0.0	20.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	3.15	0.00	1.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	51.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	133.7
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	1312	0	0	966	407	439	3	298	0	0	0
Future Volume (veh/h)	156	1312	0	0	966	407	439	3	298	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	170	1426	0	0	1050	442	402	108	324			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	192	2092	0	0	2050	863	509	117	350			
Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Sat Flow, veh/h	353	3647	0	0	3650	1465	1781	409	1227			
Grp Volume(v), veh/h	170	1426	0	0	1027	465	402	0	432			
Grp Sat Flow(s),veh/h/ln	353	1777	0	0	1702	1543	1781	0	1636			
Q Serve(g_s), s	28.7	0.0	0.0	0.0	24.3	24.3	18.7	0.0	23.1			
Cycle Q Clear(g_c), s	53.0	0.0	0.0	0.0	24.3	24.3	18.7	0.0	23.1			
Prop In Lane	1.00		0.00	0.00		0.95	1.00		0.75			
Lane Grp Cap(c), veh/h	192	2092	0	0	2004	908	509	0	467			
V/C Ratio(X)	0.88	0.68	0.00	0.00	0.51	0.51	0.79	0.00	0.92			
Avail Cap(c_a), veh/h	192	2092	0	0	2004	908	523	0	480			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.40	0.40	1.00	0.00	1.00			
Uniform Delay (d), s/veh	17.0	0.0	0.0	0.0	24.7	24.7	29.7	0.0	31.2			
Incr Delay (d2), s/veh	5.7	0.2	0.0	0.0	0.1	0.2	7.8	0.0	23.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	4.6	0.1	0.0	0.0	14.4	13.2	13.5	0.0	17.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	0.2	0.0	0.0	24.8	24.9	37.5	0.0	54.7			
LnGrp LOS	C	A	A	A	C	C	D	A	D			
Approach Vol, veh/h		1596			1492			834				
Approach Delay, s/veh		2.6			24.8			46.4				
Approach LOS		A			C			D				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	58.7	31.3	58.7
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	55.0	25.1	26.3
Green Ext Time (p_c), s	0.0	0.6	12.3

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	1312	0	0	966	407	439	3	298	0	0	0
Future Volume (veh/h)	156	1312	0	0	966	407	439	3	298	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	170	1426	0	0	1050	442	402	108	324			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	192	2092	0	0	2050	863	509	117	350			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.7	0.2	0.0	0.0	24.8	24.9	37.5	0.0	54.7			
Ln Grp LOS	C	A	A	A	C	C	D	A	D			
Approach Vol, veh/h		1596			1492			834				
Approach Delay, s/veh		2.6			24.8			46.4				
Approach LOS		A			C			D				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		58.7		31.3		58.7		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		5.7		4.5		5.2		
Max Q Clear (g_c+I1), s		55.0		25.1		26.3		
Green Ext Time (g_e), s		0.0		0.6		12.3		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		1.00		0.30		

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		353		1781		0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		409		3650		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1227		1465		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	170	0	402	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	353	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	28.7	0.0	18.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	53.0	0.0	18.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	353	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	53.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	28.7	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	28.7	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	53.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	192	0	509	0	0	0	0
V/C Ratio (X)	0.00	0.88	0.00	0.79	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	192	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.0	0.0	29.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.7	0.0	7.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.7	0.0	37.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.3	0.0	7.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	1.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.26	0.00	1.56	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.6	0.0	13.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.71	0.00	0.75	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1426	0	0	0	1027	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	24.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	24.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2092	0	0	0	2004	0	0
V/C Ratio (X)	0.00	0.68	0.00	0.00	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	2092	0	0	0	2004	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.40	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	24.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.2	0.0	0.0	0.0	24.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.31	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	14.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	432	0	465	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1636	0	1543	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	23.1	0.0	24.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	23.1	0.0	24.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.75	0.00	0.95	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	467	0	908	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.92	0.00	0.51	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	480	0	908	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.40	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.2	0.0	24.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	23.5	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	54.7	0.0	24.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.5	0.0	9.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.48	0.00	1.33	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	17.2	0.0	13.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.96	0.00	0.37	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	817	521	245	947	1	149	272	125	51	563	275
Future Volume (veh/h)	244	817	521	245	947	1	149	272	125	51	563	275
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	265	888	566	266	1029	1	162	296	136	55	612	299
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	763	471	238	1264	544	146	748	755	352	748	614
Arrive On Green	0.03	0.12	0.12	0.18	0.71	0.71	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1781	2080	1284	1781	3554	1530	613	1870	1535	947	1870	1535
Grp Volume(v), veh/h	265	754	700	266	1029	1	162	296	136	55	612	299
Grp Sat Flow(s),veh/h/ln	1781	1777	1587	1781	1777	1530	613	1870	1535	947	1870	1535
Q Serve(g_s), s	8.2	33.0	33.0	8.0	17.9	0.0	9.7	10.2	4.5	4.0	26.3	13.1
Cycle Q Clear(g_c), s	8.2	33.0	33.0	8.0	17.9	0.0	36.0	10.2	4.5	14.1	26.3	13.1
Prop In Lane	1.00		0.81	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	652	582	238	1264	544	146	748	755	352	748	614
V/C Ratio(X)	0.77	1.16	1.20	1.12	0.81	0.00	1.11	0.40	0.18	0.16	0.82	0.49
Avail Cap(c_a), veh/h	344	652	582	238	1264	544	146	748	755	352	748	614
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	39.6	39.6	20.2	11.0	8.4	42.8	19.2	12.9	24.3	24.1	20.1
Incr Delay (d2), s/veh	6.3	81.6	101.1	93.0	5.8	0.0	106.2	1.6	0.5	0.9	9.7	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.7	41.3	42.1	14.2	7.9	0.0	12.8	8.1	2.8	1.7	18.9	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	121.2	140.6	113.2	16.8	8.4	149.0	20.8	13.4	25.2	33.8	22.9
LnGrp LOS	C	F	F	F	B	A	F	C	B	C	C	C
Approach Vol, veh/h		1719			1296			594			966	
Approach Delay, s/veh		114.6			36.6			54.1			29.9	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	37.0		41.0	11.0	38.0		41.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	9.0	* 32		* 36	8.0	* 33		* 36
Max Q Clear Time (g_c+I1), s	10.2	19.9		28.3	10.0	35.0		38.0
Green Ext Time (p_c), s	0.0	5.5		3.4	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	817	521	245	947	1	149	272	125	51	563	275
Future Volume (veh/h)	244	817	521	245	947	1	149	272	125	51	563	275
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	0.99		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	265	888	566	266	1029	1	162	296	136	55	612	299
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	344	763	471	238	1264	544	146	748	755	352	748	614
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.12	0.12	0.18	0.71	0.71	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.9	121.2	140.6	113.2	16.8	8.4	149.0	20.8	13.4	25.2	33.8	22.9
Ln Grp LOS	C	F	F	F	B	A	F	C	B	C	C	C
Approach Vol, veh/h		1719			1296			594			966	
Approach Delay, s/veh		114.6			36.6			54.1			29.9	
Approach LOS		F			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	12.0	37.0		41.0	11.0	38.0		41.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	9.0	* 32		* 36	8.0	* 33		* 36
Max Allow Headway (MAH), s	3.8	5.1		4.9	3.8	5.3		5.5
Max Q Clear (g_c+I1), s	10.2	19.9		28.3	10.0	35.0		38.0
Green Ext Time (g_e), s	0.0	5.5		3.4	0.0	0.0		0.0
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			947	1781			613

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		2080		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1530		1535		1284		1535

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	265	0	0	55	266	0	0	162
Grp Sat Flow (s), veh/h/ln	1781	0	0	947	1781	0	0	613
Q Serve Time (g_s), s	8.2	0.0	0.0	4.0	8.0	0.0	0.0	9.7
Cycle Q Clear Time (g_c), s	8.2	0.0	0.0	14.1	8.0	0.0	0.0	36.0
Perm LT Sat Flow (s_l), veh/h/ln	548	0	0	947	366	0	0	613
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	32.0	0.0	0.0	36.0	32.0	0.0	0.0	36.0
Perm LT Serve Time (g_u), s	14.1	0.0	0.0	25.8	0.0	0.0	0.0	9.7
Perm LT Q Serve Time (g_ps), s	14.1	0.0	0.0	4.0	0.0	0.0	0.0	9.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	344	0	0	352	238	0	0	146
V/C Ratio (X)	0.77	0.00	0.00	0.16	1.12	0.00	0.00	1.11
Avail Cap (c_a), veh/h	344	0	0	352	238	0	0	146
Upstream Filter (I)	0.60	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	20.6	0.0	0.0	24.3	20.2	0.0	0.0	42.8
Incr Delay (d2), s/veh	6.3	0.0	0.0	0.9	93.0	0.0	0.0	106.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.9	0.0	0.0	25.2	113.2	0.0	0.0	149.0
1st-Term Q (Q1), veh/ln	3.5	0.0	0.0	0.9	2.6	0.0	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.0	0.1	6.2	0.0	0.0	4.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.62	0.00	0.00	1.80	1.62	0.00	0.00	1.69
%ile Back of Q (95%), veh/ln	6.7	0.0	0.0	1.7	14.2	0.0	0.0	12.8
%ile Storage Ratio (RQ%)	1.14	0.00	0.00	0.25	2.58	0.00	0.00	1.62
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	6.9	0.0	0.0	3.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1029	0	612	0	754	0	296
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	17.9	0.0	26.3	0.0	33.0	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	17.9	0.0	26.3	0.0	33.0	0.0	10.2
Lane Grp Cap (c), veh/h	0	1264	0	748	0	652	0	748
V/C Ratio (X)	0.00	0.81	0.00	0.82	0.00	1.16	0.00	0.40
Avail Cap (c_a), veh/h	0	1264	0	748	0	652	0	748
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.60	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.0	0.0	24.1	0.0	39.6	0.0	19.2
Incr Delay (d2), s/veh	0.0	5.8	0.0	9.7	0.0	81.6	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.8	0.0	33.8	0.0	121.2	0.0	20.8
1st-Term Q (Q1), veh/ln	0.0	3.4	0.0	11.0	0.0	15.5	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	2.0	0.0	14.8	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.78	0.00	1.45	0.00	1.36	0.00	1.77
%ile Back of Q (95%), veh/ln	0.0	7.9	0.0	18.9	0.0	41.3	0.0	8.1
%ile Storage Ratio (RQ%)	0.00	0.50	0.00	0.71	0.00	1.16	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	25.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1	0	299	0	700	0	136
Grp Sat Flow (s), veh/h/ln	0	1530	0	1535	0	1587	0	1535
Q Serve Time (g_s), s	0.0	0.0	0.0	13.1	0.0	33.0	0.0	4.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.1	0.0	33.0	0.0	4.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.81	0.00	1.00
Lane Grp Cap (c), veh/h	0	544	0	614	0	582	0	755
V/C Ratio (X)	0.00	0.00	0.00	0.49	0.00	1.20	0.00	0.18
Avail Cap (c_a), veh/h	0	544	0	614	0	582	0	755
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.60	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	20.1	0.0	39.6	0.0	12.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.7	0.0	101.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.4	0.0	22.9	0.0	140.6	0.0	13.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.5	0.0	13.9	0.0	1.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	16.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.74	0.00	1.39	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	8.6	0.0	42.1	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.19	0.00	1.18	0.00	0.80
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	29.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.7
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	643	227	55	826	104	97	382	49	105	1048	395
Future Volume (veh/h)	239	643	227	55	826	104	97	382	49	105	1048	395
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.89	1.00		0.83	0.96		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	260	699	247	60	898	113	105	415	53	114	1139	429
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	733	574	77	948	376	85	1246	157	450	1281	465
Arrive On Green	0.08	0.39	0.39	0.27	0.27	0.27	0.40	0.40	0.40	0.07	0.52	0.52
Sat Flow, veh/h	1781	1870	1466	593	3554	1410	328	3091	389	1781	2488	903
Grp Volume(v), veh/h	260	699	247	60	898	113	105	236	232	114	801	767
Grp Sat Flow(s),veh/h/ln	1781	1870	1466	593	1777	1410	328	1777	1704	1781	1777	1613
Q Serve(g_s), s	9.6	43.6	14.8	3.4	29.8	7.7	9.1	11.0	11.3	4.2	47.8	52.7
Cycle Q Clear(g_c), s	9.6	43.6	14.8	32.0	29.8	7.7	48.4	11.0	11.3	4.2	47.8	52.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.56
Lane Grp Cap(c), veh/h	213	733	574	77	948	376	85	716	687	450	915	831
V/C Ratio(X)	1.22	0.95	0.43	0.78	0.95	0.30	1.24	0.33	0.34	0.25	0.88	0.92
Avail Cap(c_a), veh/h	213	733	574	77	948	376	85	716	687	453	915	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.71	0.71	0.71	0.91	0.91	0.91	0.50	0.50	0.50
Uniform Delay (d), s/veh	34.0	35.5	26.7	59.5	43.2	35.1	58.7	24.6	24.7	17.8	25.7	26.9
Incr Delay (d2), s/veh	134.2	22.6	0.5	29.6	14.0	0.3	170.4	1.1	1.2	0.1	6.2	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.4	32.0	9.0	4.4	20.1	4.8	11.8	8.2	8.1	3.1	25.9	26.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	168.1	58.1	27.2	89.1	57.2	35.4	229.1	25.8	26.0	18.0	31.9	37.0
LnGrp LOS	F	E	C	F	E	D	F	C	C	B	C	D
Approach Vol, veh/h		1206			1071			573			1682	
Approach Delay, s/veh		75.5			56.7			63.1			33.3	
Approach LOS		E			E			E			C	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	67.3	15.0	37.7	13.4	53.9	52.7
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 62	* 9.6	* 32	8.0	* 48	* 47
Max Q Clear Time (g_c+I1), s	54.7	11.6	34.0	6.2	50.4	45.6
Green Ext Time (p_c), s	5.3	0.0	0.0	0.0	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	643	227	55	826	104	97	382	49	105	1048	395
Future Volume (veh/h)	239	643	227	55	826	104	97	382	49	105	1048	395
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.92	1.00		0.89	1.00		0.83	0.96		0.92
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	260	699	247	60	898	113	105	415	53	114	1139	429
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	213	733	574	77	948	376	85	1246	157	450	1281	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.39	0.39	0.27	0.27	0.27	0.40	0.40	0.40	0.07	0.52	0.52
Unsig. Movement Delay												
Ln Grp Delay, s/veh	168.1	58.1	27.2	89.1	57.2	35.4	229.1	25.8	26.0	18.0	31.9	37.0
Ln Grp LOS	F	E	C	F	E	D	F	C	C	B	C	D
Approach Vol, veh/h		1206			1071			573			1682	
Approach Delay, s/veh		75.5			56.7			63.1			33.3	
Approach LOS		E			E			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		67.3	15.0	37.7	13.4	53.9		52.7
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 62	* 9.6	* 32	8.0	* 48		* 47
Max Allow Headway (MAH), s		5.3	3.8	5.3	3.8	6.5		5.0
Max Q Clear (g_c+I1), s		54.7	11.6	34.0	6.2	50.4		45.6
Green Ext Time (g_e), s		5.3	0.0	0.0	0.0	0.0		0.8
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.98	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	593	1781	328		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2488		3554		3091		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		903		1410		389		1466

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment		L (Pr/Pm)		LL (Pr/Pm)		L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	260	60	114	105	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	593	1781	328	0	0
Q Serve Time (g_s), s	0.0	0.0	9.6	3.4	4.2	9.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	9.6	32.0	4.2	48.4	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	557	593	887	328	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	34.0	32.0	50.4	48.4	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.2	3.4	37.1	9.1	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.2	3.4	2.0	9.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	213	77	450	85	0	0
V/C Ratio (X)	0.00	0.00	1.22	0.78	0.25	1.24	0.00	0.00
Avail Cap (c_a), veh/h	0	0	213	77	453	85	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.71	0.50	0.91	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	34.0	59.5	17.8	58.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	134.2	29.6	0.1	170.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	168.1	89.1	18.0	229.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.4	1.8	1.7	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	7.9	0.6	0.0	4.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.57	1.80	1.80	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	19.4	4.4	3.1	11.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.29	0.56	0.88	1.43	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	11.8	0.0	0.0	5.1	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	801	0	898	0	236	0	699
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	47.8	0.0	29.8	0.0	11.0	0.0	43.6
Cycle Q Clear Time (g_c), s	0.0	47.8	0.0	29.8	0.0	11.0	0.0	43.6
Lane Grp Cap (c), veh/h	0	915	0	948	0	716	0	733
V/C Ratio (X)	0.00	0.88	0.00	0.95	0.00	0.33	0.00	0.95
Avail Cap (c_a), veh/h	0	915	0	948	0	716	0	733
Upstream Filter (I)	0.00	0.50	0.00	0.71	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.7	0.0	43.2	0.0	24.6	0.0	35.5
Incr Delay (d2), s/veh	0.0	6.2	0.0	14.0	0.0	1.1	0.0	22.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.9	0.0	57.2	0.0	25.8	0.0	58.1
1st-Term Q (Q1), veh/ln	0.0	19.0	0.0	12.9	0.0	4.6	0.0	19.4
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	1.8	0.0	0.2	0.0	4.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.26	0.00	1.36	0.00	1.71	0.00	1.33
%ile Back of Q (95%), veh/ln	0.0	25.9	0.0	20.1	0.0	8.2	0.0	32.0
%ile Storage Ratio (RQ%)	0.00	0.90	0.00	0.43	0.00	0.08	0.00	1.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	767	0	113	0	232	0	247
Grp Sat Flow (s), veh/h/ln	0	1613	0	1410	0	1704	0	1466
Q Serve Time (g_s), s	0.0	52.7	0.0	7.7	0.0	11.3	0.0	14.8
Cycle Q Clear Time (g_c), s	0.0	52.7	0.0	7.7	0.0	11.3	0.0	14.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.56	0.00	1.00	0.00	0.23	0.00	1.00
Lane Grp Cap (c), veh/h	0	831	0	376	0	687	0	574
V/C Ratio (X)	0.00	0.92	0.00	0.30	0.00	0.34	0.00	0.43
Avail Cap (c_a), veh/h	0	831	0	376	0	687	0	574
Upstream Filter (I)	0.00	0.50	0.00	0.71	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.9	0.0	35.1	0.0	24.7	0.0	26.7
Incr Delay (d2), s/veh	0.0	10.1	0.0	0.3	0.0	1.2	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.0	0.0	35.4	0.0	26.0	0.0	27.2
1st-Term Q (Q1), veh/ln	0.0	19.1	0.0	2.6	0.0	4.5	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	0.0	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.25	0.00	1.80	0.00	1.72	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	26.7	0.0	4.8	0.0	8.1	0.0	9.0
%ile Storage Ratio (RQ%)	0.00	0.93	0.00	1.02	0.00	0.08	0.00	1.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	621	44	98	679	128	158	434	80	289	893	193
Future Volume (veh/h)	70	621	44	98	679	128	158	434	80	289	893	193
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	675	48	107	738	139	172	472	87	314	971	210
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	786	638	147	1243	234	198	869	369	259	1003	417
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.04	0.08	0.08	0.15	0.28	0.28
Sat Flow, veh/h	627	1870	1518	727	2961	557	1781	3554	1511	1781	3554	1478
Grp Volume(v), veh/h	76	675	48	107	443	434	172	472	87	314	971	210
Grp Sat Flow(s),veh/h/ln	627	1870	1518	727	1777	1741	1781	1777	1511	1781	1777	1478
Q Serve(g_s), s	9.6	29.5	1.7	8.3	17.3	17.3	8.6	11.5	4.9	13.1	24.3	10.7
Cycle Q Clear(g_c), s	26.9	29.5	1.7	37.8	17.3	17.3	8.6	11.5	4.9	13.1	24.3	10.7
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	786	638	147	746	731	198	869	369	259	1003	417
V/C Ratio(X)	0.34	0.86	0.08	0.73	0.59	0.59	0.87	0.54	0.24	1.21	0.97	0.50
Avail Cap(c_a), veh/h	223	786	638	147	746	731	198	869	369	259	1003	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.26	0.26	0.26	1.00	1.00	1.00	0.91	0.91	0.91	0.37	0.37	0.37
Uniform Delay (d), s/veh	30.6	23.7	15.6	42.4	20.2	20.2	42.7	36.5	33.5	38.5	31.9	27.0
Incr Delay (d2), s/veh	1.1	3.4	0.1	26.7	3.5	3.5	29.2	0.6	0.3	107.9	10.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	15.8	1.0	6.2	11.9	11.7	9.2	9.0	3.2	18.5	14.6	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.7	27.1	15.7	69.1	23.6	23.7	71.9	37.2	33.8	146.4	42.8	27.4
LnGrp LOS	C	C	B	E	C	C	E	D	C	F	D	C
Approach Vol, veh/h		799			984			731			1495	
Approach Delay, s/veh		26.9			28.6			44.9			62.4	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	43.8	15.6	30.6	43.8	19.0	27.2
Change Period (Y+Rc), s	* 6	5.6	* 5.2	* 6	5.9	* 5.2
Max Green Setting (Gmax), s	* 38	10.0	* 25	* 38	13.1	* 22
Max Q Clear Time (g_c+I1), s	39.8	10.6	26.3	31.5	15.1	13.5
Green Ext Time (p_c), s	0.0	0.0	0.0	2.7	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	43.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	621	44	98	679	128	158	434	80	289	893	193
Future Volume (veh/h)	70	621	44	98	679	128	158	434	80	289	893	193
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.96	1.00		0.96	1.00		0.95	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	675	48	107	738	139	172	472	87	314	971	210
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	223	786	638	147	1243	234	198	869	369	259	1003	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.04	0.08	0.08	0.15	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.7	27.1	15.7	69.1	23.6	23.7	71.9	37.2	33.8	146.4	42.8	27.4
Ln Grp LOS	C	C	B	E	C	C	E	D	C	F	D	C
Approach Vol, veh/h		799			984			731			1495	
Approach Delay, s/veh		26.9			28.6			44.9			62.4	
Approach LOS		C			C			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		43.8	15.6	30.6		43.8	19.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 38	10.0	* 25		* 38	13.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.9		5.2	3.7	4.9
Max Q Clear (g_c+I1), s		39.8	10.6	26.3		31.5	15.1	13.5
Green Ext Time (g_e), s		0.0	0.0	0.0		2.7	0.0	2.1
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00	1.00	0.36

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		727	1781			627	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2961		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		557		1478		1518		1511

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	107	172	0	0	76	314	0
Grp Sat Flow (s), veh/h/ln	0	727	1781	0	0	627	1781	0
Q Serve Time (g_s), s	0.0	8.3	8.6	0.0	0.0	9.6	13.1	0.0
Cycle Q Clear Time (g_c), s	0.0	37.8	8.6	0.0	0.0	26.9	13.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	727	0	0	0	627	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	37.8	0.0	0.0	0.0	37.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	8.3	0.0	0.0	0.0	20.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	8.3	0.0	0.0	0.0	9.6	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	147	198	0	0	223	259	0
V/C Ratio (X)	0.00	0.73	0.87	0.00	0.00	0.34	1.21	0.00
Avail Cap (c_a), veh/h	0	147	198	0	0	223	259	0
Upstream Filter (I)	0.00	1.00	0.91	0.00	0.00	0.26	0.37	0.00
Uniform Delay (d1), s/veh	0.0	42.4	42.7	0.0	0.0	30.6	38.5	0.0
Incr Delay (d2), s/veh	0.0	26.7	29.2	0.0	0.0	1.1	107.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	69.1	71.9	0.0	0.0	31.7	146.4	0.0
1st-Term Q (Q1), veh/ln	0.0	2.3	3.9	0.0	0.0	1.4	5.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.1	1.6	0.0	0.0	0.1	7.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.67	0.00	0.00	1.69	1.40	0.00
%ile Back of Q (95%), veh/ln	0.0	6.2	9.2	0.0	0.0	2.5	18.5	0.0
%ile Storage Ratio (RQ%)	0.00	0.90	2.34	0.00	0.00	0.36	3.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	13.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	443	0	971	0	675	0	472
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	17.3	0.0	24.3	0.0	29.5	0.0	11.5
Cycle Q Clear Time (g_c), s	0.0	17.3	0.0	24.3	0.0	29.5	0.0	11.5
Lane Grp Cap (c), veh/h	0	746	0	1003	0	786	0	869
V/C Ratio (X)	0.00	0.59	0.00	0.97	0.00	0.86	0.00	0.54
Avail Cap (c_a), veh/h	0	746	0	1003	0	786	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.37	0.00	0.26	0.00	0.91
Uniform Delay (d1), s/veh	0.0	20.2	0.0	31.9	0.0	23.7	0.0	36.5
Incr Delay (d2), s/veh	0.0	3.5	0.0	10.9	0.0	3.4	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.6	0.0	42.8	0.0	27.1	0.0	37.2
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	9.8	0.0	12.0	0.0	5.3
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	1.5	0.0	0.8	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.60	0.00	1.30	0.00	1.23	0.00	1.67
%ile Back of Q (95%), veh/ln	0.0	11.9	0.0	14.6	0.0	15.8	0.0	9.0
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.33	0.00	0.34	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	434	0	210	0	48	0	87
Grp Sat Flow (s), veh/h/ln	0	1741	0	1478	0	1518	0	1511
Q Serve Time (g_s), s	0.0	17.3	0.0	10.7	0.0	1.7	0.0	4.9
Cycle Q Clear Time (g_c), s	0.0	17.3	0.0	10.7	0.0	1.7	0.0	4.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.32	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	731	0	417	0	638	0	369
V/C Ratio (X)	0.00	0.59	0.00	0.50	0.00	0.08	0.00	0.24
Avail Cap (c_a), veh/h	0	731	0	417	0	638	0	369
Upstream Filter (I)	0.00	1.00	0.00	0.37	0.00	0.26	0.00	0.91
Uniform Delay (d1), s/veh	0.0	20.2	0.0	27.0	0.0	15.6	0.0	33.5
Incr Delay (d2), s/veh	0.0	3.5	0.0	0.4	0.0	0.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.7	0.0	27.4	0.0	15.7	0.0	33.8
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	3.6	0.0	0.6	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.61	0.00	1.52	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.7	0.0	5.5	0.0	1.0	0.0	3.2
%ile Storage Ratio (RQ%)	0.00	0.33	0.00	0.93	0.00	0.26	0.00	0.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.8
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	132	460	0	0	1085
Future Vol, veh/h	21	132	460	0	0	1085
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	143	500	0	0	1179

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1090	500	0	-	-	-
Stage 1	500	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	223	570	-	0	0	-
Stage 1	608	-	-	0	0	-
Stage 2	518	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	223	570	-	-	-	-
Mov Cap-2 Maneuver	356	-	-	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	356	570	-
HCM Lane V/C Ratio	-	0.064	0.252	-
HCM Control Delay (s)	-	15.8	13.4	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.2	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	842	200	239	189	134	47	509	659	248	785	36
Future Volume (veh/h)	41	842	200	239	189	134	47	509	659	248	785	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	915	217	260	205	146	51	553	716	270	853	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	462	857	203	244	1252	559	255	1176	524	284	1224	546
Arrive On Green	0.05	0.30	0.30	0.10	0.35	0.35	0.06	0.33	0.33	0.07	0.34	0.34
Sat Flow, veh/h	1781	2850	675	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	45	570	562	260	205	146	51	553	716	270	853	39
Grp Sat Flow(s),veh/h/ln	1781	1777	1749	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.0	36.1	36.1	12.4	4.8	7.9	2.2	14.8	39.7	9.0	24.8	2.0
Cycle Q Clear(g_c), s	2.0	36.1	36.1	12.4	4.8	7.9	2.2	14.8	39.7	9.0	24.8	2.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	462	535	526	244	1252	559	255	1176	524	284	1224	546
V/C Ratio(X)	0.10	1.07	1.07	1.07	0.16	0.26	0.20	0.47	1.37	0.95	0.70	0.07
Avail Cap(c_a), veh/h	489	535	526	244	1252	559	279	1176	524	284	1224	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.19	0.19	0.19	0.83	0.83	0.83	1.00	1.00	1.00	0.44	0.44	0.44
Uniform Delay (d), s/veh	25.8	42.0	42.0	35.2	26.7	27.7	25.3	31.8	40.2	34.0	33.9	26.4
Incr Delay (d2), s/veh	0.0	38.0	38.8	70.8	0.1	0.2	0.4	1.4	176.4	23.8	1.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	25.3	25.1	15.1	3.6	5.3	1.6	10.6	60.9	8.1	14.2	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	79.9	80.7	106.0	26.8	27.9	25.6	33.2	216.5	57.7	35.4	26.5
LnGrp LOS	C	F	F	F	C	C	C	C	F	E	D	C
Approach Vol, veh/h		1177			611			1320			1162	
Approach Delay, s/veh		78.2			60.8			132.3			40.3	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	46.7	11.8	48.2	14.9	45.1	18.0	42.0
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	39.7	8.0	40.5	9.0	39.7	12.4	36.1
Max Q Clear Time (g_c+I1), s	4.2	26.8	4.0	9.9	11.0	41.7	14.4	38.1
Green Ext Time (p_c), s	0.0	4.7	0.0	1.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	82.1
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	842	200	239	189	134	47	509	659	248	785	36
Future Volume (veh/h)	41	842	200	239	189	134	47	509	659	248	785	36
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	915	217	260	205	146	51	553	716	270	853	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	462	857	203	244	1252	559	255	1176	524	284	1224	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.30	0.30	0.10	0.35	0.35	0.06	0.33	0.33	0.07	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.8	79.9	80.7	106.0	26.8	27.9	25.6	33.2	216.5	57.7	35.4	26.5
Ln Grp LOS	C	F	F	F	C	C	C	C	F	E	D	C
Approach Vol, veh/h		1177			611			1320			1162	
Approach Delay, s/veh		78.2			60.8			132.3			40.3	
Approach LOS		E			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.3	46.7	11.8	48.2	14.9	45.1	18.0	42.0
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	39.7	8.0	40.5	9.0	39.7	12.4	36.1
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.4	3.7	5.1
Max Q Clear (g_c+l1), s	4.2	26.8	4.0	9.9	11.0	41.7	14.4	38.1
Green Ext Time (g_e), s	0.0	4.7	0.0	1.7	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.82	1.00	0.78	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.22	0.00	0.70	0.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		2850

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		675

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	51	0	45	0	270	0	260	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.2	0.0	2.0	0.0	9.0	0.0	12.4	0.0
Cycle Q Clear Time (g_c), s	2.2	0.0	2.0	0.0	9.0	0.0	12.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	624	0	1030	0	437	0	497	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.7	0.0	36.1	0.0	39.7	0.0	38.1	0.0
Perm LT Serve Time (g_u), s	16.5	0.0	36.1	0.0	24.9	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.1	0.0	0.0	0.0	24.9	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	255	0	462	0	284	0	244	0
V/C Ratio (X)	0.20	0.00	0.10	0.00	0.95	0.00	1.07	0.00
Avail Cap (c_a), veh/h	279	0	489	0	284	0	244	0
Upstream Filter (I)	1.00	0.00	0.19	0.00	0.44	0.00	0.83	0.00
Uniform Delay (d1), s/veh	25.3	0.0	25.8	0.0	34.0	0.0	35.2	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	23.8	0.0	70.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	25.6	0.0	25.8	0.0	57.7	0.0	106.0	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	0.8	0.0	3.6	0.0	5.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	1.9	0.0	4.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.78	0.00	1.46	0.00	1.51	0.00
%ile Back of Q (95%), veh/ln	1.6	0.0	1.5	0.0	8.1	0.0	15.1	0.0
%ile Storage Ratio (RQ%)	0.20	0.00	0.48	0.00	0.91	0.00	3.20	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	853	0	205	0	553	0	570
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	24.8	0.0	4.8	0.0	14.8	0.0	36.1
Cycle Q Clear Time (g_c), s	0.0	24.8	0.0	4.8	0.0	14.8	0.0	36.1
Lane Grp Cap (c), veh/h	0	1224	0	1252	0	1176	0	535
V/C Ratio (X)	0.00	0.70	0.00	0.16	0.00	0.47	0.00	1.07
Avail Cap (c_a), veh/h	0	1224	0	1252	0	1176	0	535
Upstream Filter (I)	0.00	0.44	0.00	0.83	0.00	1.00	0.00	0.19
Uniform Delay (d1), s/veh	0.0	33.9	0.0	26.7	0.0	31.8	0.0	42.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.1	0.0	1.4	0.0	38.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.4	0.0	26.8	0.0	33.2	0.0	79.9
1st-Term Q (Q1), veh/ln	0.0	10.4	0.0	2.0	0.0	6.2	0.0	15.2
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	5.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.33	0.00	1.80	0.00	1.65	0.00	1.21
%ile Back of Q (95%), veh/ln	0.0	14.2	0.0	3.6	0.0	10.6	0.0	25.3
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.11	0.00	0.85	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	39	0	146	0	716	0	562
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1749
Q Serve Time (g_s), s	0.0	2.0	0.0	7.9	0.0	39.7	0.0	36.1
Cycle Q Clear Time (g_c), s	0.0	2.0	0.0	7.9	0.0	39.7	0.0	36.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.39
Lane Grp Cap (c), veh/h	0	546	0	559	0	524	0	526
V/C Ratio (X)	0.00	0.07	0.00	0.26	0.00	1.37	0.00	1.07
Avail Cap (c_a), veh/h	0	546	0	559	0	524	0	526
Upstream Filter (I)	0.00	0.44	0.00	0.83	0.00	1.00	0.00	0.19
Uniform Delay (d1), s/veh	0.0	26.4	0.0	27.7	0.0	40.2	0.0	42.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	176.4	0.0	38.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.5	0.0	27.9	0.0	216.5	0.0	80.7
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	2.9	0.0	14.9	0.0	15.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	25.7	0.0	5.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.50	0.00	1.22
%ile Back of Q (95%), veh/ln	0.0	1.4	0.0	5.3	0.0	60.9	0.0	25.1
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	1.13	0.00	9.66	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	47.9	0.0	9.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	82.1
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	483	0	329	0	439	0	0	1385	0
Future Volume (veh/h)	0	0	0	483	0	329	0	439	0	0	1385	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	525	0	358	0	477	0	0	1505	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Cap, veh/h	0	637	0	726	0	529	0	1787	0	0	1787	0
Arrive On Green	0.00	0.00	0.00	0.34	0.00	0.34	0.00	0.50	0.00	0.00	0.50	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1553	0	3741	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	525	0	358	0	477	0	0	1505	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1553	0	1777	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	16.5	0.0	11.9	0.0	4.6	0.0	0.0	21.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	16.5	0.0	11.9	0.0	4.6	0.0	0.0	21.9	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	637	0	726	0	529	0	1787	0	0	1787	0
V/C Ratio(X)	0.00	0.00	0.00	0.72	0.00	0.68	0.00	0.27	0.00	0.00	0.84	0.00
Avail Cap(c_a), veh/h	0	726	0	812	0	603	0	1787	0	0	1787	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.96	0.00	0.00	0.09	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.5	0.0	17.0	0.0	8.6	0.0	0.0	12.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	2.5	0.0	0.4	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	10.8	0.0	7.5	0.0	2.7	0.0	0.0	8.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	21.3	0.0	19.5	0.0	8.9	0.0	0.0	13.3	0.0
LnGrp LOS	A	A	A	C	A	B	A	A	A	A	B	A
Approach Vol, veh/h		0			883			477			1505	
Approach Delay, s/veh		0.0			20.6			8.9			13.3	
Approach LOS					C			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.1	24.9	35.1	24.9
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	27.3	23.3	27.3	23.3
Max Q Clear Time (g_c+I1), s	6.6	18.5	23.9	0.0
Green Ext Time (p_c), s	3.0	1.9	2.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	483	0	329	0	439	0	0	1385	0
Future Volume (veh/h)	0	0	0	483	0	329	0	439	0	0	1385	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	525	0	358	0	477	0	0	1505	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	637	0	726	0	529	0	1787	0	0	1787	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.34	0.00	0.34	0.00	0.50	0.00	0.00	0.50	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	21.3	0.0	19.5	0.0	8.9	0.0	0.0	13.3	0.0
Ln Grp LOS	A	A	A	C	A	B	A	A	A	A	B	A
Approach Vol, veh/h		0			883			477			1505	
Approach Delay, s/veh		0.0			20.6			8.9			13.3	
Approach LOS					C			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		35.1		24.9		35.1		24.9
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		27.3		23.3		27.3		23.3
Max Allow Headway (MAH), s		5.1		4.5		5.1		0.0
Max Q Clear (g_c+I1), s		6.6		18.5		23.9		0.0
Green Ext Time (g_e), s		3.0		1.9		2.7		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		0.95		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3741		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1553		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	525	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	16.5	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	30.2	0.0	0.0	0.0	30.2	0.0	20.4
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	726	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	812	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.64	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	10.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	477	0	0	0	1505	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	4.6	0.0	0.0	0.0	21.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.6	0.0	0.0	0.0	21.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1787	0	0	0	1787	0	637
V/C Ratio (X)	0.00	0.27	0.00	0.00	0.00	0.84	0.00	0.00
Avail Cap (c_a), veh/h	0	1787	0	0	0	1787	0	726
Upstream Filter (I)	0.00	0.96	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	0.0	0.0	12.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.9	0.0	0.0	0.0	13.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	0.0	0.0	6.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.19	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	2.7	0.0	0.0	0.0	8.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.00	0.00	0.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	358	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1553	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	11.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	529	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.68	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	603	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	19.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	431	218	82	337	71	97	298	66	233	1204	403
Future Volume (veh/h)	52	431	218	82	337	71	97	298	66	233	1204	403
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	468	237	89	366	77	105	324	72	253	1309	438
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	571	287	245	763	159	224	1300	572	572	1432	630
Arrive On Green	0.06	0.25	0.25	0.07	0.26	0.26	0.07	0.37	0.37	0.11	0.40	0.40
Sat Flow, veh/h	1781	2275	1144	1781	2919	607	1781	3554	1563	1781	3554	1565
Grp Volume(v), veh/h	57	365	340	89	221	222	105	324	72	253	1309	438
Grp Sat Flow(s),veh/h/ln	1781	1777	1642	1781	1777	1749	1781	1777	1563	1781	1777	1565
Q Serve(g_s), s	2.1	17.4	17.6	3.2	9.4	9.7	3.2	5.7	2.8	7.6	31.3	20.9
Cycle Q Clear(g_c), s	2.1	17.4	17.6	3.2	9.4	9.7	3.2	5.7	2.8	7.6	31.3	20.9
Prop In Lane	1.00		0.70	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	446	412	245	465	457	224	1300	572	572	1432	630
V/C Ratio(X)	0.17	0.82	0.83	0.36	0.48	0.49	0.47	0.25	0.13	0.44	0.91	0.69
Avail Cap(c_a), veh/h	363	582	538	260	582	573	234	1300	572	634	1432	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.96	0.96	0.96	0.09	0.09	0.09
Uniform Delay (d), s/veh	22.6	31.8	31.8	23.8	28.0	28.1	20.8	19.9	19.0	14.0	25.4	22.3
Incr Delay (d2), s/veh	0.0	0.7	0.8	0.9	0.8	0.8	1.5	0.4	0.4	0.0	1.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	8.5	8.0	2.4	7.0	7.1	2.4	4.2	1.8	3.7	14.2	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	32.4	32.6	24.7	28.8	28.9	22.2	20.4	19.4	14.1	26.6	22.9
LnGrp LOS	C	C	C	C	C	C	C	C	B	B	C	C
Approach Vol, veh/h		762			532			501			2000	
Approach Delay, s/veh		31.8			28.2			20.6			24.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	41.7	9.3	28.5	13.8	38.3	10.2	27.6
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.0	28.1	7.0	* 30	13.0	22.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	5.2	33.3	4.1	11.7	9.6	7.7	5.2	19.6
Green Ext Time (p_c), s	0.0	0.0	0.0	2.3	0.2	1.9	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	431	218	82	337	71	97	298	66	233	1204	403
Future Volume (veh/h)	52	431	218	82	337	71	97	298	66	233	1204	403
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	468	237	89	366	77	105	324	72	253	1309	438
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	330	571	287	245	763	159	224	1300	572	572	1432	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.25	0.25	0.07	0.26	0.26	0.07	0.37	0.37	0.11	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.6	32.4	32.6	24.7	28.8	28.9	22.2	20.4	19.4	14.1	26.6	22.9
Ln Grp LOS	C	C	C	C	C	C	C	C	B	B	C	C
Approach Vol, veh/h		762			532			501			2000	
Approach Delay, s/veh		31.8			28.2			20.6			24.2	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	10.5	41.7	9.3	28.5	13.8	38.3	10.2	27.6
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	13.0	22.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.8	3.7	5.1	3.8	4.9	3.7	5.1
Max Q Clear (g_c+l1), s	5.2	33.3	4.1	11.7	9.6	7.7	5.2	19.6
Green Ext Time (g_e), s	0.0	0.0	0.0	2.3	0.2	1.9	0.0	3.0
Prob of Phs Call (p_c)	0.93	1.00	0.76	1.00	1.00	1.00	0.89	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.02	1.00	0.00	1.00	0.41

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		2919		3554		2275

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1565		607		1563		1144

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	105	0	57	0	253	0	89	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.2	0.0	2.1	0.0	7.6	0.0	3.2	0.0
Cycle Q Clear Time (g_c), s	3.2	0.0	2.1	0.0	7.6	0.0	3.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	276	0	940	0	983	0	740	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	32.9	0.0	22.6	0.0	34.3	0.0	22.6	0.0
Perm LT Serve Time (g_u), s	4.9	0.0	13.9	0.0	27.2	0.0	5.0	0.0
Perm LT Q Serve Time (g_ps), s	4.9	0.0	0.6	0.0	2.4	0.0	2.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	224	0	330	0	572	0	245	0
V/C Ratio (X)	0.47	0.00	0.17	0.00	0.44	0.00	0.36	0.00
Avail Cap (c_a), veh/h	234	0	363	0	634	0	260	0
Upstream Filter (I)	0.96	0.00	0.09	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	20.8	0.0	22.6	0.0	14.0	0.0	23.8	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.0	0.0	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	22.2	0.0	22.6	0.0	14.1	0.0	24.7	0.0
1st-Term Q (Q1), veh/ln	1.2	0.0	0.8	0.0	2.8	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.54	0.00	1.29	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.4	0.0	1.3	0.0	3.7	0.0	2.4	0.0
%ile Storage Ratio (RQ%)	0.34	0.00	0.27	0.00	0.53	0.00	0.61	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1309	0	221	0	324	0	365
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	31.3	0.0	9.4	0.0	5.7	0.0	17.4
Cycle Q Clear Time (g_c), s	0.0	31.3	0.0	9.4	0.0	5.7	0.0	17.4
Lane Grp Cap (c), veh/h	0	1432	0	465	0	1300	0	446
V/C Ratio (X)	0.00	0.91	0.00	0.48	0.00	0.25	0.00	0.82
Avail Cap (c_a), veh/h	0	1432	0	582	0	1300	0	582
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.96	0.00	0.09
Uniform Delay (d1), s/veh	0.0	25.4	0.0	28.0	0.0	19.9	0.0	31.8
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.8	0.0	0.4	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.6	0.0	28.8	0.0	20.4	0.0	32.4
1st-Term Q (Q1), veh/ln	0.0	12.3	0.0	3.8	0.0	2.3	0.0	7.1
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.14	0.00	1.80	0.00	1.80	0.00	1.18
%ile Back of Q (95%), veh/ln	0.0	14.2	0.0	7.0	0.0	4.2	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	1.02	0.00	0.14	0.00	0.16	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	438	0	222	0	72	0	340
Grp Sat Flow (s), veh/h/ln	0	1565	0	1749	0	1563	0	1642
Q Serve Time (g_s), s	0.0	20.9	0.0	9.7	0.0	2.8	0.0	17.6
Cycle Q Clear Time (g_c), s	0.0	20.9	0.0	9.7	0.0	2.8	0.0	17.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.35	0.00	1.00	0.00	0.70
Lane Grp Cap (c), veh/h	0	630	0	457	0	572	0	412
V/C Ratio (X)	0.00	0.69	0.00	0.49	0.00	0.13	0.00	0.83
Avail Cap (c_a), veh/h	0	630	0	573	0	572	0	538
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.96	0.00	0.09
Uniform Delay (d1), s/veh	0.0	22.3	0.0	28.1	0.0	19.0	0.0	31.8
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.8	0.0	0.4	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.9	0.0	28.9	0.0	19.4	0.0	32.6
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	3.8	0.0	0.9	0.0	6.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.18	0.00	1.80	0.00	1.80	0.00	1.19
%ile Back of Q (95%), veh/ln	0.0	8.5	0.0	7.1	0.0	1.8	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	1.65	0.00	0.14	0.00	0.36	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	356	167	57	362	39	50	381	37	27	1397	124
Future Volume (veh/h)	61	356	167	57	362	39	50	381	37	27	1397	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	387	182	62	393	42	54	414	40	29	1518	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	348	479	225	215	747	628	120	1395	134	437	1407	124
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	951	1200	564	841	1870	1574	302	3263	313	922	3292	290
Grp Volume(v), veh/h	66	0	569	62	393	42	54	224	230	29	813	840
Grp Sat Flow(s),veh/h/ln	951	0	1764	841	1870	1574	302	1777	1800	922	1777	1805
Q Serve(g_s), s	3.4	0.0	17.2	4.2	9.6	1.0	0.0	5.0	5.0	1.3	25.6	25.6
Cycle Q Clear(g_c), s	13.0	0.0	17.2	21.4	9.6	1.0	25.6	5.0	5.0	6.3	25.6	25.6
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.17	1.00		0.16
Lane Grp Cap(c), veh/h	348	0	704	215	747	628	120	760	769	437	760	772
V/C Ratio(X)	0.19	0.00	0.81	0.29	0.53	0.07	0.45	0.30	0.30	0.07	1.07	1.09
Avail Cap(c_a), veh/h	364	0	735	230	779	656	120	760	769	437	760	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	18.7	0.0	16.0	25.5	13.7	11.1	30.0	11.3	11.3	13.3	17.2	17.2
Incr Delay (d2), s/veh	0.3	0.0	6.5	0.7	0.6	0.0	11.7	1.0	1.0	0.0	34.6	42.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	11.4	1.5	6.4	0.5	2.0	3.3	3.4	0.4	18.9	21.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	0.0	22.4	26.2	14.3	11.2	41.7	12.2	12.3	13.4	51.8	59.6
LnGrp LOS	B	A	C	C	B	B	D	B	B	B	F	F
Approach Vol, veh/h		635			497			508			1682	
Approach Delay, s/veh		22.1			15.5			15.4			55.0	
Approach LOS		C			B			B			E	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	30.6	29.4	30.6	29.4
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	27.6	19.2	27.6	23.4
Green Ext Time (p_c), s	0.0	2.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	36.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	356	167	57	362	39	50	381	37	27	1397	124
Future Volume (veh/h)	61	356	167	57	362	39	50	381	37	27	1397	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	387	182	62	393	42	54	414	40	29	1518	135
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	479	225	215	747	628	120	1395	134	437	1407	124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.9	0.0	22.4	26.2	14.3	11.2	41.7	12.2	12.3	13.4	51.8	59.6
Ln Grp LOS	B	A	C	C	B	B	D	B	B	B	F	F
Approach Vol, veh/h		635			497			508			1682	
Approach Delay, s/veh		22.1			15.5			15.4			55.0	
Approach LOS		C			B			B			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		30.6		29.4		30.6		29.4
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		6.0		5.2		5.1		5.1
Max Q Clear (g_c+I1), s		27.6		19.2		27.6		23.4
Green Ext Time (g_e), s		0.0		2.0		0.0		0.5
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.88		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		302		951		922		841

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3263		1200		3292		1870

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		313		564		290		1574

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	54	0	66	0	29	0	62
Grp Sat Flow (s), veh/h/ln	0	302	0	951	0	922	0	841
Q Serve Time (g_s), s	0.0	0.0	0.0	3.4	0.0	1.3	0.0	4.2
Cycle Q Clear Time (g_c), s	0.0	25.6	0.0	13.0	0.0	6.3	0.0	21.4
Perm LT Sat Flow (s_l), veh/h/ln	0	302	0	951	0	922	0	841
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	25.6	0.0	24.0	0.0	25.6	0.0	24.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.4	0.0	20.6	0.0	6.8
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	3.4	0.0	1.3	0.0	4.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	120	0	348	0	437	0	215
V/C Ratio (X)	0.00	0.45	0.00	0.19	0.00	0.07	0.00	0.29
Avail Cap (c_a), veh/h	0	120	0	364	0	437	0	230
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.0	0.0	18.7	0.0	13.3	0.0	25.5
Incr Delay (d2), s/veh	0.0	11.7	0.0	0.3	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.7	0.0	18.9	0.0	13.4	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.7	0.0	0.2	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.0	0.0	1.3	0.0	0.4	0.0	1.5
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.32	0.00	0.11	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	224	0	0	0	813	0	393
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	5.0	0.0	0.0	0.0	25.6	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	5.0	0.0	0.0	0.0	25.6	0.0	9.6
Lane Grp Cap (c), veh/h	0	760	0	0	0	760	0	747
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	1.07	0.00	0.53
Avail Cap (c_a), veh/h	0	760	0	0	0	760	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.3	0.0	0.0	0.0	17.2	0.0	13.7
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	34.6	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.2	0.0	0.0	0.0	51.8	0.0	14.3
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	8.5	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	7.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.19	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.3	0.0	0.0	0.0	18.9	0.0	6.4
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.00	0.00	0.73	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	13.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	230	0	569	0	840	0	42
Grp Sat Flow (s), veh/h/ln	0	1800	0	1764	0	1805	0	1574
Q Serve Time (g_s), s	0.0	5.0	0.0	17.2	0.0	25.6	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	5.0	0.0	17.2	0.0	25.6	0.0	1.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.17	0.00	0.32	0.00	0.16	0.00	1.00
Lane Grp Cap (c), veh/h	0	769	0	704	0	772	0	628
V/C Ratio (X)	0.00	0.30	0.00	0.81	0.00	1.09	0.00	0.07
Avail Cap (c_a), veh/h	0	769	0	735	0	772	0	656
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.3	0.0	16.0	0.0	17.2	0.0	11.1
Incr Delay (d2), s/veh	0.0	1.0	0.0	6.5	0.0	42.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.3	0.0	22.4	0.0	59.6	0.0	11.2
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	5.8	0.0	8.7	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.3	0.0	9.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.62	0.00	1.20	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.4	0.0	11.4	0.0	21.3	0.0	0.5
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.33	0.00	0.83	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	17.1	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	36.7
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/11/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	174	430	235	125	21	220	452	128	29	539	42	77
Future Volume (vph)	174	430	235	125	21	220	452	128	29	539	42	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.99	0.97			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Frt	1.00	0.97	0.85			1.00	0.97		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1651	3044	1304			1651	3178		1649	3197		
Flt Permitted	0.21	1.00	1.00			0.14	1.00		0.16	1.00		
Satd. Flow (perm)	358	3044	1304			242	3178		270	3197		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	467	255	136	23	239	491	139	32	586	46	84
RTOR Reduction (vph)	0	0	142	0	0	0	19	0	0	7	0	0
Lane Group Flow (vph)	189	595	121	0	0	262	611	0	32	709	0	0
Confl. Peds. (#/hr)	7		9	2	9	2		7	11		1	9
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	44.2	28.7	28.7			49.7	32.0		25.7	25.7		
Effective Green, g (s)	44.2	28.7	28.7			49.7	32.0		25.7	25.7		
Actuated g/C Ratio	0.32	0.20	0.20			0.36	0.23		0.18	0.18		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	256	624	267			264	726		49	586		
v/s Ratio Prot	0.08	0.20				c0.13	0.19			0.22		
v/s Ratio Perm	0.15		0.09			c0.23			0.12			
v/c Ratio	0.74	0.95	0.46			0.99	0.84		0.65	1.21		
Uniform Delay, d1	38.0	55.0	48.8			39.0	51.6		53.0	57.1		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	10.6	26.2	5.5			53.1	11.4		51.9	109.5		
Delay (s)	48.6	81.2	54.3			92.1	63.0		104.9	166.6		
Level of Service	D	F	D			F	E		F	F		
Approach Delay (s)		68.6					71.5			164.0		
Approach LOS		E					E			F		

Intersection Summary			
HCM 2000 Control Delay	119.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	117.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	13	227	1174	54	135	156	116	8
Future Volume (vph)	13	227	1174	54	135	156	116	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	1.00			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.99			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1652	3277			3195	1345	
Flt Permitted		0.13	1.00			0.95	1.00	
Satd. Flow (perm)		218	3277			3195	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	247	1276	59	147	170	126	9
RTOR Reduction (vph)	0	0	2	0	0	0	103	0
Lane Group Flow (vph)	0	261	1333	0	0	330	19	0
Confl. Peds. (#/hr)	1	9		11	2	11	7	1
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		45.1	45.1			21.7	21.7	
Effective Green, g (s)		45.1	45.1			21.7	21.7	
Actuated g/C Ratio		0.32	0.32			0.15	0.15	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		205	1055			495	208	
v/s Ratio Prot		0.12	c0.41			c0.10	0.01	
v/s Ratio Perm		c0.29						
v/c Ratio		1.27	1.26			0.67	0.09	
Uniform Delay, d1		40.3	47.5			55.7	50.7	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		155.3	126.2			4.1	0.3	
Delay (s)		195.6	173.7			59.9	51.0	
Level of Service		F	F			E	D	
Approach Delay (s)			177.3			57.5		
Approach LOS			F			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	12	29	208	29	68	12	56	369	30	10	14	45
Future Volume (vph)	12	29	208	29	68	12	56	369	30	10	14	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.99				1.00	1.00			1.00	1.00
Flpb, ped/bikes		0.99	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.99			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1631	3125				1644	3242			1652	1652
Flt Permitted		0.28	1.00				0.41	1.00			0.95	0.95
Satd. Flow (perm)		484	3125				712	3242			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	32	226	32	74	13	61	401	33	11	15	49
RTOR Reduction (vph)	0	0	15	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	45	317	0	0	0	74	444	0	0	15	49
Confl. Peds. (#/hr)	4	17		1	5	1	5		4	17	3	4
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		34.7	34.7				34.7	34.7			16.0	16.0
Effective Green, g (s)		34.7	34.7				34.7	34.7			16.0	16.0
Actuated g/C Ratio		0.19	0.19				0.19	0.19			0.09	0.09
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		93	602				137	624			146	146
v/s Ratio Prot			0.10					c0.14			0.01	0.03
v/s Ratio Perm		0.09					0.10					
v/c Ratio		0.48	0.53				0.54	0.71			0.10	0.34
Uniform Delay, d1		64.7	65.3				65.5	68.0			75.4	77.0
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		3.9	0.8				4.3	3.8			0.3	1.4
Delay (s)		68.6	66.1				69.8	71.8			75.7	78.4
Level of Service		E	E				E	E			E	E
Approach Delay (s)			66.4					71.5				
Approach LOS			E					E				

Intersection Summary			
HCM 2000 Control Delay	107.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	147.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL2	SBL	SBT	SBR	SBR2	SEL	SET	SER	SER2	NWL
Lane Configurations												
Traffic Volume (vph)	257	5	16	225	807	101	1	33	1066	252	34	28
Future Volume (vph)	257	5	16	225	807	101	1	33	1066	252	34	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Lane Util. Factor	0.95	1.00		1.00	0.95	1.00		1.00	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.97		1.00	1.00	0.98		1.00	1.00	0.98	0.97	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	0.85	1.00
Flt Protected	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	1.00	0.95
Satd. Flow (prot)	3303	1437		1652	3303	1448		1646	3152	1321	1440	1651
Flt Permitted	1.00	1.00		0.95	1.00	1.00		0.43	1.00	1.00	1.00	0.08
Satd. Flow (perm)	3303	1437		1652	3303	1448		744	3152	1321	1440	140
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	5	17	245	877	110	1	36	1159	274	37	30
RTOR Reduction (vph)	0	0	0	0	0	73	0	0	0	0	27	0
Lane Group Flow (vph)	279	5	0	262	877	38	0	36	1186	247	10	30
Confl. Peds. (#/hr)		6	6	1		3	4	6		5	3	3
Turn Type	NA	Perm	Prot	Prot	NA	Perm		Perm	NA	Perm	Perm	Perm
Protected Phases	6		5	5	2				10			
Permitted Phases		6				2		10		10	10	14
Actuated Green, G (s)	34.3	34.3		33.4	51.9	51.9		49.7	49.7	49.7	49.7	49.7
Effective Green, g (s)	34.3	34.3		33.4	51.9	51.9		49.7	49.7	49.7	49.7	49.7
Actuated g/C Ratio	0.19	0.19		0.19	0.29	0.29		0.28	0.28	0.28	0.28	0.28
Clearance Time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	629	273		306	952	417		205	870	364	397	38
v/s Ratio Prot	0.08			c0.16	c0.27				c0.38			
v/s Ratio Perm		0.00				0.03		0.05		0.19	0.01	0.21
v/c Ratio	0.44	0.02		0.86	0.92	0.09		0.18	1.36	0.68	0.03	0.79
Uniform Delay, d1	64.4	59.2		71.0	62.1	46.8		49.6	65.2	58.0	47.5	60.3
Progression Factor	1.00	1.00		1.20	0.66	1.32		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.3	0.1		9.4	7.4	0.2		0.4	170.9	5.0	0.0	67.6
Delay (s)	66.7	59.3		94.9	48.3	61.8		50.0	236.0	63.0	47.5	127.9
Level of Service	E	E		F	D	E		D	F	E	D	F
Approach Delay (s)	68.6				59.2				198.6			
Approach LOS	E				E				F			

Intersection Summary

Movement	NWT	NWR	NWR2
Lane Configurations			
Traffic Volume (vph)	295	171	20
Future Volume (vph)	295	171	20
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.6	7.6	
Lane Util. Factor	0.91	0.91	
Frpb, ped/bikes	1.00	0.96	
Flpb, ped/bikes	1.00	1.00	
Frt	0.98	0.85	
Flt Protected	1.00	1.00	
Satd. Flow (prot)	3090	1296	
Flt Permitted	1.00	1.00	
Satd. Flow (perm)	3090	1296	
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	321	186	22
RTOR Reduction (vph)	0	103	0
Lane Group Flow (vph)	369	57	0
Confl. Peds. (#/hr)		17	6
Turn Type	NA	Perm	
Protected Phases	14		
Permitted Phases		14	
Actuated Green, G (s)	49.7	49.7	
Effective Green, g (s)	49.7	49.7	
Actuated g/C Ratio	0.28	0.28	
Clearance Time (s)	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	
Lane Grp Cap (vph)	853	357	
v/s Ratio Prot	0.12		
v/s Ratio Perm		0.04	
v/c Ratio	0.43	0.16	
Uniform Delay, d1	53.6	49.3	
Progression Factor	1.00	1.00	
Incremental Delay, d2	0.4	0.2	
Delay (s)	53.9	49.6	
Level of Service	D	D	
Approach Delay (s)	56.6		
Approach LOS	E		

Intersection Summary

Future with Phase 1 Conditions – Year 2026

Afternoon Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1639	7	0	1556	0	1	0	18	437	8	196
Future Volume (veh/h)	0	1639	7	0	1556	0	1	0	18	437	8	196
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1782	8	0	1691	0	1	0	20	348	186	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2663	12	0	1804	0	3	0	62	482	215	246
Arrive On Green	0.00	0.51	0.51	0.00	0.51	0.00	0.04	0.00	0.04	0.27	0.27	0.27
Sat Flow, veh/h	0	5415	24	0	3741	0	76	0	1513	1781	795	910
Grp Volume(v), veh/h	0	1156	634	0	1691	0	21	0	0	348	0	399
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1589	0	0	1781	0	1705
Q Serve(g_s), s	0.0	22.8	22.8	0.0	40.2	0.0	1.2	0.0	0.0	15.9	0.0	20.1
Cycle Q Clear(g_c), s	0.0	22.8	22.8	0.0	40.2	0.0	1.2	0.0	0.0	15.9	0.0	20.1
Prop In Lane	0.00		0.01	0.00		0.00	0.05		0.95	1.00		0.53
Lane Grp Cap(c), veh/h	0	1728	947	0	1804	0	65	0	0	482	0	461
V/C Ratio(X)	0.00	0.67	0.67	0.00	0.94	0.00	0.32	0.00	0.00	0.72	0.00	0.86
Avail Cap(c_a), veh/h	0	1728	947	0	1804	0	159	0	0	590	0	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	16.5	0.0	20.8	0.0	42.0	0.0	0.0	29.8	0.0	31.3
Incr Delay (d2), s/veh	0.0	2.1	3.8	0.0	10.8	0.0	2.8	0.0	0.0	3.4	0.0	11.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.1	14.7	0.0	24.0	0.0	0.9	0.0	0.0	11.2	0.0	14.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	18.6	20.3	0.0	31.6	0.0	44.8	0.0	0.0	33.1	0.0	42.6
LnGrp LOS	A	B	C	A	C	A	D	A	A	C	A	D
Approach Vol, veh/h		1790			1691			21			747	
Approach Delay, s/veh		19.2			31.6			44.8			38.2	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.8	29.5	50.8	9.7
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	24.8	22.1	42.2	3.2
Green Ext Time (p_c), s	7.3	2.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1639	7	0	1556	0	1	0	18	437	8	196
Future Volume (veh/h)	0	1639	7	0	1556	0	1	0	18	437	8	196
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1782	8	0	1691	0	1	0	20	348	186	213
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2663	12	0	1804	0	3	0	62	482	215	246
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.51	0.51	0.00	0.51	0.00	0.04	0.00	0.04	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	18.6	20.3	0.0	31.6	0.0	44.8	0.0	0.0	33.1	0.0	42.6
Ln Grp LOS	A	B	C	A	C	A	D	A	A	C	A	D
Approach Vol, veh/h		1790			1691			21			747	
Approach Delay, s/veh		19.2			31.6			44.8			38.2	
Approach LOS		B			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		50.8	9.7	29.5		50.8		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		24.8	3.2	22.1		42.2		
Green Ext Time (g_e), s		7.3	0.0	2.2		0.0		
Prob of Phs Call (p_c)		1.00	0.42	1.00		1.00		
Prob of Max Out (p_x)		0.80	0.87	0.48		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	76	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5415	0	795		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		24	1513	910		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	21	348	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1589	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	1.2	15.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	1.2	15.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	45.7	0.0	0.0	0.0	45.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.05	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	65	482	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.32	0.72	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	159	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	42.0	29.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.8	3.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	44.8	33.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.5	6.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.62	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.9	11.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.08	1.20	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1156	0	0	0	1691	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.8	0.0	0.0	0.0	40.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	0.0	0.0	40.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1728	0	0	0	1804	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.00	0.00	0.94	0.00	0.00
Avail Cap (c_a), veh/h	0	1728	0	0	0	1804	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.5	0.0	0.0	0.0	20.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.0	0.0	10.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.6	0.0	0.0	0.0	31.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.9	0.0	0.0	0.0	14.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	2.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	1.00	1.00	0.00	1.40	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	13.1	0.0	0.0	0.0	24.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.56	0.00	0.00	0.00	3.42	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	634	0	399	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1705	0	0	0	0
Q Serve Time (g_s), s	0.0	22.8	0.0	20.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	20.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.95	0.53	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	947	0	461	0	0	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.86	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	947	0	565	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.5	0.0	31.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.8	0.0	11.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.3	0.0	42.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	7.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	1.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	1.00	1.54	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	14.7	0.0	14.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.62	0.00	1.52	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1234	79	91	1692	79	321	347	224	42	295	276
Future Volume (veh/h)	99	1234	79	91	1692	79	321	347	224	42	295	276
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	1341	86	99	1839	86	349	377	243	46	321	300
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	1876	824	171	1876	824	249	648	544	226	648	544
Arrive On Green	0.53	0.53	0.53	1.00	1.00	1.00	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	231	3554	1561	375	3554	1561	801	1870	1570	802	1870	1570
Grp Volume(v), veh/h	108	1341	86	99	1839	86	349	377	243	46	321	300
Grp Sat Flow(s),veh/h/ln	231	1777	1561	375	1777	1561	801	1870	1570	802	1870	1570
Q Serve(g_s), s	37.2	25.8	2.5	21.7	0.0	0.0	19.0	14.8	10.8	4.5	12.2	13.9
Cycle Q Clear(g_c), s	37.2	25.8	2.5	47.5	0.0	0.0	31.2	14.8	10.8	19.3	12.2	13.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	202	1876	824	171	1876	824	249	648	544	226	648	544
V/C Ratio(X)	0.53	0.71	0.10	0.58	0.98	0.10	1.40	0.58	0.45	0.20	0.50	0.55
Avail Cap(c_a), veh/h	202	1876	824	171	1876	824	249	648	544	226	648	544
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.32	0.32	0.32	0.60	0.60	0.60	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	16.1	10.6	13.8	0.0	0.0	38.5	24.1	22.7	32.0	23.2	23.7
Incr Delay (d2), s/veh	9.8	2.4	0.3	4.6	8.1	0.1	194.3	0.8	0.3	0.4	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	14.8	1.5	2.8	3.4	0.0	29.3	9.5	6.3	1.6	8.9	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	18.5	10.9	18.3	8.1	0.1	232.9	24.8	23.1	32.4	23.8	24.9
LnGrp LOS	C	B	B	B	A	A	F	C	C	C	C	C
Approach Vol, veh/h		1535			2024			969			667	
Approach Delay, s/veh		18.8			8.2			99.3			24.9	
Approach LOS		B			A			F			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.0	37.0	53.0	37.0
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 48	31.2	* 48	31.2
Max Q Clear Time (g_c+I1), s	39.2	33.2	49.5	21.3
Green Ext Time (p_c), s	6.4	0.0	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1234	79	91	1692	79	321	347	224	42	295	276
Future Volume (veh/h)	99	1234	79	91	1692	79	321	347	224	42	295	276
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	108	1341	86	99	1839	86	349	377	243	46	321	300
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	202	1876	824	171	1876	824	249	648	544	226	648	544
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.53	0.53	0.53	1.00	1.00	1.00	0.35	0.35	0.35	0.35	0.35	0.35
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.6	18.5	10.9	18.3	8.1	0.1	232.9	24.8	23.1	32.4	23.8	24.9
Ln Grp LOS	C	B	B	B	A	A	F	C	C	C	C	C
Approach Vol, veh/h		1535			2024			969			667	
Approach Delay, s/veh		18.8			8.2			99.3			24.9	
Approach LOS		B			A			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		53.0		37.0		53.0		37.0
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 48		31.2		* 48		31.2
Max Allow Headway (MAH), s		5.7		5.0		5.2		4.6
Max Q Clear (g_c+I1), s		39.2		33.2		49.5		21.3
Green Ext Time (g_e), s		6.4		0.0		0.0		2.3
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.27
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		231		801		375		802
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1561		1570		1561		1570
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	108	0	349	0	99	0	46
Grp Sat Flow (s), veh/h/ln	0	231	0	801	0	375	0	802
Q Serve Time (g_s), s	0.0	37.2	0.0	19.0	0.0	21.7	0.0	4.5
Cycle Q Clear Time (g_c), s	0.0	37.2	0.0	31.2	0.0	47.5	0.0	19.3
Perm LT Sat Flow (s_l), veh/h/ln	0	231	0	801	0	375	0	802
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.5	0.0	31.2	0.0	47.5	0.0	31.2
Perm LT Serve Time (g_u), s	0.0	47.5	0.0	19.0	0.0	21.7	0.0	16.4
Perm LT Q Serve Time (g_ps), s	0.0	37.2	0.0	19.0	0.0	21.7	0.0	4.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	202	0	249	0	171	0	226
V/C Ratio (X)	0.00	0.53	0.00	1.40	0.00	0.58	0.00	0.20
Avail Cap (c_a), veh/h	0	202	0	249	0	171	0	226
Upstream Filter (I)	0.00	1.00	0.00	0.60	0.00	0.32	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.8	0.0	38.5	0.0	13.8	0.0	32.0
Incr Delay (d2), s/veh	0.0	9.8	0.0	194.3	0.0	4.6	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.6	0.0	232.9	0.0	18.3	0.0	32.4
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	5.4	0.0	1.4	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	13.5	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.56	0.00	1.72	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	4.1	0.0	29.3	0.0	2.8	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.83	0.00	11.45	0.00	0.52	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1341	0	377	0	1839	0	321
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	25.8	0.0	14.8	0.0	0.0	0.0	12.2
Cycle Q Clear Time (g_c), s	0.0	25.8	0.0	14.8	0.0	0.0	0.0	12.2
Lane Grp Cap (c), veh/h	0	1876	0	648	0	1876	0	648
V/C Ratio (X)	0.00	0.71	0.00	0.58	0.00	0.98	0.00	0.50
Avail Cap (c_a), veh/h	0	1876	0	648	0	1876	0	648
Upstream Filter (I)	0.00	1.00	0.00	0.60	0.00	0.32	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.1	0.0	24.1	0.0	0.0	0.0	23.2
Incr Delay (d2), s/veh	0.0	2.4	0.0	0.8	0.0	8.1	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.5	0.0	24.8	0.0	8.1	0.0	23.8
1st-Term Q (Q1), veh/ln	0.0	9.1	0.0	6.1	0.0	0.0	0.0	5.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	2.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	0.00	1.51	0.00	1.64	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	14.8	0.0	9.5	0.0	3.4	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	3.19	0.00	0.20	0.00	0.30	0.00	0.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	86	0	243	0	86	0	300
Grp Sat Flow (s), veh/h/ln	0	1561	0	1570	0	1561	0	1570
Q Serve Time (g_s), s	0.0	2.5	0.0	10.8	0.0	0.0	0.0	13.9
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	10.8	0.0	0.0	0.0	13.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	824	0	544	0	824	0	544
V/C Ratio (X)	0.00	0.10	0.00	0.45	0.00	0.10	0.00	0.55
Avail Cap (c_a), veh/h	0	824	0	544	0	824	0	544
Upstream Filter (I)	0.00	1.00	0.00	0.60	0.00	0.32	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.6	0.0	22.7	0.0	0.0	0.0	23.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.1	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.9	0.0	23.1	0.0	0.1	0.0	24.9
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	3.7	0.0	0.0	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.65	0.00	1.80	0.00	1.73
%ile Back of Q (95%), veh/ln	0.0	1.5	0.0	6.3	0.0	0.0	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	1.67	0.00	0.01	0.00	2.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
4: SR 170 NB Off-Ramp/Troost Ave & Burbank Blvd

02/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1379	0	0	1187	10	651	70	251	5	0	22
Future Volume (veh/h)	23	1379	0	0	1187	10	651	70	251	5	0	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1499	0	0	1290	11	528	327	273	5	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	170	1771	0	0	1771	785	477	251	210	16	0	75
Arrive On Green	1.00	1.00	0.00	0.00	0.50	0.50	0.27	0.27	0.27	0.06	0.00	0.06
Sat Flow, veh/h	423	3647	0	0	3647	1576	1781	939	784	274	0	1316
Grp Volume(v), veh/h	25	1499	0	0	1290	11	528	0	600	29	0	0
Grp Sat Flow(s),veh/h/ln	423	1777	0	0	1777	1576	1781	0	1722	1590	0	0
Q Serve(g_s), s	3.5	0.8	0.0	0.0	25.7	0.3	24.1	0.0	24.1	1.6	0.0	0.0
Cycle Q Clear(g_c), s	29.2	0.8	0.0	0.0	25.7	0.3	24.1	0.0	24.1	1.6	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.46	0.17		0.83
Lane Grp Cap(c), veh/h	170	1771	0	0	1771	785	477	0	461	91	0	0
V/C Ratio(X)	0.15	0.85	0.00	0.00	0.73	0.01	1.11	0.00	1.30	0.32	0.00	0.00
Avail Cap(c_a), veh/h	170	1771	0	0	1771	785	477	0	461	177	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.00	0.00	0.09	0.09	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.5	0.1	0.0	0.0	17.8	11.4	33.0	0.0	33.0	40.7	0.0	0.0
Incr Delay (d2), s/veh	1.2	3.4	0.0	0.0	0.2	0.0	73.6	0.0	150.7	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	1.6	0.0	0.0	10.9	0.2	28.4	0.0	43.2	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.7	3.5	0.0	0.0	18.0	11.4	106.6	0.0	183.6	42.7	0.0	0.0
LnGrp LOS	A	A	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1524			1301			1128			29	
Approach Delay, s/veh		3.6			18.0			147.6			42.7	
Approach LOS		A			B			F			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	49.9	10.6	49.9	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	31.2	3.6	27.7	26.1
Green Ext Time (p_c), s	7.6	0.0	9.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1379	0	0	1187	10	651	70	251	5	0	22
Future Volume (veh/h)	23	1379	0	0	1187	10	651	70	251	5	0	22
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	1499	0	0	1290	11	528	327	273	5	0	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	170	1771	0	0	1771	785	477	251	210	16	0	75
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.50	0.50	0.27	0.27	0.27	0.06	0.00	0.06
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.7	3.5	0.0	0.0	18.0	11.4	106.6	0.0	183.6	42.7	0.0	0.0
Ln Grp LOS	A	A	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1524			1301			1128			29	
Approach Delay, s/veh		3.6			18.0			147.6			42.7	
Approach LOS		A			B			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		49.9	29.5	10.6		49.9		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.9	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		31.2	26.1	3.6		27.7		
Green Ext Time (g_e), s		7.6	0.0	0.0		9.3		
Prob of Phs Call (p_c)		1.00	1.00	0.56		1.00		
Prob of Max Out (p_x)		0.00	1.00	0.49		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		423	1781	274		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	939	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	784	1316		1576		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	25	528	29	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	423	1781	1590	0	0	0	0
Q Serve Time (g_s), s	0.0	3.5	24.1	1.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.2	24.1	1.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	423	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	44.8	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	19.1	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	44.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.17	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	170	477	91	0	0	0	0
V/C Ratio (X)	0.00	0.15	1.11	0.32	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	170	477	177	0	0	0	0
Upstream Filter (I)	0.00	0.64	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.5	33.0	40.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	73.6	2.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.7	106.6	42.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	9.7	0.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	9.8	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.46	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.5	28.4	1.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	2.18	0.08	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	12.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1499	0	0	0	1290	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	25.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.0	0.0	25.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1771	0	0	0	1771	0	0
V/C Ratio (X)	0.00	0.85	0.00	0.00	0.00	0.73	0.00	0.00
Avail Cap (c_a), veh/h	0	1771	0	0	0	1771	0	0
Upstream Filter (I)	0.00	0.64	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.1	0.0	0.0	0.0	17.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.4	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.5	0.0	0.0	0.0	18.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	9.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.00	0.00	1.16	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.6	0.0	0.0	0.0	10.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	600	0	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1722	0	0	1576	0	0
Q Serve Time (g_s), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.46	0.83	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	461	0	0	785	0	0
V/C Ratio (X)	0.00	0.00	1.30	0.00	0.00	0.01	0.00	0.00
Avail Cap (c_a), veh/h	0	0	461	0	0	785	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.0	0.0	0.0	11.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	150.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	183.6	0.0	0.0	11.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.4	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	19.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.50	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	43.2	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.32	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	34.7	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	366	729	374	208	730	122	276	859	126	73	637	73
Future Volume (veh/h)	366	729	374	208	730	122	276	859	126	73	637	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.90	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	398	792	407	226	793	133	300	934	137	79	692	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	566	640	216	791	133	336	668	508	170	990	113
Arrive On Green	0.13	0.30	0.30	0.09	0.26	0.26	0.11	0.36	0.36	0.06	0.31	0.31
Sat Flow, veh/h	1781	1870	1549	1781	3031	508	1781	1870	1423	1781	3186	363
Grp Volume(v), veh/h	398	792	407	226	465	461	300	934	137	79	386	385
Grp Sat Flow(s),veh/h/ln	1781	1870	1549	1781	1777	1763	1781	1870	1423	1781	1777	1772
Q Serve(g_s), s	15.5	36.3	25.2	10.5	31.3	31.3	13.0	42.9	8.2	3.5	22.9	23.0
Cycle Q Clear(g_c), s	15.5	36.3	25.2	10.5	31.3	31.3	13.0	42.9	8.2	3.5	22.9	23.0
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	290	566	640	216	463	460	336	668	508	170	552	551
V/C Ratio(X)	1.37	1.40	0.64	1.05	1.00	1.00	0.89	1.40	0.27	0.46	0.70	0.70
Avail Cap(c_a), veh/h	290	566	640	216	463	460	336	668	508	208	552	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.10	0.10	0.10	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	41.8	28.3	33.6	44.3	44.4	28.8	38.6	27.4	30.5	36.4	36.4
Incr Delay (d2), s/veh	169.4	180.9	0.4	33.0	13.9	14.0	24.7	188.0	1.3	2.0	7.2	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	26.0	59.0	10.7	8.0	17.2	17.1	12.6	80.2	5.3	2.8	16.3	16.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	205.3	222.8	28.7	66.6	58.3	58.4	53.6	226.5	28.7	32.5	43.6	43.6
LnGrp LOS	F	F	C	F	F	F	D	F	C	C	D	D
Approach Vol, veh/h		1597			1152			1371			850	
Approach Delay, s/veh		168.9			59.9			168.9			42.6	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	42.0	19.0	43.0	21.0	37.0	13.4	48.6
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 11	* 36	13.0	* 37	* 16	* 31	10.0	* 40
Max Q Clear Time (g_c+I1), s	12.5	38.3	15.0	25.0	17.5	33.3	5.5	44.9
Green Ext Time (p_c), s	0.0	0.0	0.0	3.8	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	122.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	366	729	374	208	730	122	276	859	126	73	637	73
Future Volume (veh/h)	366	729	374	208	730	122	276	859	126	73	637	73
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.97	0.99		0.90	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	398	792	407	226	793	133	300	934	137	79	692	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	290	566	640	216	791	133	336	668	508	170	990	113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.13	0.30	0.30	0.09	0.26	0.26	0.11	0.36	0.36	0.06	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	205.3	222.8	28.7	66.6	58.3	58.4	53.6	226.5	28.7	32.5	43.6	43.6
Ln Grp LOS	F	F	C	F	F	F	D	F	C	C	D	D
Approach Vol, veh/h		1597			1152			1371			850	
Approach Delay, s/veh		168.9			59.9			168.9			42.6	
Approach LOS		F			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	16.0	42.0	19.0	43.0	21.0	37.0	13.4	48.6
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 11	* 36	13.0	* 37	* 16	* 31	10.0	* 40
Max Allow Headway (MAH), s	3.7	4.7	3.8	5.2	3.7	5.1	3.8	5.0
Max Q Clear (g_c+I1), s	12.5	38.3	15.0	25.0	17.5	33.3	5.5	44.9
Green Ext Time (g_e), s	0.0	0.0	0.0	3.8	0.0	0.0	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.42	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1870	3186	3031	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1549	363	508	1423

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	226	0	300	0	398	0	79	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	10.5	0.0	13.0	0.0	15.5	0.0	3.5	0.0
Cycle Q Clear Time (g_c), s	10.5	0.0	13.0	0.0	15.5	0.0	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	467	0	694	0	604	0	527	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	31.3	0.0	38.9	0.0	32.8	0.0	37.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	216	0	336	0	290	0	170	0
V/C Ratio (X)	1.05	0.00	0.89	0.00	1.37	0.00	0.46	0.00
Avail Cap (c_a), veh/h	216	0	336	0	290	0	208	0
Upstream Filter (I)	0.10	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	33.6	0.0	28.8	0.0	35.8	0.0	30.5	0.0
Incr Delay (d2), s/veh	33.0	0.0	24.7	0.0	169.4	0.0	2.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	66.6	0.0	53.6	0.0	205.3	0.0	32.5	0.0
1st-Term Q (Q1), veh/ln	4.5	0.0	5.7	0.0	6.5	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	2.0	0.0	2.3	0.0	13.7	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.23	0.00	1.58	0.00	1.29	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	8.0	0.0	12.6	0.0	26.0	0.0	2.8	0.0
%ile Storage Ratio (RQ%)	1.27	0.00	4.46	0.00	2.36	0.00	0.56	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	2.5	0.0	0.0	0.0	27.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	792	0	386	0	465	0	934
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	36.3	0.0	22.9	0.0	31.3	0.0	42.9
Cycle Q Clear Time (g_c), s	0.0	36.3	0.0	22.9	0.0	31.3	0.0	42.9
Lane Grp Cap (c), veh/h	0	566	0	552	0	463	0	668
V/C Ratio (X)	0.00	1.40	0.00	0.70	0.00	1.00	0.00	1.40
Avail Cap (c_a), veh/h	0	566	0	552	0	463	0	668
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.10	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	36.4	0.0	44.3	0.0	38.6
Incr Delay (d2), s/veh	0.0	180.9	0.0	7.2	0.0	13.9	0.0	188.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	222.8	0.0	43.6	0.0	58.3	0.0	226.5
1st-Term Q (Q1), veh/ln	0.0	16.1	0.0	9.8	0.0	13.3	0.0	19.0
2nd-Term Q (Q2), veh/ln	0.0	28.4	0.0	1.1	0.0	1.8	0.0	34.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.32	0.00	1.50	0.00	1.14	0.00	1.49
%ile Back of Q (95%), veh/ln	0.0	59.0	0.0	16.3	0.0	17.2	0.0	80.2
%ile Storage Ratio (RQ%)	0.00	0.68	0.00	3.23	0.00	0.17	0.00	28.30
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	56.6	0.0	0.0	0.0	0.3	0.0	66.4
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	407	0	385	0	461	0	137
Grp Sat Flow (s), veh/h/ln	0	1549	0	1772	0	1763	0	1423
Q Serve Time (g_s), s	0.0	25.2	0.0	23.0	0.0	31.3	0.0	8.2
Cycle Q Clear Time (g_c), s	0.0	25.2	0.0	23.0	0.0	31.3	0.0	8.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.20	0.00	0.29	0.00	1.00
Lane Grp Cap (c), veh/h	0	640	0	551	0	460	0	508
V/C Ratio (X)	0.00	0.64	0.00	0.70	0.00	1.00	0.00	0.27
Avail Cap (c_a), veh/h	0	640	0	551	0	460	0	508
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.10	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.3	0.0	36.4	0.0	44.4	0.0	27.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	7.2	0.0	14.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.7	0.0	43.6	0.0	58.4	0.0	28.7
1st-Term Q (Q1), veh/ln	0.0	9.1	0.0	9.8	0.0	13.2	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.1	0.0	1.8	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.16	0.00	1.50	0.00	1.14	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.7	0.0	16.3	0.0	17.1	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	3.23	0.00	0.17	0.00	1.88
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	122.1
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	623	77	104	702	87	145	954	197	96	746	137
Future Volume (veh/h)	120	623	77	104	702	87	145	954	197	96	746	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	677	84	113	763	95	158	1037	214	104	811	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	881	726	201	881	726	187	1441	618	151	1207	222
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	644	1870	1541	705	1870	1541	583	3554	1524	443	2976	547
Grp Volume(v), veh/h	130	677	84	113	763	95	158	1037	214	104	484	476
Grp Sat Flow(s),veh/h/ln	644	1870	1541	705	1870	1541	583	1777	1524	443	1777	1746
Q Serve(g_s), s	9.6	27.0	2.7	14.2	32.8	3.1	16.5	22.0	8.7	14.5	20.0	20.0
Cycle Q Clear(g_c), s	42.4	27.0	2.7	41.2	32.8	3.1	36.5	22.0	8.7	36.5	20.0	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	149	881	726	201	881	726	187	1441	618	151	721	708
V/C Ratio(X)	0.87	0.77	0.12	0.56	0.87	0.13	0.85	0.72	0.35	0.69	0.67	0.67
Avail Cap(c_a), veh/h	149	881	726	201	881	726	187	1441	618	151	721	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.49	0.49	0.49	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	19.7	13.3	36.8	21.3	13.4	39.4	22.5	18.5	40.1	21.9	21.9
Incr Delay (d2), s/veh	6.8	0.6	0.0	11.0	11.1	0.4	16.1	0.9	0.2	12.3	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.0	12.2	1.3	5.3	21.9	1.9	6.6	12.0	4.8	5.0	12.8	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.2	20.3	13.3	47.8	32.4	13.8	55.5	23.3	18.7	52.4	24.3	24.3
LnGrp LOS	D	C	B	D	C	B	E	C	B	D	C	C
Approach Vol, veh/h		891			971			1409			1064	
Approach Delay, s/veh		23.9			32.4			26.2			27.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	48.0	42.0	48.0	42.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 42	* 37	* 42	* 37
Max Q Clear Time (g_c+I1), s	44.4	38.5	43.2	38.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	623	77	104	702	87	145	954	197	96	746	137
Future Volume (veh/h)	120	623	77	104	702	87	145	954	197	96	746	137
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	130	677	84	113	763	95	158	1037	214	104	811	149
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	149	881	726	201	881	726	187	1441	618	151	1207	222
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Unsig. Movement Delay												
Ln Grp Delay, s/veh	49.2	20.3	13.3	47.8	32.4	13.8	55.5	23.3	18.7	52.4	24.3	24.3
Ln Grp LOS	D	C	B	D	C	B	E	C	B	D	C	C
Approach Vol, veh/h		891			971			1409			1064	
Approach Delay, s/veh		23.9			32.4			26.2			27.1	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		48.0		42.0		48.0		42.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 42		* 37		* 42		* 37
Max Allow Headway (MAH), s		5.1		5.1		5.0		5.4
Max Q Clear (g_c+l1), s		44.4		38.5		43.2		38.5
Green Ext Time (g_e), s		0.0		0.0		0.0		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		644		583		705		443
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		2976
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1541		1524		1541		547
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	130	0	158	0	113	0	104
Grp Sat Flow (s), veh/h/ln	0	644	0	583	0	705	0	443
Q Serve Time (g_s), s	0.0	9.6	0.0	16.5	0.0	14.2	0.0	14.5
Cycle Q Clear Time (g_c), s	0.0	42.4	0.0	36.5	0.0	41.2	0.0	36.5
Perm LT Sat Flow (s_l), veh/h/ln	0	644	0	583	0	705	0	443
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	42.4	0.0	36.5	0.0	42.4	0.0	36.5
Perm LT Serve Time (g_u), s	0.0	9.6	0.0	16.5	0.0	15.4	0.0	14.5
Perm LT Q Serve Time (g_ps), s	0.0	9.6	0.0	16.5	0.0	14.2	0.0	14.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	149	0	187	0	201	0	151
V/C Ratio (X)	0.00	0.87	0.00	0.85	0.00	0.56	0.00	0.69
Avail Cap (c_a), veh/h	0	149	0	187	0	201	0	151
Upstream Filter (I)	0.00	0.09	0.00	0.49	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.5	0.0	39.4	0.0	36.8	0.0	40.1
Incr Delay (d2), s/veh	0.0	6.8	0.0	16.1	0.0	11.0	0.0	12.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	49.2	0.0	55.5	0.0	47.8	0.0	52.4
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	3.4	0.0	2.3	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.8	0.0	0.6	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.28	0.00	1.56	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	4.0	0.0	6.6	0.0	5.3	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	2.40	0.00	1.00	0.00	1.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	677	0	1037	0	763	0	484
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	27.0	0.0	22.0	0.0	32.8	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	27.0	0.0	22.0	0.0	32.8	0.0	20.0
Lane Grp Cap (c), veh/h	0	881	0	1441	0	881	0	721
V/C Ratio (X)	0.00	0.77	0.00	0.72	0.00	0.87	0.00	0.67
Avail Cap (c_a), veh/h	0	881	0	1441	0	881	0	721
Upstream Filter (I)	0.00	0.09	0.00	0.49	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.7	0.0	22.5	0.0	21.3	0.0	21.9
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.9	0.0	11.1	0.0	2.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.3	0.0	23.3	0.0	32.4	0.0	24.3
1st-Term Q (Q1), veh/ln	0.0	10.5	0.0	8.4	0.0	12.7	0.0	7.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	2.7	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.15	0.00	1.39	0.00	1.42	0.00	1.57
%ile Back of Q (95%), veh/ln	0.0	12.2	0.0	12.0	0.0	21.9	0.0	12.8
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.25	0.00	1.55	0.00	0.70
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	84	0	214	0	95	0	476
Grp Sat Flow (s), veh/h/ln	0	1541	0	1524	0	1541	0	1746
Q Serve Time (g_s), s	0.0	2.7	0.0	8.7	0.0	3.1	0.0	20.0
Cycle Q Clear Time (g_c), s	0.0	2.7	0.0	8.7	0.0	3.1	0.0	20.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.31
Lane Grp Cap (c), veh/h	0	726	0	618	0	726	0	708
V/C Ratio (X)	0.00	0.12	0.00	0.35	0.00	0.13	0.00	0.67
Avail Cap (c_a), veh/h	0	726	0	618	0	726	0	708
Upstream Filter (I)	0.00	0.09	0.00	0.49	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.3	0.0	18.5	0.0	13.4	0.0	21.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.4	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.3	0.0	18.7	0.0	13.8	0.0	24.3
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	2.9	0.0	1.0	0.0	7.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	0.00	1.68	0.00	1.80	0.00	1.58
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	4.8	0.0	1.9	0.0	12.7
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	1.12	0.00	0.49	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	36	75	287	329	52
Future Vol, veh/h	13	36	75	287	329	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	39	82	312	358	57

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	707	387	415	0	-	0
Stage 1	387	-	-	-	-	-
Stage 2	320	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	385	660	1142	-	-	-
Stage 1	685	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	357	660	1142	-	-	-
Mov Cap-2 Maneuver	468	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	710	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1142	-	595	-	-
HCM Lane V/C Ratio	0.071	-	0.09	-	-
HCM Control Delay (s)	8.4	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	15	114	188	20	324
Future Vol, veh/h	56	15	114	188	20	324
Conflicting Peds, #/hr	12	5	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	61	16	124	204	22	352

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	552	149	0	0	348	0
Stage 1	144	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	495	898	-	-	1211	-
Stage 1	883	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	474	880	-	-	1192	-
Mov Cap-2 Maneuver	545	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	653	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	593	1192	-
HCM Lane V/C Ratio	-	-	0.13	0.018	-
HCM Control Delay (s)	-	-	12	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	51	44	64	109	160	28	897	49	206	640	28
Future Volume (veh/h)	139	51	44	64	109	160	28	897	49	206	640	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.97		0.96	0.99		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	151	55	48	70	118	174	30	975	53	224	696	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	289	252	425	213	314	405	1992	813	295	1937	83
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	1073	904	789	1252	666	982	723	3554	1451	546	3455	149
Grp Volume(v), veh/h	151	0	103	70	0	292	30	975	53	224	358	368
Grp Sat Flow(s),veh/h/ln	1073	0	1692	1252	0	1648	723	1777	1451	546	1777	1827
Q Serve(g_s), s	12.2	0.0	4.0	3.9	0.0	13.2	2.1	15.0	1.5	35.5	10.0	10.0
Cycle Q Clear(g_c), s	25.4	0.0	4.0	7.8	0.0	13.2	12.1	15.0	1.5	50.5	10.0	10.0
Prop In Lane	1.00		0.47	1.00		0.60	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	265	0	540	425	0	526	405	1992	813	295	996	1024
V/C Ratio(X)	0.57	0.00	0.19	0.16	0.00	0.55	0.07	0.49	0.07	0.76	0.36	0.36
Avail Cap(c_a), veh/h	378	0	718	556	0	700	405	1992	813	295	996	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	0.0	22.2	25.0	0.0	25.3	14.2	12.0	9.0	27.9	10.9	10.9
Incr Delay (d2), s/veh	1.9	0.0	0.2	0.2	0.0	0.9	0.3	0.8	0.1	16.6	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.0	0.0	2.9	2.1	0.0	9.0	0.7	9.2	0.8	9.9	6.9	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	0.0	22.4	25.2	0.0	26.3	14.5	12.8	9.2	44.5	11.9	11.9
LnGrp LOS	D	A	C	C	A	C	B	B	A	D	B	B
Approach Vol, veh/h		254			362			1058			950	
Approach Delay, s/veh		31.5			26.1			12.6			19.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.5	34.5	55.5	34.5
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	52.5	27.4	17.0	15.2
Green Ext Time (p_c), s	0.0	0.9	7.8	2.2

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	51	44	64	109	160	28	897	49	206	640	28
Future Volume (veh/h)	139	51	44	64	109	160	28	897	49	206	640	28
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.96	0.97		0.96	0.99		0.92	1.00		0.92
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	151	55	48	70	118	174	30	975	53	224	696	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	265	289	252	425	213	314	405	1992	813	295	1937	83
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.56	0.56	0.56	0.56	0.56	0.56
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.7	0.0	22.4	25.2	0.0	26.3	14.5	12.8	9.2	44.5	11.9	11.9
Ln Grp LOS	D	A	C	C	A	C	B	B	A	D	B	B
Approach Vol, veh/h		254			362			1058			950	
Approach Delay, s/veh		31.5			26.1			12.6			19.6	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		55.5		34.5		55.5		34.5
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.7		5.0		5.1		5.4
Max Q Clear (g_c+l1), s		52.5		27.4		17.0		15.2
Green Ext Time (g_e), s		0.0		0.9		7.8		2.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.07		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		546		1073		723		1252
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3455		904		3554		666
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		149		789		1451		982
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	224	0	151	0	30	0	70
Grp Sat Flow (s), veh/h/ln	0	546	0	1073	0	723	0	1252
Q Serve Time (g_s), s	0.0	35.5	0.0	12.2	0.0	2.1	0.0	3.9
Cycle Q Clear Time (g_c), s	0.0	50.5	0.0	25.4	0.0	12.1	0.0	7.8
Perm LT Sat Flow (s_l), veh/h/ln	0	546	0	1073	0	723	0	1252
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	50.5	0.0	28.7	0.0	50.5	0.0	28.7
Perm LT Serve Time (g_u), s	0.0	35.5	0.0	15.6	0.0	40.5	0.0	24.8
Perm LT Q Serve Time (g_ps), s	0.0	35.5	0.0	12.2	0.0	2.1	0.0	3.9
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	295	0	265	0	405	0	425
V/C Ratio (X)	0.00	0.76	0.00	0.57	0.00	0.07	0.00	0.16
Avail Cap (c_a), veh/h	0	295	0	378	0	405	0	556
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.9	0.0	35.8	0.0	14.2	0.0	25.0
Incr Delay (d2), s/veh	0.0	16.6	0.0	1.9	0.0	0.3	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	44.5	0.0	37.7	0.0	14.5	0.0	25.2
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	3.2	0.0	0.3	0.0	1.1
2nd-Term Q (Q2), veh/ln	0.0	1.4	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.67	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.9	0.0	6.0	0.0	0.7	0.0	2.1
%ile Storage Ratio (RQ%)	0.00	1.68	0.00	3.78	0.00	0.17	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	358	0	0	0	975	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	10.0	0.0	0.0	0.0	15.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.0	0.0	0.0	0.0	15.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	996	0	0	0	1992	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.00	0.00	0.49	0.00	0.00
Avail Cap (c_a), veh/h	0	996	0	0	0	1992	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.91	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.9	0.0	0.0	0.0	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.9	0.0	0.0	0.0	12.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	0.0	0.0	5.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.67	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.9	0.0	0.0	0.0	9.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.00	0.00	0.74	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	368	0	103	0	53	0	292
Grp Sat Flow (s), veh/h/ln	0	1827	0	1692	0	1451	0	1648
Q Serve Time (g_s), s	0.0	10.0	0.0	4.0	0.0	1.5	0.0	13.2
Cycle Q Clear Time (g_c), s	0.0	10.0	0.0	4.0	0.0	1.5	0.0	13.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	0.47	0.00	1.00	0.00	0.60
Lane Grp Cap (c), veh/h	0	1024	0	540	0	813	0	526
V/C Ratio (X)	0.00	0.36	0.00	0.19	0.00	0.07	0.00	0.55
Avail Cap (c_a), veh/h	0	1024	0	718	0	813	0	700
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.9	0.0	22.2	0.0	9.0	0.0	25.3
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.2	0.0	0.1	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.9	0.0	22.4	0.0	9.2	0.0	26.3
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	1.6	0.0	0.4	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	7.0	0.0	2.9	0.0	0.8	0.0	9.0
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	0.27	0.00	0.21	0.00	0.70
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	232	6	0	268	4	1	0	0	10	0	50
Future Vol, veh/h	56	232	6	0	268	4	1	0	0	10	0	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	252	7	0	291	4	1	0	0	11	0	54
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10	11.1	8.7	8.4
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	100%	0%	0%	0%	17%
Vol Thru, %	0%	0%	97%	100%	99%	0%
Vol Right, %	0%	0%	3%	0%	1%	83%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	56	238	0	272	60
LT Vol	1	56	0	0	0	10
Through Vol	0	0	232	0	268	0
RT Vol	0	0	6	0	4	50
Lane Flow Rate	1	61	259	0	296	65
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.002	0.092	0.353	0	0.407	0.089
Departure Headway (Hd)	5.688	5.437	4.917	4.969	4.959	4.907
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	628	660	732	0	727	729
Service Time	3.736	3.162	2.642	2.695	2.684	2.943
HCM Lane V/C Ratio	0.002	0.092	0.354	0	0.407	0.089
HCM Control Delay	8.7	8.7	10.3	7.7	11.1	8.4
HCM Lane LOS	A	A	B	N	B	A
HCM 95th-tile Q	0	0.3	1.6	0	2	0.3

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	90	29	1	211	54	84	3	0	7	3	29
Future Vol, veh/h	50	90	29	1	211	54	84	3	0	7	3	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	98	32	1	229	59	91	3	0	8	3	32
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	8.8	10.8	9.2	8.2
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	97%	100%	0%	100%	0%	18%
Vol Thru, %	3%	0%	76%	0%	80%	8%
Vol Right, %	0%	0%	24%	0%	20%	74%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	87	50	119	1	265	39
LT Vol	84	50	0	1	0	7
Through Vol	3	0	90	0	211	3
RT Vol	0	0	29	0	54	29
Lane Flow Rate	95	54	129	1	288	42
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.14	0.085	0.179	0.002	0.394	0.057
Departure Headway (Hd)	5.319	5.646	4.971	5.566	4.92	4.805
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	672	634	719	642	732	741
Service Time	3.369	3.39	2.715	3.305	2.659	2.862
HCM Lane V/C Ratio	0.141	0.085	0.179	0.002	0.393	0.057
HCM Control Delay	9.2	8.9	8.8	8.3	10.8	8.2
HCM Lane LOS	A	A	A	A	B	A
HCM 95th-tile Q	0.5	0.3	0.6	0	1.9	0.2

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	19	75	57	66	1	182	8	17	3	20	37
Future Vol, veh/h	2	19	75	57	66	1	182	8	17	3	20	37
Conflicting Peds, #/hr	23	0	35	35	0	23	12	0	26	26	0	12
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	21	82	62	72	1	198	9	18	3	22	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	96	0	0	138	0	0	300	280	82	326	362	108
Stage 1	-	-	-	-	-	-	60	60	-	220	220	-
Stage 2	-	-	-	-	-	-	240	220	-	106	142	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1498	-	-	1446	-	-	652	628	978	627	565	946
Stage 1	-	-	-	-	-	-	951	845	-	782	721	-
Stage 2	-	-	-	-	-	-	763	721	-	900	779	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1471	-	-	1406	-	-	561	573	931	564	515	920
Mov Cap-2 Maneuver	-	-	-	-	-	-	561	573	-	564	515	-
Stage 1	-	-	-	-	-	-	923	820	-	767	677	-
Stage 2	-	-	-	-	-	-	669	677	-	854	756	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	3.5	14.4	10.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	561	931	1471	-	-	1406	-	-	721
HCM Lane V/C Ratio	0.353	0.02	0.001	-	-	0.044	-	-	0.086
HCM Control Delay (s)	14.9	8.9	7.5	-	-	7.7	-	-	10.5
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.6	0.1	0	-	-	0.1	-	-	0.3

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	9	37	0	19	11	191	61	30	85	0
Future Vol, veh/h	0	0	9	37	0	19	11	191	61	30	85	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	10	40	0	21	12	208	66	33	92	0
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	7.5	8.3	9.8	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	66%	100%	0%
Vol Thru, %	0%	76%	0%	0%	0%	100%
Vol Right, %	0%	24%	100%	34%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	252	9	56	30	85
LT Vol	11	0	0	37	30	0
Through Vol	0	191	0	0	0	85
RT Vol	0	61	9	19	0	0
Lane Flow Rate	12	274	10	61	33	92
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.018	0.354	0.012	0.082	0.049	0.126
Departure Headway (Hd)	5.329	4.657	4.381	4.838	5.428	4.926
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	676	778	817	742	662	730
Service Time	3.029	2.357	2.407	2.859	3.146	2.644
HCM Lane V/C Ratio	0.018	0.352	0.012	0.082	0.05	0.126
HCM Control Delay	8.1	9.9	7.5	8.3	8.4	8.4
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.1	1.6	0	0.3	0.2	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	488	114	52	380	250	153	528	65	49	338	55
Future Volume (veh/h)	121	488	114	52	380	250	153	528	65	49	338	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	530	124	57	413	272	166	574	71	53	367	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	1447	631	74	1275	555	196	633	529	68	499	416
Arrive On Green	0.09	0.41	0.41	0.04	0.36	0.36	0.11	0.34	0.34	0.04	0.27	0.27
Sat Flow, veh/h	1781	3554	1550	1781	3554	1545	1781	1870	1565	1781	1870	1560
Grp Volume(v), veh/h	132	530	124	57	413	272	166	574	71	53	367	60
Grp Sat Flow(s),veh/h/ln	1781	1777	1550	1781	1777	1545	1781	1870	1565	1781	1870	1560
Q Serve(g_s), s	8.7	12.5	6.2	3.8	10.1	16.4	11.0	35.2	3.8	3.5	21.5	3.5
Cycle Q Clear(g_c), s	8.7	12.5	6.2	3.8	10.1	16.4	11.0	35.2	3.8	3.5	21.5	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	1447	631	74	1275	555	196	633	529	68	499	416
V/C Ratio(X)	0.83	0.37	0.20	0.77	0.32	0.49	0.85	0.91	0.13	0.77	0.74	0.14
Avail Cap(c_a), veh/h	238	1447	631	143	1275	555	318	810	678	134	617	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82
Uniform Delay (d), s/veh	53.7	24.8	22.9	57.0	27.9	29.9	52.4	37.9	27.5	57.2	40.1	33.5
Incr Delay (d2), s/veh	14.0	0.7	0.7	15.7	0.7	3.1	11.1	11.8	0.1	14.1	2.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.9	9.0	4.3	3.6	7.7	10.7	9.3	24.7	2.6	3.3	14.9	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.7	25.5	23.6	72.7	28.6	33.0	63.5	49.7	27.6	71.2	43.1	33.7
LnGrp LOS	E	C	C	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		786			742			811			480	
Approach Delay, s/veh		32.3			33.6			50.6			45.0	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	48.1	18.2	37.0	11.0	53.8	9.6	45.6
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	16.0	* 22	21.4	* 40	9.6	* 28	9.0	* 52
Max Q Clear Time (g_c+I1), s	10.7	18.4	13.0	23.5	5.8	14.5	5.5	37.2
Green Ext Time (p_c), s	0.1	1.2	0.3	2.1	0.0	3.2	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	40.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	488	114	52	380	250	153	528	65	49	338	55
Future Volume (veh/h)	121	488	114	52	380	250	153	528	65	49	338	55
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	530	124	57	413	272	166	574	71	53	367	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	159	1447	631	74	1275	555	196	633	529	68	499	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.41	0.41	0.04	0.36	0.36	0.11	0.34	0.34	0.04	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	67.7	25.5	23.6	72.7	28.6	33.0	63.5	49.7	27.6	71.2	43.1	33.7
Ln Grp LOS	E	C	C	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		786			742			811			480	
Approach Delay, s/veh		32.3			33.6			50.6			45.0	
Approach LOS		C			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.7	48.1	18.2	37.0	11.0	53.8	9.6	45.6
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	16.0	* 22	21.4	* 40	9.6	* 28	9.0	* 52
Max Allow Headway (MAH), s	3.7	4.6	3.8	5.0	3.7	4.8	3.8	5.0
Max Q Clear (g_c+I1), s	10.7	18.4	13.0	23.5	5.8	14.5	5.5	37.2
Green Ext Time (g_e), s	0.1	1.2	0.3	2.1	0.0	3.2	0.0	3.4
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	0.85	1.00	0.83	1.00
Prob of Max Out (p_x)	0.23	0.00	0.02	0.03	0.92	0.00	1.00	0.13

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1545		1560		1550		1565

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	132	0	166	0	57	0	53	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	8.7	0.0	11.0	0.0	3.8	0.0	3.5	0.0
Cycle Q Clear Time (g_c), s	8.7	0.0	11.0	0.0	3.8	0.0	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	159	0	196	0	74	0	68	0
V/C Ratio (X)	0.83	0.00	0.85	0.00	0.77	0.00	0.77	0.00
Avail Cap (c_a), veh/h	238	0	318	0	143	0	134	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.82	0.00
Uniform Delay (d1), s/veh	53.7	0.0	52.4	0.0	57.0	0.0	57.2	0.0
Incr Delay (d2), s/veh	14.0	0.0	11.1	0.0	15.7	0.0	14.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	67.7	0.0	63.5	0.0	72.7	0.0	71.2	0.0
1st-Term Q (Q1), veh/ln	3.8	0.0	4.9	0.0	1.7	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	0.6	0.0	0.6	0.0	0.3	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.78	0.00	1.70	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.9	0.0	9.3	0.0	3.6	0.0	3.3	0.0
%ile Storage Ratio (RQ%)	0.94	0.00	1.89	0.00	0.46	0.00	0.94	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	413	0	367	0	530	0	574
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	10.1	0.0	21.5	0.0	12.5	0.0	35.2
Cycle Q Clear Time (g_c), s	0.0	10.1	0.0	21.5	0.0	12.5	0.0	35.2
Lane Grp Cap (c), veh/h	0	1275	0	499	0	1447	0	633
V/C Ratio (X)	0.00	0.32	0.00	0.74	0.00	0.37	0.00	0.91
Avail Cap (c_a), veh/h	0	1275	0	617	0	1447	0	810
Upstream Filter (I)	0.00	1.00	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.9	0.0	40.1	0.0	24.8	0.0	37.9
Incr Delay (d2), s/veh	0.0	0.7	0.0	2.9	0.0	0.7	0.0	11.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.6	0.0	43.1	0.0	25.5	0.0	49.7
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	9.7	0.0	5.1	0.0	15.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.1	0.0	2.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.47	0.00	1.72	0.00	1.39
%ile Back of Q (95%), veh/ln	0.0	7.7	0.0	14.9	0.0	9.0	0.0	24.7
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.31	0.00	0.28	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	272	0	60	0	124	0	71
Grp Sat Flow (s), veh/h/ln	0	1545	0	1560	0	1550	0	1565
Q Serve Time (g_s), s	0.0	16.4	0.0	3.5	0.0	6.2	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	16.4	0.0	3.5	0.0	6.2	0.0	3.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	555	0	416	0	631	0	529
V/C Ratio (X)	0.00	0.49	0.00	0.14	0.00	0.20	0.00	0.13
Avail Cap (c_a), veh/h	0	555	0	515	0	631	0	678
Upstream Filter (I)	0.00	1.00	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.9	0.0	33.5	0.0	22.9	0.0	27.5
Incr Delay (d2), s/veh	0.0	3.1	0.0	0.1	0.0	0.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.0	0.0	33.7	0.0	23.6	0.0	27.6
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	1.3	0.0	2.2	0.0	1.4
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.7	0.0	2.4	0.0	4.3	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	2.71	0.00	0.56	0.00	1.08	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.1
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	100	318	65	0	310	31	0	299	93
Future Volume (veh/h)	0	0	0	100	318	65	0	310	31	0	299	93
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				109	346	71	0	337	34	0	325	101
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				123	390	421	0	2082	209	0	872	271
Arrive On Green				0.28	0.28	0.28	0.00	1.00	1.00	0.00	0.64	0.64
Sat Flow, veh/h				443	1405	1518	0	3351	326	0	1365	424
Grp Volume(v), veh/h				455	0	71	0	183	188	0	0	426
Grp Sat Flow(s),veh/h/ln				1848	0	1518	0	1777	1807	0	0	1789
Q Serve(g_s), s				28.3	0.0	4.3	0.0	0.0	0.0	0.0	0.0	13.5
Cycle Q Clear(g_c), s				28.3	0.0	4.3	0.0	0.0	0.0	0.0	0.0	13.5
Prop In Lane				0.24		1.00	0.00		0.18	0.00		0.24
Lane Grp Cap(c), veh/h				513	0	421	0	1135	1155	0	0	1143
V/C Ratio(X)				0.89	0.00	0.17	0.00	0.16	0.16	0.00	0.00	0.37
Avail Cap(c_a), veh/h				863	0	709	0	1135	1155	0	0	1143
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				0.25	0.00	0.25	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				41.5	0.0	32.8	0.0	0.0	0.0	0.0	0.0	10.3
Incr Delay (d2), s/veh				1.7	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				15.7	0.0	2.6	0.0	0.2	0.2	0.0	0.0	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				43.3	0.0	32.9	0.0	0.3	0.3	0.0	0.0	11.2
LnGrp LOS				D	A	C	A	A	A	A	A	B
Approach Vol, veh/h					526			371			426	
Approach Delay, s/veh					41.9			0.3			11.2	
Approach LOS					D			A			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	81.7	38.3	81.7
Change Period (Y+Rc), s	* 5	* 5	* 5
Max Green Setting (Gmax), s	* 54	* 56	* 54
Max Q Clear Time (g_c+I1), s	15.5	30.3	2.0
Green Ext Time (p_c), s	4.3	3.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	100	318	65	0	310	31	0	299	93
Future Volume (veh/h)	0	0	0	100	318	65	0	310	31	0	299	93
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				109	346	71	0	337	34	0	325	101
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Opposing Right Turn Influence				Yes			No			No		
Cap, veh/h				123	390	421	0	2082	209	0	872	271
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green				0.28	0.28	0.28	0.00	1.00	1.00	0.00	0.64	0.64
Unsig. Movement Delay												
Ln Grp Delay, s/veh				43.3	0.0	32.9	0.0	0.3	0.3	0.0	0.0	11.2
Ln Grp LOS				D	A	C	A	A	A	A	A	B
Approach Vol, veh/h					526			371			426	
Approach Delay, s/veh					41.9			0.3			11.2	
Approach LOS					D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		8.0		11.0		8.0		
Phs Duration (G+Y+Rc), s		81.7		38.3		81.7		
Change Period (Y+Rc), s		* 5		* 5		* 5		
Max Green (Gmax), s		* 54		* 56		* 54		
Max Allow Headway (MAH), s		6.2		4.9		6.1		
Max Q Clear (g_c+l1), s		15.5		30.3		2.0		
Green Ext Time (g_e), s		4.3		3.0		3.4		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		0.00		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		0		443		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1365		1405		3351		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		424		1518		326		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment				L+T				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	455	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1848	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	28.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	28.3	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	76.7	0.0	0.0	0.0	76.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	513	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	863	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	41.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	43.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.23	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	15.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	183	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1135	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1135	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	426	0	71	0	188	0	0
Grp Sat Flow (s), veh/h/ln	0	1789	0	1518	0	1807	0	0
Q Serve Time (g_s), s	0.0	13.5	0.0	4.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.5	0.0	4.3	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.24	0.00	1.00	0.00	0.18	0.00	0.00
Lane Grp Cap (c), veh/h	0	1143	0	421	0	1155	0	0
V/C Ratio (X)	0.00	0.37	0.00	0.17	0.00	0.16	0.00	0.00
Avail Cap (c_a), veh/h	0	1143	0	709	0	1155	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.25	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.3	0.0	32.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.2	0.0	32.9	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.0	0.0	1.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.66	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	9.1	0.0	2.6	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.01	0.00	0.14	0.00	0.06	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	15	465	1030	652	89
Future Volume (veh/h)	16	15	465	1030	652	89
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.84	1.00			0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	16	505	1120	709	97
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	101	95	544	2705	1222	167
Arrive On Green	0.13	0.13	0.31	0.76	0.13	0.13
Sat Flow, veh/h	769	724	1781	3647	3162	419
Grp Volume(v), veh/h	34	0	505	1120	410	396
Grp Sat Flow(s),veh/h/ln	1539	0	1781	1777	1777	1711
Q Serve(g_s), s	1.8	0.0	24.7	9.9	19.5	19.6
Cycle Q Clear(g_c), s	1.8	0.0	24.7	9.9	19.5	19.6
Prop In Lane	0.50	0.47	1.00			0.25
Lane Grp Cap(c), veh/h	202	0	544	2705	707	681
V/C Ratio(X)	0.17	0.00	0.93	0.41	0.58	0.58
Avail Cap(c_a), veh/h	308	0	610	2705	707	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.51	0.51	0.95	0.95
Uniform Delay (d), s/veh	34.7	0.0	30.3	3.7	32.0	32.0
Incr Delay (d2), s/veh	0.4	0.0	11.8	0.2	3.3	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	0.0	16.0	4.5	14.9	14.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.1	0.0	42.1	4.0	35.3	35.5
LnGrp LOS	D	A	D	A	D	D
Approach Vol, veh/h	34			1625	806	
Approach Delay, s/veh	35.1			15.8	35.4	
Approach LOS	D			B	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		73.6		16.4	32.7	40.9
Change Period (Y+Rc), s		5.1		4.6	* 5.2	5.1
Max Green Setting (Gmax), s		62.3		18.0	* 31	26.3
Max Q Clear Time (g_c+I1), s		11.9		3.8	26.7	21.6
Green Ext Time (p_c), s		11.2		0.0	0.7	2.1

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	15	465	1030	652	89
Future Volume (veh/h)	16	15	465	1030	652	89
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.84	1.00			0.85
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	16	505	1120	709	97
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	101	95	544	2705	1222	167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Prop Arrive On Green	0.13	0.13	0.31	0.76	0.13	0.13
Unsig. Movement Delay						
Ln Grp Delay, s/veh	35.1	0.0	42.1	4.0	35.3	35.5
Ln Grp LOS	D	A	D	A	D	D
Approach Vol, veh/h	34			1625	806	
Approach Delay, s/veh	35.1			15.8	35.4	
Approach LOS	D			B	D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		73.6		16.4	32.7	40.9		
Change Period (Y+Rc), s		5.1		4.6	* 5.2	5.1		
Max Green (Gmax), s		62.3		18.0	* 31	26.3		
Max Allow Headway (MAH), s		5.2		4.1	3.8	5.3		
Max Q Clear (g_c+l1), s		11.9		3.8	26.7	21.6		
Green Ext Time (g_e), s		11.2		0.0	0.7	2.1		
Prob of Phs Call (p_c)		1.00		0.82	1.00	1.00		
Prob of Max Out (p_x)		0.01		0.00	0.90	1.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				769	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		45		3162		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		724		419		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	34	505	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1539	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	1.8	24.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.8	24.7	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	35.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.50	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	202	544	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.17	0.93	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	308	610	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.51	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	34.7	30.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	11.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	35.1	42.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.7	10.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.34	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	1.2	16.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	8.15	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1120	0	0	0	410	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	9.9	0.0	0.0	0.0	19.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.9	0.0	0.0	0.0	19.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2705	0	0	0	707	0	0
V/C Ratio (X)	0.00	0.41	0.00	0.00	0.00	0.58	0.00	0.00
Avail Cap (c_a), veh/h	0	2705	0	0	0	707	0	0
Upstream Filter (I)	0.00	0.51	0.00	0.00	0.00	0.95	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.7	0.0	0.0	0.0	32.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	3.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.0	0.0	0.0	0.0	35.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	0.0	0.0	9.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.00	0.00	1.51	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.5	0.0	0.0	0.0	14.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.50	0.00	0.00	0.00	1.20	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	396	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1711	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	19.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	19.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.47	0.00	0.25	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	681	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	681	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	32.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	35.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.52	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	14.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	1.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	1	0	269	1	0	368	0
Future Volume (veh/h)	0	13	1	0	13	1	0	269	1	0	368	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	1	0	292	1	0	400	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Cap, veh/h	0	40	3	0	40	3	0	3186	11	0	1640	0
Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	0	1725	123	0	1725	123	0	3726	12	0	1870	0
Grp Volume(v), veh/h	0	0	15	0	0	15	0	143	150	0	400	0
Grp Sat Flow(s),veh/h/ln	0	0	1848	0	0	1848	0	1777	1868	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.00		0.07	0.00		0.07	0.00		0.01	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	42	0	0	42	0	1558	1638	0	1640	0
V/C Ratio(X)	0.00	0.00	0.35	0.00	0.00	0.35	0.00	0.09	0.09	0.00	0.24	0.00
Avail Cap(c_a), veh/h	0	0	108	0	0	108	0	1558	1638	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.98	0.98	0.00	0.90	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.7	0.0	0.0	57.7	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	21.6	0.0	0.0	21.6	0.0	0.1	0.1	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.3	0.0	0.0	1.3	0.0	0.1	0.1	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	79.4	0.0	0.0	79.4	0.0	0.1	0.1	0.0	0.3	0.0
LnGrp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		15			15			293			400	
Approach Delay, s/veh		79.4			79.4			0.1			0.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.2	9.8	110.2	9.8
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	2.0	3.0	2.0	3.0
Green Ext Time (p_c), s	2.6	0.0	4.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	1	0	269	1	0	368	0
Future Volume (veh/h)	0	13	1	0	13	1	0	269	1	0	368	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	1	0	292	1	0	400	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	40	3	0	40	3	0	3186	11	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	1.00	1.00	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	79.4	0.0	0.0	79.4	0.0	0.1	0.1	0.0	0.3	0.0
Ln Grp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		15			15			293			400	
Approach Delay, s/veh		79.4			79.4			0.1			0.3	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.2		9.8		110.2		9.8
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+I1), s		2.0		3.0		2.0		3.0
Green Ext Time (g_e), s		2.6		0.0		4.0		0.0
Prob of Phs Call (p_c)		1.00		0.39		1.00		0.39
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3726		1725		1870		1725
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		12		123		0		123
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.2	0.0	2.8	0.0	105.2	0.0	2.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	143	0	0	0	400	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1558	0	0	0	1640	0	0
V/C Ratio (X)	0.00	0.09	0.00	0.00	0.00	0.24	0.00	0.00
Avail Cap (c_a), veh/h	0	1558	0	0	0	1640	0	0
Upstream Filter (I)	0.00	0.98	0.00	0.00	0.00	0.90	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	150	0	15	0	0	0	15
Grp Sat Flow (s), veh/h/ln	0	1868	0	1848	0	0	0	1848
Q Serve Time (g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.00	0.07	0.00	0.00	0.00	0.07
Lane Grp Cap (c), veh/h	0	1638	0	42	0	0	0	42
V/C Ratio (X)	0.00	0.09	0.00	0.35	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	1638	0	108	0	0	0	108
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	57.7	0.0	0.0	0.0	57.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	21.6	0.0	0.0	0.0	21.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	79.4	0.0	0.0	0.0	79.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	1.3	0.0	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	488	98	0	0	31	0	209	191	37	358	0
Future Volume (veh/h)	70	488	98	0	0	31	0	209	191	37	358	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.95	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	76	530	107	0	0	34	0	227	208	40	389	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	2	2	0
Cap, veh/h	687	706	283	0	0	43	0	976	842	623	1220	0
Arrive On Green	0.20	0.20	0.20	0.00	0.00	0.03	0.00	0.55	0.55	0.12	1.00	0.00
Sat Flow, veh/h	3456	3554	1422	0	0	1505	0	1870	1533	1781	1870	0
Grp Volume(v), veh/h	76	530	107	0	0	34	0	227	208	40	389	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1422	0	0	1505	0	1777	1533	1781	1870	0
Q Serve(g_s), s	2.2	16.9	7.8	0.0	0.0	2.7	0.0	7.9	8.5	1.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	16.9	7.8	0.0	0.0	2.7	0.0	7.9	8.5	1.0	0.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	687	706	283	0	0	43	0	976	842	623	1220	0
V/C Ratio(X)	0.11	0.75	0.38	0.00	0.00	0.80	0.00	0.23	0.25	0.06	0.32	0.00
Avail Cap(c_a), veh/h	1008	1036	415	0	0	232	0	976	842	692	1220	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	39.4	45.3	41.6	0.0	0.0	58.0	0.0	14.0	14.1	8.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	2.4	1.2	0.0	0.0	27.9	0.0	0.6	0.7	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	12.0	10.7	0.0	0.0	2.4	0.0	5.9	5.5	0.7	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	47.7	42.8	0.0	0.0	85.8	0.0	14.5	14.8	8.5	0.7	0.0
LnGrp LOS	D	D	D	A	A	F	A	B	B	A	A	A
Approach Vol, veh/h		713			34			435			429	
Approach Delay, s/veh		46.1			85.8			14.7			1.4	
Approach LOS		D			F			B			A	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	83.3		28.9	12.4	70.9		7.9
Change Period (Y+Rc), s	* 5		* 5	* 5	* 5		4.5
Max Green Setting (Gmax), s	* 52		* 35	* 12	* 35		18.5
Max Q Clear Time (g_c+I1), s	2.0		18.9	3.0	10.5		4.7
Green Ext Time (p_c), s	5.3		5.0	0.0	5.0		0.1

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	488	98	0	0	31	0	209	191	37	358	0
Future Volume (veh/h)	70	488	98	0	0	31	0	209	191	37	358	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.90	1.00		0.95	1.00		0.97	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	76	530	107	0	0	34	0	227	208	40	389	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			No			No			Yes		
Cap, veh/h	687	706	283	0	0	43	0	976	842	623	1220	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.20	0.20	0.20	0.00	0.00	0.03	0.00	0.55	0.55	0.12	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	39.5	47.7	42.8	0.0	0.0	85.8	0.0	14.5	14.8	8.5	0.7	0.0
Ln Grp LOS	D	D	D	A	A	F	A	B	B	A	A	A
Approach Vol, veh/h		713			34			435			429	
Approach Delay, s/veh		46.1			85.8			14.7			1.4	
Approach LOS		D			F			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	8.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		83.3	7.9	28.9	12.4	70.9		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 52	18.5	* 35	* 12	* 35		
Max Allow Headway (MAH), s		7.1	5.5	5.8	3.8	7.3		
Max Q Clear (g_c+I1), s		2.0	4.7	18.9	3.0	10.5		
Green Ext Time (g_e), s		5.3	0.1	5.0	0.0	5.0		
Prob of Phs Call (p_c)		1.00	0.71	1.00	0.74	1.00		
Prob of Max Out (p_x)		0.00	0.00	0.20	0.00	0.07		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			0	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		1870		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1505	1422		1533		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment				LL (Pr/Pm)				

Lanes in Grp	0	0	0	2	1	0	0	0
Grp Vol (v), veh/h	0	0	0	76	40	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	2.2	1.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.2	1.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	949	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	67.9	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	57.4	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	3.4	0.0	0.0	65.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	687	623	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.11	0.06	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1008	692	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.98	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.4	8.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	39.5	8.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.9	0.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	1.7	0.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.84	0.28	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	389	0	530	0	227	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	16.9	0.0	7.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.9	0.0	7.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1220	0	706	0	976	0	0
V/C Ratio (X)	0.00	0.32	0.00	0.75	0.00	0.23	0.00	0.00
Avail Cap (c_a), veh/h	0	1220	0	1036	0	976	0	0
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.3	0.0	14.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	2.4	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.7	0.0	47.7	0.0	14.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.3	0.0	3.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.60	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	12.0	0.0	5.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.51	0.00	0.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	34	107	0	208	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1505	1422	0	1533	0	0
Q Serve Time (g_s), s	0.0	0.0	2.7	7.8	0.0	8.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	2.7	7.8	0.0	8.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	43	283	0	842	0	0
V/C Ratio (X)	0.00	0.00	0.80	0.38	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	0	232	415	0	842	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	58.0	41.6	0.0	14.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	27.9	1.2	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	85.8	42.8	0.0	14.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.0	6.4	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.64	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	2.4	10.7	0.0	5.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.15	3.62	0.00	0.41	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱		↑		↱
Traffic Vol, veh/h	787	41	0	37	0	170
Future Vol, veh/h	787	41	0	37	0	170
Conflicting Peds, #/hr	0	70	70	0	18	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	855	45	0	40	0	185

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	505
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	-	-	0	-	0	513
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	482
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	482	-	-	-
HCM Lane V/C Ratio	0.383	-	-	-
HCM Control Delay (s)	17	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.8	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	546	95	279	6	365	19	837	197	143	506	12
Future Volume (veh/h)	229	546	95	279	6	365	19	837	197	143	506	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.84	0.91		0.82	0.87		0.81	0.99		0.78
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	249	593	103	303	7	397	21	910	214	155	550	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	487	1014	378	574	471	457	370	1502	674	317	1962	684
Arrive On Green	0.04	0.09	0.09	0.08	0.25	0.25	0.42	0.42	0.42	0.08	0.55	0.55
Sat Flow, veh/h	1781	3554	1327	3456	1870	1292	737	3554	1283	1781	3554	1238
Grp Volume(v), veh/h	249	593	103	303	7	397	21	910	214	155	550	13
Grp Sat Flow(s),veh/h/ln	1781	1777	1327	1728	1870	1292	737	1777	1283	1781	1777	1238
Q Serve(g_s), s	12.0	19.2	8.7	7.7	0.3	30.2	2.0	23.8	11.9	5.5	9.8	0.6
Cycle Q Clear(g_c), s	12.0	19.2	8.7	7.7	0.3	30.2	2.3	23.8	11.9	5.5	9.8	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	487	1014	378	574	471	457	370	1502	674	317	1962	684
V/C Ratio(X)	0.51	0.58	0.27	0.53	0.01	0.87	0.06	0.61	0.32	0.49	0.28	0.02
Avail Cap(c_a), veh/h	490	1014	378	574	471	457	370	1502	674	398	1962	684
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86	0.70	0.70	0.70
Uniform Delay (d), s/veh	29.9	47.5	42.8	30.3	33.7	38.3	20.7	26.9	17.6	19.2	14.2	12.2
Incr Delay (d2), s/veh	0.9	0.9	0.4	0.9	0.0	16.4	0.3	1.6	1.1	0.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.8	14.3	5.5	5.9	0.3	19.0	0.7	15.2	6.6	4.1	6.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	48.4	43.2	31.2	33.7	54.6	21.0	28.4	18.6	20.0	14.5	12.2
LnGrp LOS	C	D	D	C	C	D	C	C	B	B	B	B
Approach Vol, veh/h		945			707			1145			718	
Approach Delay, s/veh		43.2			44.4			26.5			15.6	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	72.3	19.6	36.2	15.5	56.8	15.6	40.2
Change Period (Y+Rc), s	* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s	* 59	14.2	* 30	15.4	* 38	10.0	* 34
Max Q Clear Time (g_c+I1), s	11.8	14.0	32.2	7.5	25.8	9.7	21.2
Green Ext Time (p_c), s	4.3	0.0	0.0	0.2	5.8	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	32.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	546	95	279	6	365	19	837	197	143	506	12
Future Volume (veh/h)	229	546	95	279	6	365	19	837	197	143	506	12
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.90		0.84	0.91		0.82	0.87		0.81	0.99		0.78
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	249	593	103	303	7	397	21	910	214	155	550	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	487	1014	378	574	471	457	370	1502	674	317	1962	684
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.09	0.09	0.08	0.25	0.25	0.42	0.42	0.42	0.08	0.55	0.55
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.7	48.4	43.2	31.2	33.7	54.6	21.0	28.4	18.6	20.0	14.5	12.2
Ln Grp LOS	C	D	D	C	C	D	C	C	B	B	B	B
Approach Vol, veh/h		945			707			1145			718	
Approach Delay, s/veh		43.2			44.4			26.5			15.6	
Approach LOS		D			D			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	1.1	3.0	1.2	5.3	1.1	3.0
Phs Duration (G+Y+Rc), s		72.3	19.6	36.2	15.5	56.8	15.6	40.2
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s		* 59	14.2	* 30	15.4	* 38	10.0	* 34
Max Allow Headway (MAH), s		5.2	3.8	4.6	3.8	5.1	3.8	5.1
Max Q Clear (g_c+l1), s		11.8	14.0	32.2	7.5	25.8	9.7	21.2
Green Ext Time (g_e), s		4.3	0.0	0.0	0.2	5.8	0.0	3.6
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.99	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	0.03	0.00	1.00	0.21

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			1781		1781	737	3456	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1238		1292		1283		1327

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		LL (Pr/Pm)		

Lanes in Grp	0	0	1	0	1	1	2	0
Grp Vol (v), veh/h	0	0	249	0	155	21	303	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	1781	737	1728	0
Q Serve Time (g_s), s	0.0	0.0	12.0	0.0	5.5	2.0	7.7	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	12.0	0.0	5.5	2.3	7.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	881	0	497	737	663	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	30.6	0.0	52.7	50.7	30.2	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	29.9	0.0	26.5	50.5	15.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.3	0.0	11.9	2.0	4.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	487	0	317	370	574	0
V/C Ratio (X)	0.00	0.00	0.51	0.00	0.49	0.06	0.53	0.00
Avail Cap (c_a), veh/h	0	0	490	0	398	370	574	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.70	0.86	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	29.9	0.0	19.2	20.7	30.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	0.0	0.8	0.3	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	30.7	0.0	20.0	21.0	31.2	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	5.7	0.0	2.2	0.4	3.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.68	0.00	1.80	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	9.8	0.0	4.1	0.7	5.9	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	4.13	0.00	0.95	0.12	1.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	2
Grp Vol (v), veh/h	0	550	0	7	0	910	0	593
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	9.8	0.0	0.3	0.0	23.8	0.0	19.2
Cycle Q Clear Time (g_c), s	0.0	9.8	0.0	0.3	0.0	23.8	0.0	19.2
Lane Grp Cap (c), veh/h	0	1962	0	471	0	1502	0	1014
V/C Ratio (X)	0.00	0.28	0.00	0.01	0.00	0.61	0.00	0.58
Avail Cap (c_a), veh/h	0	1962	0	471	0	1502	0	1014
Upstream Filter (I)	0.00	0.70	0.00	1.00	0.00	0.86	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.2	0.0	33.7	0.0	26.9	0.0	47.5
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	1.6	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.5	0.0	33.7	0.0	28.4	0.0	48.4
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	0.2	0.0	10.0	0.0	9.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.69	0.00	1.80	0.00	1.47	0.00	1.54
%ile Back of Q (95%), veh/ln	0.0	6.7	0.0	0.3	0.0	15.2	0.0	14.3
%ile Storage Ratio (RQ%)	0.00	0.75	0.00	0.02	0.00	1.11	0.00	2.75
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	13	0	397	0	214	0	103
Grp Sat Flow (s), veh/h/ln	0	1238	0	1292	0	1283	0	1327
Q Serve Time (g_s), s	0.0	0.6	0.0	30.2	0.0	11.9	0.0	8.7
Cycle Q Clear Time (g_c), s	0.0	0.6	0.0	30.2	0.0	11.9	0.0	8.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.9	0.0	10.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	684	0	457	0	674	0	378
V/C Ratio (X)	0.00	0.02	0.00	0.87	0.00	0.32	0.00	0.27
Avail Cap (c_a), veh/h	0	684	0	457	0	674	0	378
Upstream Filter (I)	0.00	0.70	0.00	1.00	0.00	0.86	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.2	0.0	38.3	0.0	17.6	0.0	42.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	16.4	0.0	1.1	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.2	0.0	54.6	0.0	18.6	0.0	43.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	11.0	0.0	3.5	0.0	3.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.45	0.00	1.79	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	19.0	0.0	6.6	0.0	5.5
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	3.58	0.00	0.48	0.00	1.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	32.4
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	9.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	159	662	48	14	503	39	6	0	28	55	0	133
Future Vol, veh/h	159	662	48	14	503	39	6	0	28	55	0	133
Conflicting Peds, #/hr	0	0	87	87	0	0	0	0	11	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	173	720	52	15	547	42	7	0	30	60	0	145

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	589	0	0	859	0	0	1483	1798	484	1315	1803	295
Stage 1	-	-	-	-	-	-	1179	1179	-	598	598	-
Stage 2	-	-	-	-	-	-	304	619	-	717	1205	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	982	-	-	778	-	-	87	79	529	116	79	701
Stage 1	-	-	-	-	-	-	202	262	-	456	489	-
Stage 2	-	-	-	-	-	-	681	478	-	387	255	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	982	-	-	724	-	-	55	59	488	92	59	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	59	-	92	59	-
Stage 1	-	-	-	-	-	-	155	201	-	376	479	-
Stage 2	-	-	-	-	-	-	529	468	-	296	196	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	0.3	26.5	70.3
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	204	982	-	-	724	-	-	239
HCM Lane V/C Ratio	0.181	0.176	-	-	0.021	-	-	0.855
HCM Control Delay (s)	26.5	9.4	-	-	10.1	-	-	70.3
HCM Lane LOS	D	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	0.6	0.6	-	-	0.1	-	-	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	669	7	4	464	97	2	0	5	69	0	136
Future Volume (veh/h)	54	669	7	4	464	97	2	0	5	69	0	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.99		0.95	0.98		0.96	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	727	8	4	504	105	2	0	5	75	0	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	2195	24	446	906	189	131	25	260	432	0	416
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	812	3598	40	716	1486	310	289	92	953	1373	0	1522
Grp Volume(v), veh/h	59	359	376	4	0	609	7	0	0	75	0	148
Grp Sat Flow(s),veh/h/ln	812	1777	1861	716	0	1795	1334	0	0	1373	0	1522
Q Serve(g_s), s	4.2	8.9	8.9	0.2	0.0	18.0	0.0	0.0	0.0	0.0	0.0	7.0
Cycle Q Clear(g_c), s	22.2	8.9	8.9	9.1	0.0	18.0	7.1	0.0	0.0	4.9	0.0	7.0
Prop In Lane	1.00		0.02	1.00		0.17	0.29		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	413	1084	1135	446	0	1095	416	0	0	432	0	416
V/C Ratio(X)	0.14	0.33	0.33	0.01	0.00	0.56	0.02	0.00	0.00	0.17	0.00	0.36
Avail Cap(c_a), veh/h	413	1084	1135	446	0	1095	416	0	0	432	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.73	0.00	0.73	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.9	8.6	8.6	10.8	0.0	10.4	23.9	0.0	0.0	25.5	0.0	26.3
Incr Delay (d2), s/veh	0.7	0.8	0.8	0.0	0.0	1.5	0.1	0.0	0.0	0.2	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	5.6	5.9	0.1	0.0	9.9	0.2	0.0	0.0	2.3	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	9.4	9.4	10.8	0.0	11.8	24.0	0.0	0.0	25.7	0.0	26.8
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		794			613			7			223	
Approach Delay, s/veh		10.0			11.8			24.0			26.5	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	20.0	9.0	24.2	9.1
Green Ext Time (p_c), s	7.5	1.0	8.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	669	7	4	464	97	2	0	5	69	0	136
Future Volume (veh/h)	54	669	7	4	464	97	2	0	5	69	0	136
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.95	0.99		0.95	0.98		0.96	0.97		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	727	8	4	504	105	2	0	5	75	0	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	413	2195	24	446	906	189	131	25	260	432	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	17.6	9.4	9.4	10.8	0.0	11.8	24.0	0.0	0.0	25.7	0.0	26.8
Ln Grp LOS	B	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		794			613			7			223	
Approach Delay, s/veh		10.0			11.8			24.0			26.5	
Approach LOS		A			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		5.2		6.3		5.8
Max Q Clear (g_c+I1), s		20.0		9.0		24.2		9.1
Green Ext Time (g_e), s		7.5		1.0		8.3		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.03		0.01		0.09		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		716		1373		812		289
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1486		0		3598		92
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		310		1522		40		953
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	75	0	59	0	7
Grp Sat Flow (s), veh/h/ln	0	716	0	1373	0	812	0	1334
Q Serve Time (g_s), s	0.0	0.2	0.0	0.0	0.0	4.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.1	0.0	4.9	0.0	22.2	0.0	7.1
Perm LT Sat Flow (s_l), veh/h/ln	0	716	0	1373	0	812	0	1232
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1077	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	46.0	0.0	17.5	0.0	36.9	0.0	17.6
Perm LT Q Serve Time (g_ps), s	0.0	0.2	0.0	0.0	0.0	4.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.29
Lane Grp Cap (c), veh/h	0	446	0	432	0	413	0	416
V/C Ratio (X)	0.00	0.01	0.00	0.17	0.00	0.14	0.00	0.02
Avail Cap (c_a), veh/h	0	446	0	432	0	413	0	416
Upstream Filter (I)	0.00	0.73	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.8	0.0	25.5	0.0	16.9	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.8	0.0	25.7	0.0	17.6	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.2	0.0	0.7	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	2.3	0.0	1.5	0.0	0.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	2.00	0.00	0.25	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	359	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	9.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	609	0	148	0	376	0	0
Grp Sat Flow (s), veh/h/ln	0	1795	0	1522	0	1861	0	0
Q Serve Time (g_s), s	0.0	18.0	0.0	7.0	0.0	8.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.0	0.0	7.0	0.0	8.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.17	0.00	1.00	0.00	0.02	0.00	0.71
Lane Grp Cap (c), veh/h	0	1095	0	416	0	1135	0	0
V/C Ratio (X)	0.00	0.56	0.00	0.36	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	1095	0	416	0	1135	0	0
Upstream Filter (I)	0.00	0.73	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.4	0.0	26.3	0.0	8.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.5	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.8	0.0	26.8	0.0	9.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	2.5	0.0	3.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.56	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	9.9	0.0	4.7	0.0	5.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	4.10	0.00	0.69	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	493	225	165	965	815	343
Future Volume (veh/h)	493	225	165	965	815	343
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	536	245	179	1049	886	373
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	646	296	206	2567	2038	876
Arrive On Green	0.19	0.19	0.12	0.72	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1527
Grp Volume(v), veh/h	536	245	179	1049	886	373
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1527
Q Serve(g_s), s	17.9	17.8	11.9	14.0	0.0	0.0
Cycle Q Clear(g_c), s	17.9	17.8	11.9	14.0	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	646	296	206	2567	2038	876
V/C Ratio(X)	0.83	0.83	0.87	0.41	0.43	0.43
Avail Cap(c_a), veh/h	950	436	223	2567	2038	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.90	0.90	0.09	0.09	0.83	0.83
Uniform Delay (d), s/veh	47.0	46.9	52.2	6.6	0.0	0.0
Incr Delay (d2), s/veh	3.7	7.5	3.4	0.0	0.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.4	11.9	6.5	5.4	0.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.7	54.4	55.6	6.6	0.6	1.3
LnGrp LOS	D	D	E	A	A	A
Approach Vol, veh/h	781			1228	1259	
Approach Delay, s/veh	51.8			13.7	0.8	
Approach LOS	D			B	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.9	73.7		28.4		91.6
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	13.9	2.0		19.9		16.0
Green Ext Time (p_c), s	0.1	13.8		2.5		4.5

Intersection Summary	
HCM 6th Ctrl Delay	17.9
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	493	225	165	965	815	343
Future Volume (veh/h)	493	225	165	965	815	343
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	536	245	179	1049	886	373
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	646	296	206	2567	2038	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.19	0.19	0.12	0.72	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	50.7	54.4	55.6	6.6	0.6	1.3
Ln Grp LOS	D	D	E	A	A	A
Approach Vol, veh/h	781			1228	1259	
Approach Delay, s/veh	51.8			13.7	0.8	
Approach LOS	D			B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	17.9	73.7		28.4		91.6		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.7		3.9		5.0		
Max Q Clear (g_c+I1), s	13.9	2.0		19.9		16.0		
Green Ext Time (g_e), s	0.1	13.8		2.5		4.5		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.52		0.06		0.60		
Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1527		1585		0		
Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	179	0	0	536	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	11.9	0.0	0.0	17.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	11.9	0.0	0.0	17.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	68.8	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	206	0	0	646	0	0	0	0
V/C Ratio (X)	0.87	0.00	0.00	0.83	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.09	0.00	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	52.2	0.0	0.0	47.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.4	0.0	0.0	3.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	55.6	0.0	0.0	50.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	0.0	7.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.21	1.00	0.00	1.55	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	6.5	0.0	0.0	12.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.79	0.00	0.00	2.87	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	886	0	0	0	1049	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2038	0	0	0	2567	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.00	0.00	0.41	0.00	0.00
Avail Cap (c_a), veh/h	0	2038	0	0	0	2567	0	0
Upstream Filter (I)	0.00	0.83	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	0.0	0.0	6.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.23	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	5.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	373	0	245	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1527	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	876	0	296	0	0	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.83	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	876	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.83	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	46.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	7.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.3	0.0	54.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.56	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.6	0.0	11.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.28	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		17.9						
HCM 6th LOS		B						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	227	44	1248	229	39	891
Future Volume (veh/h)	227	44	1248	229	39	891
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	48	1357	249	42	968
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	271	53	1940	351	56	2527
Arrive On Green	0.19	0.19	1.00	1.00	0.03	0.71
Sat Flow, veh/h	1431	278	3095	543	1781	3647
Grp Volume(v), veh/h	296	0	796	810	42	968
Grp Sat Flow(s),veh/h/ln	1715	0	1777	1768	1781	1777
Q Serve(g_s), s	20.3	0.0	0.0	0.0	2.8	13.0
Cycle Q Clear(g_c), s	20.3	0.0	0.0	0.0	2.8	13.0
Prop In Lane	0.83	0.16		0.31	1.00	
Lane Grp Cap(c), veh/h	325	0	1149	1143	56	2527
V/C Ratio(X)	0.91	0.00	0.69	0.71	0.75	0.38
Avail Cap(c_a), veh/h	329	0	1149	1143	223	2527
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.67	0.67	0.66	0.66
Uniform Delay (d), s/veh	47.6	0.0	0.0	0.0	57.7	6.9
Incr Delay (d2), s/veh	27.9	0.0	2.3	2.5	12.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.6	0.0	1.3	1.4	2.6	7.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	75.5	0.0	2.3	2.5	70.1	7.2
LnGrp LOS	E	A	A	A	E	A
Approach Vol, veh/h	296		1606			1010
Approach Delay, s/veh	75.5		2.4			9.8
Approach LOS	E		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.2		27.8	7.8	84.5
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		15.0		22.3	4.8	2.0
Green Ext Time (p_c), s		6.6		0.1	0.0	39.9

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	227	44	1248	229	39	891
Future Volume (veh/h)	227	44	1248	229	39	891
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	247	48	1357	249	42	968
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	271	53	1940	351	56	2527
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.19	0.19	1.00	1.00	0.03	0.71
Unsig. Movement Delay						
Ln Grp Delay, s/veh	75.5	0.0	2.3	2.5	70.1	7.2
Ln Grp LOS	E	A	A	A	E	A
Approach Vol, veh/h	296		1606			1010
Approach Delay, s/veh	75.5		2.4			9.8
Approach LOS	E		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		92.2		27.8	7.8	84.5		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+l1), s		15.0		22.3	4.8	2.0		
Green Ext Time (g_e), s		6.6		0.1	0.0	39.9		
Prob of Phs Call (p_c)		1.00		1.00	0.75	1.00		
Prob of Max Out (p_x)		0.83		1.00	0.00	0.48		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1431	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		6		3095		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		278		543		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	296	42	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1715	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	20.3	2.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.3	2.8	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	77.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.83	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	325	56	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.91	0.75	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	329	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.66	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	47.6	57.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	27.9	12.5	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	75.5	70.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	1.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.5	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.49	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	16.6	2.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.33	0.49	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	968	0	0	0	796	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2527	0	0	0	1149	0	0
V/C Ratio (X)	0.00	0.38	0.00	0.00	0.00	0.69	0.00	0.00
Avail Cap (c_a), veh/h	0	2527	0	0	0	1149	0	0
Upstream Filter (I)	0.00	0.66	0.00	0.00	0.00	0.67	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	2.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.2	0.0	0.0	0.0	2.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.0	0.0	0.0	0.0	1.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	0.35	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	810	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1768	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.16	0.00	0.31	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1143	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1143	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	124	12	45	115	20	25	57	30	79	29	191
Future Vol, veh/h	18	124	12	45	115	20	25	57	30	79	29	191
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	135	13	49	125	22	27	62	33	86	32	208
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.2	10.5	9.5	11.4
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	22%	12%	25%	26%
Vol Thru, %	51%	81%	64%	10%
Vol Right, %	27%	8%	11%	64%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	112	154	180	299
LT Vol	25	18	45	79
Through Vol	57	124	115	29
RT Vol	30	12	20	191
Lane Flow Rate	122	167	196	325
Geometry Grp	1	1	1	1
Degree of Util (X)	0.179	0.249	0.289	0.434
Departure Headway (Hd)	5.28	5.359	5.321	4.808
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	679	670	675	754
Service Time	3.315	3.398	3.358	2.808
HCM Lane V/C Ratio	0.18	0.249	0.29	0.431
HCM Control Delay	9.5	10.2	10.5	11.4
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.6	1	1.2	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	25	62	82	57	108	70	885	108	51	724	131
Future Volume (veh/h)	47	25	62	82	57	108	70	885	108	51	724	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	0.99		0.85	0.99		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	27	67	89	62	117	76	962	117	55	787	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	70	115	222	139	363	386	2004	244	331	1881	339
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	265	296	483	668	587	1531	599	3119	379	519	2927	528
Grp Volume(v), veh/h	145	0	0	151	0	117	76	548	531	55	478	451
Grp Sat Flow(s),veh/h/ln	1044	0	0	1255	0	1531	599	1777	1721	519	1777	1679
Q Serve(g_s), s	4.1	0.0	0.0	0.0	0.0	5.7	6.4	14.3	14.4	5.5	11.8	11.8
Cycle Q Clear(g_c), s	14.2	0.0	0.0	10.1	0.0	5.7	18.2	14.3	14.4	19.9	11.8	11.8
Prop In Lane	0.35		0.46	0.59		1.00	1.00		0.22	1.00		0.31
Lane Grp Cap(c), veh/h	302	0	0	361	0	363	386	1142	1106	331	1142	1079
V/C Ratio(X)	0.48	0.00	0.00	0.42	0.00	0.32	0.20	0.48	0.48	0.17	0.42	0.42
Avail Cap(c_a), veh/h	411	0	0	473	0	480	386	1142	1106	331	1142	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.48	0.48	0.48	0.92	0.92	0.92
Uniform Delay (d), s/veh	31.3	0.0	0.0	29.7	0.0	28.3	12.3	8.3	8.3	13.4	7.9	7.9
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.8	0.0	0.5	0.5	0.7	0.7	1.0	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.4	0.0	0.0	5.2	0.0	3.8	1.5	7.3	7.2	1.3	7.3	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	0.0	30.4	0.0	28.8	12.9	9.0	9.0	14.4	8.9	9.0
LnGrp LOS	C	A	A	C	A	C	B	A	A	B	A	A
Approach Vol, veh/h		145			268			1155			984	
Approach Delay, s/veh		32.5			29.7			9.3			9.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	62.8	27.2	62.8	27.2
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	21.9	12.1	20.2	16.2
Green Ext Time (p_c), s	7.6	1.2	9.4	0.6

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	25	62	82	57	108	70	885	108	51	724	131
Future Volume (veh/h)	47	25	62	82	57	108	70	885	108	51	724	131
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.97	0.98		0.97	0.99		0.85	0.99		0.87
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	27	67	89	62	117	76	962	117	55	787	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	117	70	115	222	139	363	386	2004	244	331	1881	339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.64	0.64	0.64	0.64	0.64	0.64
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.5	0.0	0.0	30.4	0.0	28.8	12.9	9.0	9.0	14.4	8.9	9.0
Ln Grp LOS	C	A	A	C	A	C	B	A	A	B	A	A
Approach Vol, veh/h		145			268			1155			984	
Approach Delay, s/veh		32.5			29.7			9.3			9.2	
Approach LOS		C			C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		62.8		27.2		62.8		27.2
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.4		5.0		5.3		5.8
Max Q Clear (g_c+I1), s		21.9		12.1		20.2		16.2
Green Ext Time (g_e), s		7.6		1.2		9.4		0.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.01		0.00		0.04
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		519		668		599		265
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2927		587		3119		296
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		528		1531		379		483
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	55	0	151	0	76	0	145
Grp Sat Flow (s), veh/h/ln	0	519	0	1255	0	599	0	1044
Q Serve Time (g_s), s	0.0	5.5	0.0	0.0	0.0	6.4	0.0	4.1
Cycle Q Clear Time (g_c), s	0.0	19.9	0.0	10.1	0.0	18.2	0.0	14.2
Perm LT Sat Flow (s_l), veh/h/ln	0	519	0	1296	0	599	0	1199
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1067	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	57.8	0.0	21.4	0.0	57.8	0.0	21.4
Perm LT Serve Time (g_u), s	0.0	43.5	0.0	7.2	0.0	46.0	0.0	11.3
Perm LT Q Serve Time (g_ps), s	0.0	5.5	0.0	0.0	0.0	6.4	0.0	4.1
Time to First Blk (g_f), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	3.7
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	3.7
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.59	0.00	1.00	0.00	0.35
Lane Grp Cap (c), veh/h	0	331	0	361	0	386	0	302
V/C Ratio (X)	0.00	0.17	0.00	0.42	0.00	0.20	0.00	0.48
Avail Cap (c_a), veh/h	0	331	0	473	0	386	0	411
Upstream Filter (I)	0.00	0.92	0.00	1.00	0.00	0.48	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.4	0.0	29.7	0.0	12.3	0.0	31.3
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.8	0.0	0.5	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.4	0.0	30.4	0.0	12.9	0.0	32.5
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	2.8	0.0	0.8	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	5.2	0.0	1.5	0.0	5.4
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.28	0.00	0.32	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	478	0	0	0	548	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	11.8	0.0	0.0	0.0	14.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	0.0	0.0	14.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1142	0	0	0	1142	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.00	0.00	0.48	0.00	0.00
Avail Cap (c_a), veh/h	0	1142	0	0	0	1142	0	0
Upstream Filter (I)	0.00	0.92	0.00	0.00	0.00	0.48	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	0.0	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.9	0.0	0.0	0.0	9.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.8	0.0	0.0	0.0	4.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.00	0.00	1.52	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	7.3	0.0	0.0	0.0	7.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	0.00	0.00	0.26	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	451	0	117	0	531	0	0
Grp Sat Flow (s), veh/h/ln	0	1679	0	1531	0	1721	0	0
Q Serve Time (g_s), s	0.0	11.8	0.0	5.7	0.0	14.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	5.7	0.0	14.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	1.00	0.00	0.22	0.00	0.46
Lane Grp Cap (c), veh/h	0	1079	0	363	0	1106	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.32	0.00	0.48	0.00	0.00
Avail Cap (c_a), veh/h	0	1079	0	480	0	1106	0	0
Upstream Filter (I)	0.00	0.92	0.00	1.00	0.00	0.48	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.9	0.0	28.3	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.5	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.0	0.0	28.8	0.0	9.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.6	0.0	2.1	0.0	4.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.80	0.00	1.52	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	7.0	0.0	3.8	0.0	7.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.21	0.00	0.25	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	796	529	408	1347	0	0	0	0	428	2	140
Future Volume (veh/h)	0	796	529	408	1347	0	0	0	0	428	2	140
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	865	575	443	1464	0				310	220	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1304	840	212	2266	0				453	261	181
Arrive On Green	0.00	0.64	0.64	0.64	0.64	0.00				0.25	0.25	0.25
Sat Flow, veh/h	0	2138	1318	371	3647	0				1781	1027	710
Grp Volume(v), veh/h	0	748	692	443	1464	0				310	0	372
Grp Sat Flow(s),veh/h/ln	0	1777	1585	371	1777	0				1781	0	1737
Q Serve(g_s), s	0.0	23.7	25.2	32.2	22.8	0.0				14.1	0.0	18.3
Cycle Q Clear(g_c), s	0.0	23.7	25.2	57.4	22.8	0.0				14.1	0.0	18.3
Prop In Lane	0.00		0.83	1.00		0.00				1.00		0.41
Lane Grp Cap(c), veh/h	0	1133	1011	212	2266	0				453	0	442
V/C Ratio(X)	0.00	0.66	0.68	2.09	0.65	0.00				0.68	0.00	0.84
Avail Cap(c_a), veh/h	0	1133	1011	212	2266	0				653	0	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.48	0.48	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.2	10.5	35.0	10.0	0.0				30.3	0.0	31.8
Incr Delay (d2), s/veh	0.0	3.0	3.8	496.1	0.7	0.0				1.8	0.0	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.5	13.1	58.0	10.8	0.0				10.0	0.0	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.2	14.2	531.1	10.7	0.0				32.1	0.0	38.7
LnGrp LOS	A	B	B	F	B	A				C	A	D
Approach Vol, veh/h		1440			1907						682	
Approach Delay, s/veh		13.7			131.6						35.7	
Approach LOS		B			F						D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	62.1	27.9	62.1
Change Period (Y+Rc), s	* 4.7	5.0	* 4.7
Max Green Setting (Gmax), s	* 47	33.0	* 47
Max Q Clear Time (g_c+I1), s	59.4	20.3	27.2
Green Ext Time (p_c), s	0.0	2.6	10.6

Intersection Summary	
HCM 6th Ctrl Delay	73.2
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	796	529	408	1347	0	0	0	0	428	2	140
Future Volume (veh/h)	0	796	529	408	1347	0	0	0	0	428	2	140
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	865	575	443	1464	0				310	220	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	1304	840	212	2266	0				453	261	181
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.64	0.64	0.64	0.64	0.00				0.25	0.25	0.25
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	13.2	14.2	531.1	10.7	0.0				32.1	0.0	38.7
Ln Grp LOS	A	B	B	F	B	A				C	A	D
Approach Vol, veh/h		1440			1907						682	
Approach Delay, s/veh		13.7			131.6						35.7	
Approach LOS		B			F						D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		62.1		27.9		62.1		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		6.4		4.5		5.3		
Max Q Clear (g_c+I1), s		59.4		20.3		27.2		
Green Ext Time (g_e), s		0.0		2.6		10.6		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		0.13		0.47		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		371		1781		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1027		2138		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		710		1318		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	443	0	310	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	371	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	32.2	0.0	14.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	57.4	0.0	14.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	371	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	57.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	32.2	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	32.2	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	57.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	212	0	453	0	0	0	0
V/C Ratio (X)	0.00	2.09	0.00	0.68	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	212	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.48	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	35.0	0.0	30.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	496.1	0.0	1.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	531.1	0.0	32.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	5.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	29.3	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.67	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	58.0	0.0	10.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	4.49	0.00	0.52	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	57.6	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1464	0	0	0	748	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.8	0.0	0.0	0.0	23.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.8	0.0	0.0	0.0	23.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2266	0	0	0	1133	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.00	0.00	0.66	0.00	0.00
Avail Cap (c_a), veh/h	0	2266	0	0	0	1133	0	0
Upstream Filter (I)	0.00	0.48	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.0	0.0	0.0	0.0	10.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	3.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.7	0.0	0.0	0.0	13.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.4	0.0	0.0	0.0	7.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	1.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.41	0.00	1.00	0.00	1.56	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	10.8	0.0	0.0	0.0	13.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.83	0.00	0.00	0.00	0.73	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	372	0	692	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1737	0	1585	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	18.3	0.0	25.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.3	0.0	25.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.41	0.00	0.83	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	442	0	1011	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.84	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	637	0	1011	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.8	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.9	0.0	3.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	38.7	0.0	14.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.2	0.0	7.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	1.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.58	0.00	1.57	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	12.8	0.0	13.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.67	0.00	0.71	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	73.2
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	1061	0	0	1269	593	485	4	465	0	0	0
Future Volume (veh/h)	152	1061	0	0	1269	593	485	4	465	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	165	1153	0	0	1379	645	518	17	505			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	121	2065	0	0	1983	905	523	15	450			
Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Sat Flow, veh/h	210	3647	0	0	3580	1557	1781	52	1535			
Grp Volume(v), veh/h	165	1153	0	0	1376	648	518	0	522			
Grp Sat Flow(s),veh/h/ln	210	1777	0	0	1702	1564	1781	0	1587			
Q Serve(g_s), s	17.4	0.0	0.0	0.0	33.9	34.9	26.1	0.0	26.4			
Cycle Q Clear(g_c), s	52.3	0.0	0.0	0.0	33.9	34.9	26.1	0.0	26.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.97			
Lane Grp Cap(c), veh/h	121	2065	0	0	1978	909	523	0	465			
V/C Ratio(X)	1.37	0.56	0.00	0.00	0.70	0.71	0.99	0.00	1.12			
Avail Cap(c_a), veh/h	121	2065	0	0	1978	909	523	0	465			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.58	0.58	0.00	0.00	0.28	0.28	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.2	0.0	0.0	0.0	28.9	29.3	31.7	0.0	31.8			
Incr Delay (d2), s/veh	193.1	0.6	0.0	0.0	0.3	0.8	37.0	0.0	79.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	15.1	0.3	0.0	0.0	18.7	17.9	22.4	0.0	28.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	216.3	0.6	0.0	0.0	29.2	30.1	68.7	0.0	111.1			
LnGrp LOS	F	A	A	A	C	C	E	A	F			
Approach Vol, veh/h		1318			2024			1040				
Approach Delay, s/veh		27.6			29.5			90.0				
Approach LOS		C			C			F				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	58.0	32.0	58.0
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	54.3	28.4	36.9
Green Ext Time (p_c), s	0.0	0.0	11.8

Intersection Summary	
HCM 6th Ctrl Delay	43.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	1061	0	0	1269	593	485	4	465	0	0	0
Future Volume (veh/h)	152	1061	0	0	1269	593	485	4	465	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	165	1153	0	0	1379	645	518	17	505			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	121	2065	0	0	1983	905	523	15	450			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	216.3	0.6	0.0	0.0	29.2	30.1	68.7	0.0	111.1			
Ln Grp LOS	F	A	A	A	C	C	E	A	F			
Approach Vol, veh/h		1318			2024			1040				
Approach Delay, s/veh		27.6			29.5			90.0				
Approach LOS		C			C			F				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		6.7		4.5		5.2		
Max Q Clear (g_c+I1), s		54.3		28.4		36.9		
Green Ext Time (g_e), s		0.0		0.0		11.8		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		1.00		0.77		

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		210		1781		0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		52		3580		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1535		1557		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	165	0	518	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	210	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	17.4	0.0	26.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	52.3	0.0	26.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	210	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	52.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	52.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	121	0	523	0	0	0	0
V/C Ratio (X)	0.00	1.37	0.00	0.99	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	121	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.58	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.2	0.0	31.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	193.1	0.0	37.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	216.3	0.0	68.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	10.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	6.5	0.0	5.4	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.41	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	15.1	0.0	22.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.33	0.00	1.25	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1153	0	0	0	1376	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	33.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	33.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2065	0	0	0	1978	0	0
V/C Ratio (X)	0.00	0.56	0.00	0.00	0.00	0.70	0.00	0.00
Avail Cap (c_a), veh/h	0	2065	0	0	0	1978	0	0
Upstream Filter (I)	0.00	0.58	0.00	0.00	0.00	0.28	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	28.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	0.0	0.0	29.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	15.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.22	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	18.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.53	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	522	0	648	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1587	0	1564	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	26.4	0.0	34.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	26.4	0.0	34.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.97	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	465	0	909	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.12	0.00	0.71	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	465	0	909	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.28	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.8	0.0	29.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	79.3	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	111.1	0.0	30.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.4	0.0	14.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	10.3	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.47	0.00	1.23	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	28.9	0.0	17.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.61	0.00	0.50	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	14.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	1094	195	200	1370	11	153	268	145	46	326	330
Future Volume (veh/h)	238	1094	195	200	1370	11	153	268	145	46	326	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	259	1189	212	217	1489	12	166	291	158	50	354	359
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1437	254	277	1677	719	170	540	577	227	540	438
Arrive On Green	0.06	0.32	0.32	0.17	0.94	0.94	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1781	2997	530	1781	3554	1524	731	1870	1518	929	1870	1518
Grp Volume(v), veh/h	259	701	700	217	1489	12	166	291	158	50	354	359
Grp Sat Flow(s),veh/h/ln	1781	1777	1750	1781	1777	1524	731	1870	1518	929	1870	1518
Q Serve(g_s), s	6.5	32.8	33.3	5.8	13.1	0.0	11.1	11.8	6.5	4.3	14.9	19.8
Cycle Q Clear(g_c), s	6.5	32.8	33.3	5.8	13.1	0.0	26.0	11.8	6.5	16.1	14.9	19.8
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	852	839	277	1677	719	170	540	577	227	540	438
V/C Ratio(X)	0.71	0.82	0.83	0.78	0.89	0.02	0.98	0.54	0.27	0.22	0.66	0.82
Avail Cap(c_a), veh/h	372	852	839	306	1677	719	170	540	577	227	540	438
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	27.0	27.2	17.2	1.7	1.3	42.0	26.9	19.6	33.7	28.1	29.8
Incr Delay (d2), s/veh	4.8	7.0	7.5	11.4	7.4	0.0	63.3	3.8	1.2	2.2	6.1	15.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.2	21.6	21.7	4.7	4.6	0.0	10.9	9.6	4.4	2.0	11.9	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	34.0	34.7	28.6	9.1	1.4	105.3	30.8	20.7	36.0	34.2	45.4
LnGrp LOS	B	C	C	C	A	A	F	C	C	D	C	D
Approach Vol, veh/h		1660			1718			615			763	
Approach Delay, s/veh		31.9			11.5			48.3			39.6	
Approach LOS		C			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.5	47.5		31.0	10.8	48.2		31.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	9.0	* 42		* 26	9.3	* 42		* 26
Max Q Clear Time (g_c+I1), s	8.5	15.1		21.8	7.8	35.3		28.0
Green Ext Time (p_c), s	0.0	13.3		1.6	0.1	4.4		0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	1094	195	200	1370	11	153	268	145	46	326	330
Future Volume (veh/h)	238	1094	195	200	1370	11	153	268	145	46	326	330
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	1.00		0.96	0.99		0.96	0.99		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	259	1189	212	217	1489	12	166	291	158	50	354	359
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	363	1437	254	277	1677	719	170	540	577	227	540	438
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.32	0.32	0.17	0.94	0.94	0.29	0.29	0.29	0.29	0.29	0.29
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.9	34.0	34.7	28.6	9.1	1.4	105.3	30.8	20.7	36.0	34.2	45.4
Ln Grp LOS	B	C	C	C	A	A	F	C	C	D	C	D
Approach Vol, veh/h		1660			1718			615			763	
Approach Delay, s/veh		31.9			11.5			48.3			39.6	
Approach LOS		C			B			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	11.5	47.5		31.0	10.8	48.2		31.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	9.0	* 42		* 26	9.3	* 42		* 26
Max Allow Headway (MAH), s	3.8	5.1		4.7	3.8	5.2		5.2
Max Q Clear (g_c+I1), s	8.5	15.1		21.8	7.8	35.3		28.0
Green Ext Time (g_e), s	0.0	13.3		1.6	0.1	4.4		0.0
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			929	1781			731

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		2997		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1524		1518		530		1518

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	259	0	0	50	217	0	0	166
Grp Sat Flow (s), veh/h/ln	1781	0	0	929	1781	0	0	731
Q Serve Time (g_s), s	6.5	0.0	0.0	4.3	5.8	0.0	0.0	11.1
Cycle Q Clear Time (g_c), s	6.5	0.0	0.0	16.1	5.8	0.0	0.0	26.0
Perm LT Sat Flow (s_l), veh/h/ln	349	0	0	929	385	0	0	731
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	42.5	0.0	0.0	26.0	42.5	0.0	0.0	26.0
Perm LT Serve Time (g_u), s	29.4	0.0	0.0	14.2	9.8	0.0	0.0	11.1
Perm LT Q Serve Time (g_ps), s	29.4	0.0	0.0	4.3	9.8	0.0	0.0	11.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	363	0	0	227	277	0	0	170
V/C Ratio (X)	0.71	0.00	0.00	0.22	0.78	0.00	0.00	0.98
Avail Cap (c_a), veh/h	372	0	0	227	306	0	0	170
Upstream Filter (I)	0.77	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	14.1	0.0	0.0	33.7	17.2	0.0	0.0	42.0
Incr Delay (d2), s/veh	4.8	0.0	0.0	2.2	11.4	0.0	0.0	63.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	18.9	0.0	0.0	36.0	28.6	0.0	0.0	105.3
1st-Term Q (Q1), veh/ln	2.4	0.0	0.0	1.0	1.7	0.0	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.5	0.0	0.0	0.1	0.9	0.0	0.0	3.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.64
%ile Back of Q (95%), veh/ln	5.2	0.0	0.0	2.0	4.7	0.0	0.0	10.9
%ile Storage Ratio (RQ%)	0.89	0.00	0.00	0.29	0.85	0.00	0.00	1.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1489	0	354	0	701	0	291
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	13.1	0.0	14.9	0.0	32.8	0.0	11.8
Cycle Q Clear Time (g_c), s	0.0	13.1	0.0	14.9	0.0	32.8	0.0	11.8
Lane Grp Cap (c), veh/h	0	1677	0	540	0	852	0	540
V/C Ratio (X)	0.00	0.89	0.00	0.66	0.00	0.82	0.00	0.54
Avail Cap (c_a), veh/h	0	1677	0	540	0	852	0	540
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.77	0.00	1.00
Uniform Delay (d1), s/veh	0.0	1.7	0.0	28.1	0.0	27.0	0.0	26.9
Incr Delay (d2), s/veh	0.0	7.4	0.0	6.1	0.0	7.0	0.0	3.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.1	0.0	34.2	0.0	34.0	0.0	30.8
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	6.5	0.0	14.2	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.0	1.7	0.0	0.9	0.0	1.6	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.60	0.00	1.36	0.00	1.69
%ile Back of Q (95%), veh/ln	0.0	4.6	0.0	11.9	0.0	21.6	0.0	9.6
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	0.44	0.00	0.61	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	12	0	359	0	700	0	158
Grp Sat Flow (s), veh/h/ln	0	1524	0	1518	0	1750	0	1518
Q Serve Time (g_s), s	0.0	0.0	0.0	19.8	0.0	33.3	0.0	6.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.8	0.0	33.3	0.0	6.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.30	0.00	1.00
Lane Grp Cap (c), veh/h	0	719	0	438	0	839	0	577
V/C Ratio (X)	0.00	0.02	0.00	0.82	0.00	0.83	0.00	0.27
Avail Cap (c_a), veh/h	0	719	0	438	0	839	0	577
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.77	0.00	1.00
Uniform Delay (d1), s/veh	0.0	1.3	0.0	29.8	0.0	27.2	0.0	19.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	15.6	0.0	7.5	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.4	0.0	45.4	0.0	34.7	0.0	20.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.0	0.0	14.2	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.9	0.0	1.8	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.55	0.00	1.36	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	13.8	0.0	21.7	0.0	4.4
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	3.50	0.00	0.61	0.00	1.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.9
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	686	229	71	1172	148	172	656	80	116	522	256
Future Volume (veh/h)	231	686	229	71	1172	148	172	656	80	116	522	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.90	0.97		0.75	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	746	249	77	1274	161	187	713	87	126	567	278
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	878	692	126	1193	481	213	995	121	258	967	473
Arrive On Green	0.09	0.47	0.47	0.34	0.34	0.34	0.33	0.33	0.33	0.07	0.44	0.44
Sat Flow, veh/h	1781	1870	1476	565	3554	1432	629	3060	373	1781	2211	1081
Grp Volume(v), veh/h	251	746	249	77	1274	161	187	413	387	126	455	390
Grp Sat Flow(s),veh/h/ln	1781	1870	1476	565	1777	1432	629	1777	1656	1781	1777	1515
Q Serve(g_s), s	10.6	42.3	12.9	14.0	40.3	10.1	29.1	24.5	24.7	5.4	23.3	23.4
Cycle Q Clear(g_c), s	10.6	42.3	12.9	40.3	40.3	10.1	39.0	24.5	24.7	5.4	23.3	23.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.71
Lane Grp Cap(c), veh/h	217	878	692	126	1193	481	213	578	539	258	777	663
V/C Ratio(X)	1.15	0.85	0.36	0.61	1.07	0.33	0.88	0.72	0.72	0.49	0.59	0.59
Avail Cap(c_a), veh/h	217	878	692	126	1193	481	213	578	539	260	777	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.38	0.38	0.38	0.59	0.59	0.59	0.90	0.90	0.90
Uniform Delay (d), s/veh	34.7	28.1	20.3	54.0	39.8	29.8	48.1	35.6	35.6	26.3	25.5	25.6
Incr Delay (d2), s/veh	109.1	8.0	0.3	3.3	37.7	0.2	24.8	4.5	4.8	1.3	2.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.5	27.7	8.0	4.0	29.8	5.4	10.5	15.4	14.6	4.2	15.2	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	143.8	36.1	20.7	57.2	77.5	30.0	72.9	40.1	40.5	27.6	28.4	29.0
LnGrp LOS	F	D	C	E	F	C	E	D	D	C	C	C
Approach Vol, veh/h		1246			1512			987			971	
Approach Delay, s/veh		54.7			71.4			46.5			28.5	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	58.0	16.0	46.0	13.5	44.5	62.0
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 53	* 11	* 40	8.0	* 39	* 56
Max Q Clear Time (g_c+I1), s	25.4	12.6	42.3	7.4	41.0	44.3
Green Ext Time (p_c), s	6.1	0.0	0.0	0.0	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	53.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	686	229	71	1172	148	172	656	80	116	522	256
Future Volume (veh/h)	231	686	229	71	1172	148	172	656	80	116	522	256
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.93	1.00		0.90	0.97		0.75	1.00		0.89
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	746	249	77	1274	161	187	713	87	126	567	278
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	217	878	692	126	1193	481	213	995	121	258	967	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.47	0.47	0.34	0.34	0.34	0.33	0.33	0.33	0.07	0.44	0.44
Unsig. Movement Delay												
Ln Grp Delay, s/veh	143.8	36.1	20.7	57.2	77.5	30.0	72.9	40.1	40.5	27.6	28.4	29.0
Ln Grp LOS	F	D	C	E	F	C	E	D	D	C	C	C
Approach Vol, veh/h		1246			1512			987			971	
Approach Delay, s/veh		54.7			71.4			46.5			28.5	
Approach LOS		D			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		58.0	16.0	46.0	13.5	44.5		62.0
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 53	* 11	* 40	8.0	* 39		* 56
Max Allow Headway (MAH), s		5.3	3.8	5.3	3.8	5.5		5.0
Max Q Clear (g_c+l1), s		25.4	12.6	42.3	7.4	41.0		44.3
Green Ext Time (g_e), s		6.1	0.0	0.0	0.0	0.0		5.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.99	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		0.44

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	565	1781	629		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2211		3554		3060		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1081		1432		373		1476

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L (Pr/Pm)		LL (Pr/Pm)	L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	251	77	126	187	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	565	1781	629	0	0
Q Serve Time (g_s), s	0.0	0.0	10.6	14.0	5.4	29.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	10.6	40.3	5.4	39.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	372	565	680	629	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	42.3	40.3	41.0	39.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.0	14.4	29.1	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	14.0	6.1	29.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	217	126	258	213	0	0
V/C Ratio (X)	0.00	0.00	1.15	0.61	0.49	0.88	0.00	0.00
Avail Cap (c_a), veh/h	0	0	217	126	260	213	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.38	0.90	0.59	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	34.7	54.0	26.3	48.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	109.1	3.3	1.3	24.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	143.8	57.2	27.6	72.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.5	2.3	2.3	5.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	6.6	0.1	0.1	1.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.57	1.65	1.80	1.47	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	17.5	4.0	4.2	10.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.96	0.51	1.19	1.27	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	455	0	1274	0	413	0	746
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	23.3	0.0	40.3	0.0	24.5	0.0	42.3
Cycle Q Clear Time (g_c), s	0.0	23.3	0.0	40.3	0.0	24.5	0.0	42.3
Lane Grp Cap (c), veh/h	0	777	0	1193	0	578	0	878
V/C Ratio (X)	0.00	0.59	0.00	1.07	0.00	0.72	0.00	0.85
Avail Cap (c_a), veh/h	0	777	0	1193	0	578	0	878
Upstream Filter (I)	0.00	0.90	0.00	0.38	0.00	0.59	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	39.8	0.0	35.6	0.0	28.1
Incr Delay (d2), s/veh	0.0	2.9	0.0	37.7	0.0	4.5	0.0	8.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.4	0.0	77.5	0.0	40.1	0.0	36.1
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	17.3	0.0	10.4	0.0	18.4
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	6.2	0.0	0.7	0.0	1.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	0.00	1.27	0.00	1.38	0.00	1.36
%ile Back of Q (95%), veh/ln	0.0	15.2	0.0	29.8	0.0	15.4	0.0	27.7
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	0.64	0.00	0.14	0.00	0.93
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	20.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	390	0	161	0	387	0	249
Grp Sat Flow (s), veh/h/ln	0	1515	0	1432	0	1656	0	1476
Q Serve Time (g_s), s	0.0	23.4	0.0	10.1	0.0	24.7	0.0	12.9
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	10.1	0.0	24.7	0.0	12.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.71	0.00	1.00	0.00	0.22	0.00	1.00
Lane Grp Cap (c), veh/h	0	663	0	481	0	539	0	692
V/C Ratio (X)	0.00	0.59	0.00	0.33	0.00	0.72	0.00	0.36
Avail Cap (c_a), veh/h	0	663	0	481	0	539	0	692
Upstream Filter (I)	0.00	0.90	0.00	0.38	0.00	0.59	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.6	0.0	29.8	0.0	35.6	0.0	20.3
Incr Delay (d2), s/veh	0.0	3.4	0.0	0.2	0.0	4.8	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.0	0.0	30.0	0.0	40.5	0.0	20.7
1st-Term Q (Q1), veh/ln	0.0	8.2	0.0	3.5	0.0	9.8	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	0.00	1.54	0.00	1.39	0.00	1.77
%ile Back of Q (95%), veh/ln	0.0	13.4	0.0	5.4	0.0	14.6	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	1.14	0.00	0.14	0.00	1.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.0
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	682	58	113	984	166	202	780	142	293	641	172
Future Volume (veh/h)	70	682	58	113	984	166	202	780	142	293	641	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.90	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	741	63	123	1070	180	220	848	154	318	697	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	827	648	132	1328	223	206	869	348	220	908	340
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.12	0.24	0.24	0.12	0.26	0.26
Sat Flow, veh/h	443	1870	1465	677	3004	504	1781	3554	1426	1781	3554	1331
Grp Volume(v), veh/h	76	741	63	123	631	619	220	848	154	318	697	187
Grp Sat Flow(s),veh/h/ln	443	1870	1465	677	1777	1731	1781	1777	1426	1781	1777	1331
Q Serve(g_s), s	11.9	32.9	2.3	6.9	27.7	27.9	10.4	21.3	8.2	11.1	16.3	11.0
Cycle Q Clear(g_c), s	39.8	32.9	2.3	39.8	27.7	27.9	10.4	21.3	8.2	11.1	16.3	11.0
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	827	648	132	786	765	206	869	348	220	908	340
V/C Ratio(X)	0.55	0.90	0.10	0.93	0.80	0.81	1.07	0.98	0.44	1.45	0.77	0.55
Avail Cap(c_a), veh/h	138	827	648	132	786	765	206	869	348	220	908	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.37	0.37	0.37	1.00	1.00	1.00	0.59	0.59	0.59	0.54	0.54	0.54
Uniform Delay (d), s/veh	40.4	23.2	14.6	43.6	21.7	21.8	39.8	33.7	28.8	39.4	31.0	29.0
Incr Delay (d2), s/veh	5.7	6.1	0.1	62.5	8.5	9.0	67.6	18.0	0.5	214.8	2.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.2	18.5	1.3	8.6	18.2	18.1	12.2	15.0	4.8	26.4	10.1	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	29.3	14.7	106.1	30.3	30.8	107.4	51.7	29.3	254.2	33.2	30.0
LnGrp LOS	D	C	B	F	C	C	F	D	C	F	C	C
Approach Vol, veh/h		880			1373			1222			1202	
Approach Delay, s/veh		29.7			37.3			58.9			91.2	
Approach LOS		C			D			E			F	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.8	16.0	28.2		45.8	17.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green Setting (Gmax), s		* 40	10.4	* 23		* 40	11.1	* 22
Max Q Clear Time (g_c+I1), s		41.8	12.4	18.3		41.8	13.1	23.3
Green Ext Time (p_c), s		0.0	0.0	2.2		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.4
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	682	58	113	984	166	202	780	142	293	641	172
Future Volume (veh/h)	70	682	58	113	984	166	202	780	142	293	641	172
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.92	1.00		0.92	1.00		0.90	1.00		0.84
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	741	63	123	1070	180	220	848	154	318	697	187
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	138	827	648	132	1328	223	206	869	348	220	908	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.12	0.24	0.24	0.12	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	46.1	29.3	14.7	106.1	30.3	30.8	107.4	51.7	29.3	254.2	33.2	30.0
Ln Grp LOS	D	C	B	F	C	C	F	D	C	F	C	C
Approach Vol, veh/h		880			1373			1222			1202	
Approach Delay, s/veh		29.7			37.3			58.9			91.2	
Approach LOS		C			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		45.8	16.0	28.2		45.8	17.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 40	10.4	* 23		* 40	11.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.9		5.4	3.7	4.9
Max Q Clear (g_c+I1), s		41.8	12.4	18.3		41.8	13.1	23.3
Green Ext Time (g_e), s		0.0	0.0	2.2		0.0	0.0	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		677	1781			443	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3004		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		504		1331		1465		1426

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	123	220	0	0	76	318	0
Grp Sat Flow (s), veh/h/ln	0	677	1781	0	0	443	1781	0
Q Serve Time (g_s), s	0.0	6.9	10.4	0.0	0.0	11.9	11.1	0.0
Cycle Q Clear Time (g_c), s	0.0	39.8	10.4	0.0	0.0	39.8	11.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	677	0	0	0	443	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	39.8	0.0	0.0	0.0	39.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	6.9	0.0	0.0	0.0	11.9	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	6.9	0.0	0.0	0.0	11.9	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	132	206	0	0	138	220	0
V/C Ratio (X)	0.00	0.93	1.07	0.00	0.00	0.55	1.45	0.00
Avail Cap (c_a), veh/h	0	132	206	0	0	138	220	0
Upstream Filter (I)	0.00	1.00	0.59	0.00	0.00	0.37	0.54	0.00
Uniform Delay (d1), s/veh	0.0	43.6	39.8	0.0	0.0	40.4	39.4	0.0
Incr Delay (d2), s/veh	0.0	62.5	67.6	0.0	0.0	5.7	214.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	106.1	107.4	0.0	0.0	46.1	254.2	0.0
1st-Term Q (Q1), veh/ln	0.0	2.7	4.4	0.0	0.0	1.7	4.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.3	3.9	0.0	0.0	0.2	13.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.74	1.48	0.00	0.00	1.73	1.49	0.00
%ile Back of Q (95%), veh/ln	0.0	8.6	12.2	0.0	0.0	3.2	26.4	0.0
%ile Storage Ratio (RQ%)	0.00	1.25	3.10	0.00	0.00	0.47	4.47	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	3.5	0.0	0.0	0.0	24.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	631	0	697	0	741	0	848
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	27.7	0.0	16.3	0.0	32.9	0.0	21.3
Cycle Q Clear Time (g_c), s	0.0	27.7	0.0	16.3	0.0	32.9	0.0	21.3
Lane Grp Cap (c), veh/h	0	786	0	908	0	827	0	869
V/C Ratio (X)	0.00	0.80	0.00	0.77	0.00	0.90	0.00	0.98
Avail Cap (c_a), veh/h	0	786	0	908	0	827	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.54	0.00	0.37	0.00	0.59
Uniform Delay (d1), s/veh	0.0	21.7	0.0	31.0	0.0	23.2	0.0	33.7
Incr Delay (d2), s/veh	0.0	8.5	0.0	2.2	0.0	6.1	0.0	18.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.3	0.0	33.2	0.0	29.3	0.0	51.7
1st-Term Q (Q1), veh/ln	0.0	10.6	0.0	6.6	0.0	13.3	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	0.3	0.0	1.4	0.0	2.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.46	0.00	1.46	0.00	1.26	0.00	1.38
%ile Back of Q (95%), veh/ln	0.0	18.2	0.0	10.1	0.0	18.5	0.0	15.0
%ile Storage Ratio (RQ%)	0.00	0.52	0.00	0.23	0.00	0.40	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	619	0	187	0	63	0	154
Grp Sat Flow (s), veh/h/ln	0	1731	0	1331	0	1465	0	1426
Q Serve Time (g_s), s	0.0	27.9	0.0	11.0	0.0	2.3	0.0	8.2
Cycle Q Clear Time (g_c), s	0.0	27.9	0.0	11.0	0.0	2.3	0.0	8.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	765	0	340	0	648	0	348
V/C Ratio (X)	0.00	0.81	0.00	0.55	0.00	0.10	0.00	0.44
Avail Cap (c_a), veh/h	0	765	0	340	0	648	0	348
Upstream Filter (I)	0.00	1.00	0.00	0.54	0.00	0.37	0.00	0.59
Uniform Delay (d1), s/veh	0.0	21.8	0.0	29.0	0.0	14.6	0.0	28.8
Incr Delay (d2), s/veh	0.0	9.0	0.0	1.0	0.0	0.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.8	0.0	30.0	0.0	14.7	0.0	29.3
1st-Term Q (Q1), veh/ln	0.0	10.4	0.0	3.3	0.0	0.7	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.47	0.00	1.65	0.00	1.80	0.00	1.76
%ile Back of Q (95%), veh/ln	0.0	18.1	0.0	5.6	0.0	1.3	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	0.96	0.00	0.33	0.00	0.98
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.4
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	231	575	0	0	412
Future Vol, veh/h	70	231	575	0	0	412
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	251	625	0	0	448

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	849	625	0	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	315	484	-	0	0	-
Stage 1	533	-	-	0	0	-
Stage 2	793	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	315	484	-	-	-	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	533	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	424	484	-
HCM Lane V/C Ratio	-	0.179	0.519	-
HCM Control Delay (s)	-	15.3	20.2	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.6	2.9	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	346	104	494	566	428	83	858	317	111	748	31
Future Volume (veh/h)	152	346	104	494	566	428	83	858	317	111	748	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	165	376	113	537	615	465	90	933	345	121	813	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	613	182	485	1164	517	267	1143	506	226	1152	510
Arrive On Green	0.09	0.23	0.23	0.19	0.33	0.33	0.07	0.32	0.32	0.07	0.32	0.32
Sat Flow, veh/h	1781	2697	800	1781	3554	1578	1781	3554	1573	1781	3554	1573
Grp Volume(v), veh/h	165	246	243	537	615	465	90	933	345	121	813	34
Grp Sat Flow(s),veh/h/ln	1781	1777	1720	1781	1777	1578	1781	1777	1573	1781	1777	1573
Q Serve(g_s), s	8.4	14.9	15.3	22.5	16.9	33.7	3.9	29.0	22.9	5.3	24.1	1.8
Cycle Q Clear(g_c), s	8.4	14.9	15.3	22.5	16.9	33.7	3.9	29.0	22.9	5.3	24.1	1.8
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	404	391	485	1164	517	267	1143	506	226	1152	510
V/C Ratio(X)	0.53	0.61	0.62	1.11	0.53	0.90	0.34	0.82	0.68	0.54	0.71	0.07
Avail Cap(c_a), veh/h	343	503	487	485	1303	579	274	1143	506	228	1152	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.10	0.10	0.10	1.00	1.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	31.2	41.6	41.7	31.0	32.8	38.5	26.0	37.4	35.4	28.4	35.5	28.0
Incr Delay (d2), s/veh	0.9	1.0	1.1	52.2	0.0	2.1	0.7	6.5	7.3	1.8	2.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.2	9.9	9.8	20.9	8.5	14.7	3.0	19.2	14.6	4.1	15.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	42.6	42.8	83.2	32.8	40.5	26.8	43.9	42.6	30.2	38.3	28.2
LnGrp LOS	C	D	D	F	C	D	C	D	D	C	D	C
Approach Vol, veh/h		654			1617			1368			968	
Approach Delay, s/veh		40.0			51.8			42.5			36.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	44.3	16.0	45.2	14.7	44.0	28.1	33.2
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	31.7	12.5	44.0	9.0	31.7	22.5	34.0
Max Q Clear Time (g_c+I1), s	5.9	26.1	10.4	35.7	7.3	31.0	24.5	17.3
Green Ext Time (p_c), s	0.0	2.5	0.1	3.6	0.0	0.5	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	44.2
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	152	346	104	494	566	428	83	858	317	111	748	31
Future Volume (veh/h)	152	346	104	494	566	428	83	858	317	111	748	31
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	165	376	113	537	615	465	90	933	345	121	813	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	313	613	182	485	1164	517	267	1143	506	226	1152	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.23	0.23	0.19	0.33	0.33	0.07	0.32	0.32	0.07	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.2	42.6	42.8	83.2	32.8	40.5	26.8	43.9	42.6	30.2	38.3	28.2
Ln Grp LOS	C	D	D	F	C	D	C	D	D	C	D	C
Approach Vol, veh/h		654			1617			1368			968	
Approach Delay, s/veh		40.0			51.8			42.5			36.9	
Approach LOS		D			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	14.5	44.3	16.0	45.2	14.7	44.0	28.1	33.2
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	31.7	12.5	44.0	9.0	31.7	22.5	34.0
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.7	3.7	5.1
Max Q Clear (g_c+l1), s	5.9	26.1	10.4	35.7	7.3	31.0	24.5	17.3
Green Ext Time (g_e), s	0.0	2.5	0.1	3.6	0.0	0.5	0.0	2.5
Prob of Phs Call (p_c)	0.95	1.00	1.00	1.00	0.98	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.58	1.00	0.00	1.00	0.04

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		2697

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1573		1578		1573		800

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	90	0	165	0	121	0	537	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.9	0.0	8.4	0.0	5.3	0.0	22.5	0.0
Cycle Q Clear Time (g_c), s	3.9	0.0	8.4	0.0	5.3	0.0	22.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	650	0	522	0	433	0	905	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	38.6	0.0	27.3	0.0	38.6	0.0	29.3	0.0
Perm LT Serve Time (g_u), s	14.8	0.0	22.4	0.0	9.6	0.0	12.0	0.0
Perm LT Q Serve Time (g_ps), s	3.8	0.0	2.2	0.0	9.6	0.0	12.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	267	0	313	0	226	0	485	0
V/C Ratio (X)	0.34	0.00	0.53	0.00	0.54	0.00	1.11	0.00
Avail Cap (c_a), veh/h	274	0	343	0	228	0	485	0
Upstream Filter (I)	1.00	0.00	0.66	0.00	0.75	0.00	0.10	0.00
Uniform Delay (d1), s/veh	26.0	0.0	31.2	0.0	28.4	0.0	31.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.9	0.0	1.8	0.0	52.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.8	0.0	32.2	0.0	30.2	0.0	83.2	0.0
1st-Term Q (Q1), veh/ln	1.6	0.0	3.5	0.0	2.2	0.0	10.4	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.1	0.0	7.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.70	0.00	1.80	0.00	1.20	0.00
%ile Back of Q (95%), veh/ln	3.0	0.0	6.2	0.0	4.1	0.0	20.9	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	1.96	0.00	0.47	0.00	4.43	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	13.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	813	0	615	0	933	0	246
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	24.1	0.0	16.9	0.0	29.0	0.0	14.9
Cycle Q Clear Time (g_c), s	0.0	24.1	0.0	16.9	0.0	29.0	0.0	14.9
Lane Grp Cap (c), veh/h	0	1152	0	1164	0	1143	0	404
V/C Ratio (X)	0.00	0.71	0.00	0.53	0.00	0.82	0.00	0.61
Avail Cap (c_a), veh/h	0	1152	0	1303	0	1143	0	503
Upstream Filter (I)	0.00	0.75	0.00	0.10	0.00	1.00	0.00	0.66
Uniform Delay (d1), s/veh	0.0	35.5	0.0	32.8	0.0	37.4	0.0	41.6
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.0	0.0	6.5	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.3	0.0	32.8	0.0	43.9	0.0	42.6
1st-Term Q (Q1), veh/ln	0.0	10.1	0.0	7.1	0.0	12.2	0.0	6.4
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	1.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.44	0.00	1.19	0.00	1.45	0.00	1.52
%ile Back of Q (95%), veh/ln	0.0	15.2	0.0	8.5	0.0	19.2	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.26	0.00	1.53	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	34	0	465	0	345	0	243
Grp Sat Flow (s), veh/h/ln	0	1573	0	1578	0	1573	0	1720
Q Serve Time (g_s), s	0.0	1.8	0.0	33.7	0.0	22.9	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	1.8	0.0	33.7	0.0	22.9	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.47
Lane Grp Cap (c), veh/h	0	510	0	517	0	506	0	391
V/C Ratio (X)	0.00	0.07	0.00	0.90	0.00	0.68	0.00	0.62
Avail Cap (c_a), veh/h	0	510	0	579	0	506	0	487
Upstream Filter (I)	0.00	0.75	0.00	0.10	0.00	1.00	0.00	0.66
Uniform Delay (d1), s/veh	0.0	28.0	0.0	38.5	0.0	35.4	0.0	41.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.1	0.0	7.3	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.2	0.0	40.5	0.0	42.6	0.0	42.8
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	12.6	0.0	8.5	0.0	6.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	1.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.14	0.00	1.53	0.00	1.52
%ile Back of Q (95%), veh/ln	0.0	1.2	0.0	14.7	0.0	14.6	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	3.12	0.00	2.32	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.2
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	434	0	377	1	913	0	0	821	0
Future Volume (veh/h)	0	0	0	434	0	377	1	913	0	0	821	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	472	0	410	1	992	0	0	892	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Cap, veh/h	0	615	0	706	0	519	60	1794	0	0	1829	0
Arrive On Green	0.00	0.00	0.00	0.33	0.00	0.33	0.51	0.51	0.00	0.00	0.51	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1578	0	3571	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	472	0	410	533	460	0	0	892	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1578	1870	1617	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	14.5	0.0	14.1	0.0	11.6	0.0	0.0	9.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	14.5	0.0	14.1	11.6	11.6	0.0	0.0	9.8	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	615	0	706	0	519	1022	832	0	0	1829	0
V/C Ratio(X)	0.00	0.00	0.00	0.67	0.00	0.79	0.52	0.55	0.00	0.00	0.49	0.00
Avail Cap(c_a), veh/h	0	826	0	907	0	697	1022	832	0	0	1829	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.62	0.62	0.00	0.00	0.76	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.4	0.0	18.3	9.9	9.9	0.0	0.0	9.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	4.4	1.2	1.6	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	9.4	0.0	9.0	6.6	6.0	0.0	0.0	5.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	19.7	0.0	22.7	11.1	11.5	0.0	0.0	10.1	0.0
LnGrp LOS	A	A	A	B	A	C	B	B	A	A	B	A
Approach Vol, veh/h		0			882			993			892	
Approach Delay, s/veh		0.0			21.1			11.3			10.1	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.8	24.2	35.8	24.2
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	24.1	26.5	24.1	26.5
Max Q Clear Time (g_c+I1), s	13.6	16.5	11.8	0.0
Green Ext Time (p_c), s	4.5	3.2	4.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	434	0	377	1	913	0	0	821	0
Future Volume (veh/h)	0	0	0	434	0	377	1	913	0	0	821	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	472	0	410	1	992	0	0	892	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			Yes			No		
Cap, veh/h	0	615	0	706	0	519	60	1794	0	0	1829	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.33	0.00	0.33	0.51	0.51	0.00	0.00	0.51	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	19.7	0.0	22.7	11.1	11.5	0.0	0.0	10.1	0.0
Ln Grp LOS	A	A	A	B	A	C	B	B	A	A	B	A
Approach Vol, veh/h		0			882			993			892	
Approach Delay, s/veh		0.0			21.1			11.3			10.1	
Approach LOS					C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		35.8		24.2		35.8		24.2
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		24.1		26.5		24.1		26.5
Max Allow Headway (MAH), s		5.1		4.6		5.1		0.0
Max Q Clear (g_c+I1), s		13.6		16.5		11.8		0.0
Green Ext Time (g_e), s		4.5		3.2		4.8		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		0.38		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3571		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1578		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L+T		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	533	0	472	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.6	0.0	14.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	633	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	30.9	0.0	19.7	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	21.1	0.0	19.7	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	27.5	0.0	0.0	0.0	30.9	0.0	19.7
Serve Time pre Blk (g_fs), s	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1022	0	706	0	0	0	0
V/C Ratio (X)	0.00	0.52	0.00	0.67	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1022	0	907	0	0	0	0
Upstream Filter (I)	0.00	0.62	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.9	0.0	18.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	1.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.1	0.0	19.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	5.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.69	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.6	0.0	9.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.48	0.00	0.50	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	2	0	1
Grp Vol (v), veh/h	0	460	0	0	0	892	0	0
Grp Sat Flow (s), veh/h/ln	0	1617	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	11.6	0.0	0.0	0.0	9.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.6	0.0	0.0	0.0	9.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	832	0	0	0	1829	0	615
V/C Ratio (X)	0.00	0.55	0.00	0.00	0.00	0.49	0.00	0.00
Avail Cap (c_a), veh/h	0	832	0	0	0	1829	0	826
Upstream Filter (I)	0.00	0.62	0.00	0.00	0.00	0.76	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.9	0.0	0.0	0.0	9.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.5	0.0	0.0	0.0	10.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.2	0.0	0.0	0.0	3.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.68	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.0	0.0	0.0	0.0	5.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.00	0.00	0.10	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	410	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1578	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	14.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	519	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	697	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.72	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	347	84	96	948	158	247	718	110	165	617	478
Future Volume (veh/h)	53	347	84	96	948	158	247	718	110	165	617	478
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	377	91	104	1030	172	268	780	120	179	671	520
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	893	213	400	995	166	300	1174	516	306	1174	516
Arrive On Green	0.06	0.32	0.32	0.07	0.33	0.33	0.08	0.33	0.33	0.08	0.33	0.33
Sat Flow, veh/h	1781	2832	675	1781	3037	506	1781	3554	1561	1781	3554	1561
Grp Volume(v), veh/h	58	235	233	104	602	600	268	780	120	179	671	520
Grp Sat Flow(s),veh/h/ln	1781	1777	1730	1781	1777	1766	1781	1777	1561	1781	1777	1561
Q Serve(g_s), s	1.9	9.4	9.6	3.4	29.5	29.5	7.0	16.9	5.0	5.9	14.0	29.7
Cycle Q Clear(g_c), s	1.9	9.4	9.6	3.4	29.5	29.5	7.0	16.9	5.0	5.9	14.0	29.7
Prop In Lane	1.00		0.39	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	560	546	400	582	579	300	1174	516	306	1174	516
V/C Ratio(X)	0.31	0.42	0.43	0.26	1.03	1.04	0.89	0.66	0.23	0.58	0.57	1.01
Avail Cap(c_a), veh/h	219	582	567	410	582	579	300	1174	516	306	1174	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	1.00	1.00	1.00	0.64	0.64	0.64	0.64	0.64	0.64
Uniform Delay (d), s/veh	22.7	24.3	24.4	18.5	30.3	30.3	25.4	25.8	21.9	19.8	24.9	30.1
Incr Delay (d2), s/veh	0.7	0.4	0.4	0.3	46.2	47.2	18.9	1.9	0.7	1.8	1.3	33.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	6.6	6.6	2.4	26.9	27.0	6.6	10.6	3.3	4.4	9.0	20.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	24.7	24.8	18.9	76.4	77.5	44.3	27.8	22.5	21.6	26.2	63.9
LnGrp LOS	C	C	C	B	F	F	D	C	C	C	C	F
Approach Vol, veh/h		526			1306			1168			1370	
Approach Delay, s/veh		24.6			72.3			31.0			39.9	
Approach LOS		C			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	35.1	9.4	34.5	11.0	35.1	10.5	33.4
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	9.0	31.7	3.9	31.5	7.9	18.9	5.4	11.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.8	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	45.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	347	84	96	948	158	247	718	110	165	617	478
Future Volume (veh/h)	53	347	84	96	948	158	247	718	110	165	617	478
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	377	91	104	1030	172	268	780	120	179	671	520
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	186	893	213	400	995	166	300	1174	516	306	1174	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.32	0.32	0.07	0.33	0.33	0.08	0.33	0.33	0.08	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.4	24.7	24.8	18.9	76.4	77.5	44.3	27.8	22.5	21.6	26.2	63.9
Ln Grp LOS	C	C	C	B	F	F	D	C	C	C	C	F
Approach Vol, veh/h		526			1306			1168			1370	
Approach Delay, s/veh		24.6			72.3			31.0			39.9	
Approach LOS		C			E			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	11.0	35.1	9.4	34.5	11.0	35.1	10.5	33.4
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.6	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+l1), s	9.0	31.7	3.9	31.5	7.9	18.9	5.4	11.6
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	3.8	0.0	2.4
Prob of Phs Call (p_c)	1.00	1.00	0.77	1.00	0.99	1.00	0.93	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.02

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3037		3554		2832

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1561		506		1561		675

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	268	0	58	0	179	0	104	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	1.9	0.0	5.9	0.0	3.4	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	1.9	0.0	5.9	0.0	3.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	469	0	465	0	618	0	918	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	29.7	0.0	28.4	0.0	29.7	0.0	28.4	0.0
Perm LT Serve Time (g_u), s	15.7	0.0	0.0	0.0	12.8	0.0	18.8	0.0
Perm LT Q Serve Time (g_ps), s	15.7	0.0	0.0	0.0	6.9	0.0	1.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	300	0	186	0	306	0	400	0
V/C Ratio (X)	0.89	0.00	0.31	0.00	0.58	0.00	0.26	0.00
Avail Cap (c_a), veh/h	300	0	219	0	306	0	410	0
Upstream Filter (I)	0.64	0.00	0.78	0.00	0.64	0.00	1.00	0.00
Uniform Delay (d1), s/veh	25.4	0.0	22.7	0.0	19.8	0.0	18.5	0.0
Incr Delay (d2), s/veh	18.9	0.0	0.7	0.0	1.8	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	44.3	0.0	23.4	0.0	21.6	0.0	18.9	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.7	0.0	2.3	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	1.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.66	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	6.6	0.0	1.4	0.0	4.4	0.0	2.4	0.0
%ile Storage Ratio (RQ%)	0.96	0.00	0.29	0.00	0.64	0.00	0.62	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	671	0	602	0	780	0	235
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	14.0	0.0	29.5	0.0	16.9	0.0	9.4
Cycle Q Clear Time (g_c), s	0.0	14.0	0.0	29.5	0.0	16.9	0.0	9.4
Lane Grp Cap (c), veh/h	0	1174	0	582	0	1174	0	560
V/C Ratio (X)	0.00	0.57	0.00	1.03	0.00	0.66	0.00	0.42
Avail Cap (c_a), veh/h	0	1174	0	582	0	1174	0	582
Upstream Filter (I)	0.00	0.64	0.00	1.00	0.00	0.64	0.00	0.78
Uniform Delay (d1), s/veh	0.0	24.9	0.0	30.3	0.0	25.8	0.0	24.3
Incr Delay (d2), s/veh	0.0	1.3	0.0	46.2	0.0	1.9	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.2	0.0	76.4	0.0	27.8	0.0	24.7
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	11.7	0.0	6.8	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	7.5	0.0	0.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.54	0.00	1.41	0.00	1.49	0.00	1.74
%ile Back of Q (95%), veh/ln	0.0	9.0	0.0	26.9	0.0	10.6	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.54	0.00	0.41	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	520	0	600	0	120	0	233
Grp Sat Flow (s), veh/h/ln	0	1561	0	1766	0	1561	0	1730
Q Serve Time (g_s), s	0.0	29.7	0.0	29.5	0.0	5.0	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	29.7	0.0	29.5	0.0	5.0	0.0	9.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.29	0.00	1.00	0.00	0.39
Lane Grp Cap (c), veh/h	0	516	0	579	0	516	0	546
V/C Ratio (X)	0.00	1.01	0.00	1.04	0.00	0.23	0.00	0.43
Avail Cap (c_a), veh/h	0	516	0	579	0	516	0	567
Upstream Filter (I)	0.00	0.64	0.00	1.00	0.00	0.64	0.00	0.78
Uniform Delay (d1), s/veh	0.0	30.1	0.0	30.3	0.0	21.9	0.0	24.4
Incr Delay (d2), s/veh	0.0	33.8	0.0	47.2	0.0	0.7	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	63.9	0.0	77.5	0.0	22.5	0.0	24.8
1st-Term Q (Q1), veh/ln	0.0	10.3	0.0	11.6	0.0	1.7	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	4.8	0.0	7.6	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.34	0.00	1.41	0.00	1.80	0.00	1.75
%ile Back of Q (95%), veh/ln	0.0	20.4	0.0	27.0	0.0	3.3	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	3.98	0.00	0.54	0.00	0.65	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	1.1	0.0	5.3	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	45.4
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	351	93	59	486	73	178	928	39	30	634	141
Future Volume (veh/h)	74	351	93	59	486	73	178	928	39	30	634	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	382	101	64	528	79	193	1009	42	33	689	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	552	146	268	726	608	290	1523	63	232	1261	280
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	811	1422	376	908	1870	1567	650	3472	145	535	2874	638
Grp Volume(v), veh/h	80	0	483	64	528	79	193	516	535	33	426	416
Grp Sat Flow(s),veh/h/ln	811	0	1797	908	1870	1567	650	1777	1840	535	1777	1735
Q Serve(g_s), s	5.6	0.0	13.5	3.8	14.4	1.9	15.7	13.8	13.8	3.1	10.6	10.6
Cycle Q Clear(g_c), s	20.0	0.0	13.5	17.3	14.4	1.9	26.3	13.8	13.8	16.9	10.6	10.6
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.08	1.00		0.37
Lane Grp Cap(c), veh/h	240	0	698	268	726	608	290	779	807	232	779	761
V/C Ratio(X)	0.33	0.00	0.69	0.24	0.73	0.13	0.67	0.66	0.66	0.14	0.55	0.55
Avail Cap(c_a), veh/h	263	0	749	294	779	653	290	779	807	232	779	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	24.2	0.0	15.4	22.6	15.6	11.8	23.1	13.3	13.3	20.0	12.4	12.4
Incr Delay (d2), s/veh	0.8	0.0	2.5	0.5	3.2	0.1	11.5	4.4	4.3	1.0	2.1	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	8.9	1.4	9.8	1.1	6.2	9.3	9.6	0.8	6.8	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	0.0	17.9	23.0	18.8	11.9	34.6	17.7	17.6	21.0	14.6	14.6
LnGrp LOS	C	A	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		563			671			1244			875	
Approach Delay, s/veh		18.9			18.4			20.3			14.8	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	31.3	28.7	31.3	28.7
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	28.3	22.0	18.9	19.3
Green Ext Time (p_c), s	0.0	1.0	2.7	1.9

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	351	93	59	486	73	178	928	39	30	634	141
Future Volume (veh/h)	74	351	93	59	486	73	178	928	39	30	634	141
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	382	101	64	528	79	193	1009	42	33	689	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	240	552	146	268	726	608	290	1523	63	232	1261	280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.44	0.44	0.44	0.44	0.44	0.44
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.0	0.0	17.9	23.0	18.8	11.9	34.6	17.7	17.6	21.0	14.6	14.6
Ln Grp LOS	C	A	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		563			671			1244			875	
Approach Delay, s/veh		18.9			18.4			20.3			14.8	
Approach LOS		B			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		31.3		28.7		31.3		28.7
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		5.4		5.2		5.3		5.0
Max Q Clear (g_c+I1), s		28.3		22.0		18.9		19.3
Green Ext Time (g_e), s		0.0		1.0		2.7		1.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.87

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		650		811		535		908

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3472		1422		2874		1870

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		145		376		638		1567

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	193	0	80	0	33	0	64
Grp Sat Flow (s), veh/h/ln	0	650	0	811	0	535	0	908
Q Serve Time (g_s), s	0.0	15.7	0.0	5.6	0.0	3.1	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	26.3	0.0	20.0	0.0	16.9	0.0	17.3
Perm LT Sat Flow (s_l), veh/h/ln	0	650	0	811	0	535	0	908
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	26.3	0.0	23.3	0.0	26.3	0.0	23.3
Perm LT Serve Time (g_u), s	0.0	15.7	0.0	8.8	0.0	12.5	0.0	9.8
Perm LT Q Serve Time (g_ps), s	0.0	15.7	0.0	5.6	0.0	3.1	0.0	3.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	290	0	240	0	232	0	268
V/C Ratio (X)	0.00	0.67	0.00	0.33	0.00	0.14	0.00	0.24
Avail Cap (c_a), veh/h	0	290	0	263	0	232	0	294
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.77	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	24.2	0.0	20.0	0.0	22.6
Incr Delay (d2), s/veh	0.0	11.5	0.0	0.8	0.0	1.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.6	0.0	25.0	0.0	21.0	0.0	23.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	1.0	0.0	0.4	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	6.2	0.0	1.9	0.0	0.8	0.0	1.4
%ile Storage Ratio (RQ%)	0.00	1.58	0.00	0.47	0.00	0.19	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	516	0	0	0	426	0	528
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	13.8	0.0	0.0	0.0	10.6	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	13.8	0.0	0.0	0.0	10.6	0.0	14.4
Lane Grp Cap (c), veh/h	0	779	0	0	0	779	0	726
V/C Ratio (X)	0.00	0.66	0.00	0.00	0.00	0.55	0.00	0.73
Avail Cap (c_a), veh/h	0	779	0	0	0	779	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.77	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.3	0.0	0.0	0.0	12.4	0.0	15.6
Incr Delay (d2), s/veh	0.0	4.4	0.0	0.0	0.0	2.1	0.0	3.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.7	0.0	0.0	0.0	14.6	0.0	18.8
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	0.0	0.0	3.5	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.0	0.0	0.5	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	0.00	1.00	0.00	1.72	0.00	1.68
%ile Back of Q (95%), veh/ln	0.0	9.3	0.0	0.0	0.0	6.8	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.36	0.00	0.00	0.00	0.26	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	535	0	483	0	416	0	79
Grp Sat Flow (s), veh/h/ln	0	1840	0	1797	0	1735	0	1567
Q Serve Time (g_s), s	0.0	13.8	0.0	13.5	0.0	10.6	0.0	1.9
Cycle Q Clear Time (g_c), s	0.0	13.8	0.0	13.5	0.0	10.6	0.0	1.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	0.21	0.00	0.37	0.00	1.00
Lane Grp Cap (c), veh/h	0	807	0	698	0	761	0	608
V/C Ratio (X)	0.00	0.66	0.00	0.69	0.00	0.55	0.00	0.13
Avail Cap (c_a), veh/h	0	807	0	749	0	761	0	653
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.77	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.3	0.0	15.4	0.0	12.4	0.0	11.8
Incr Delay (d2), s/veh	0.0	4.3	0.0	2.5	0.0	2.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.6	0.0	17.9	0.0	14.6	0.0	11.9
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	4.7	0.0	3.4	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.5	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.69	0.00	1.72	0.00	1.73	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	9.6	0.0	8.9	0.0	6.7	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.26	0.00	0.26	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/11/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	172	226	431	142	12	137	384	126	22	519	20	99
Future Volume (vph)	172	226	431	142	12	137	384	126	22	519	20	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.98	0.96			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		0.99	1.00		
Frt	1.00	0.92	0.85			1.00	0.96		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1650	2851	1287			1649	3161		1642	3185		
Flt Permitted	0.21	1.00	1.00			0.19	1.00		0.41	1.00		
Satd. Flow (perm)	372	2851	1287			336	3161		702	3185		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	187	246	468	154	13	149	417	137	24	564	22	108
RTOR Reduction (vph)	0	0	148	0	0	0	23	0	0	11	0	0
Lane Group Flow (vph)	187	555	165	0	0	162	531	0	24	683	0	0
Confl. Peds. (#/hr)	9		11	8	11	8		9	9		7	11
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	39.6	28.8	28.8			38.3	28.7		29.7	29.7		
Effective Green, g (s)	39.6	28.8	28.8			38.3	28.7		29.7	29.7		
Actuated g/C Ratio	0.28	0.21	0.21			0.27	0.20		0.21	0.21		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	203	586	264			181	648		148	675		
v/s Ratio Prot	c0.07	c0.19				0.06	0.17			c0.21		
v/s Ratio Perm	0.19		0.13			0.18			0.03			
v/c Ratio	0.92	1.09dr	0.63			0.90	0.82		0.16	1.01		
Uniform Delay, d1	44.1	54.8	50.7			44.2	53.2		45.0	55.1		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	41.6	26.2	10.7			38.5	11.1		2.3	37.6		
Delay (s)	85.6	81.0	61.4			82.7	64.3		47.3	92.8		
Level of Service	F	F	E			F	E		D	F		
Approach Delay (s)		76.0					68.4			91.2		
Approach LOS		E					E			F		

Intersection Summary			
HCM 2000 Control Delay	67.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	106.8%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	21	59	485	110	44	415	166	15
Future Volume (vph)	21	59	485	110	44	415	166	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	1.00			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.97			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1652	3196			3196	1345	
Flt Permitted		0.11	1.00			0.95	1.00	
Satd. Flow (perm)		194	3196			3196	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	64	527	120	48	451	180	16
RTOR Reduction (vph)	0	0	14	0	0	0	144	0
Lane Group Flow (vph)	0	87	633	0	0	517	34	0
Confl. Peds. (#/hr)	7	11		9	8	9	9	7
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		47.9	47.9			26.9	26.9	
Effective Green, g (s)		47.9	47.9			26.9	26.9	
Actuated g/C Ratio		0.34	0.34			0.19	0.19	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		191	1093			614	258	
v/s Ratio Prot		0.04	c0.20			c0.16	0.03	
v/s Ratio Perm		0.12						
v/c Ratio		0.46	0.58			0.84	0.13	
Uniform Delay, d1		35.2	37.8			54.5	46.9	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.7	2.2			11.0	0.4	
Delay (s)		36.9	40.0			65.5	47.3	
Level of Service		D	D			E	D	
Approach Delay (s)			39.7			60.8		
Approach LOS			D			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	20	57	239	71	65	20	47	314	57	41	70	131
Future Volume (vph)	20	57	239	71	65	20	47	314	57	41	70	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.98				1.00	0.99			1.00	1.00
Flpb, ped/bikes		0.98	1.00				0.98	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.96			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1614	3066				1620	3138			1652	1652
Flt Permitted		0.28	1.00				0.33	1.00			0.95	0.95
Satd. Flow (perm)		480	3066				556	3138			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	62	260	77	71	22	51	341	62	45	76	142
RTOR Reduction (vph)	0	0	10	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	84	398	0	0	0	73	443	0	0	76	142
Confl. Peds. (#/hr)	12	27		17	13	17	13		12	27	24	12
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		35.2	35.2				35.2	35.2			20.0	20.0
Effective Green, g (s)		35.2	35.2				35.2	35.2			20.0	20.0
Actuated g/C Ratio		0.20	0.20				0.20	0.20			0.11	0.11
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		93	599				108	613			183	183
v/s Ratio Prot			0.13					0.14			0.05	0.09
v/s Ratio Perm		c0.17					0.13					
v/c Ratio		0.90	0.66				0.68	0.72			0.42	0.78
Uniform Delay, d1		70.7	66.9				67.1	67.8			74.6	77.8
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		62.4	2.8				15.5	4.2			1.5	18.4
Delay (s)		133.1	69.7				82.6	72.0			76.1	96.2
Level of Service		F	E				F	E			E	F
Approach Delay (s)			80.5					73.5				
Approach LOS			F					E				

Intersection Summary			
HCM 2000 Control Delay	68.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	158.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SEL2	SEL	SET	SER
Lane Configurations												
Traffic Volume (vph)	513	45	22	30	122	470	65	6	6	62	448	169
Future Volume (vph)	513	45	22	30	122	470	65	6	6	62	448	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Lane Util. Factor	0.95	1.00			1.00	0.95	1.00			1.00	0.91	0.91
Frpb, ped/bikes	1.00	0.88			1.00	1.00	0.95			1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00			0.99	1.00	1.00
Frt	1.00	0.85			1.00	1.00	0.85			1.00	0.99	0.85
Flt Protected	1.00	1.00			0.95	1.00	1.00			0.95	1.00	1.00
Satd. Flow (prot)	3303	1300			1652	3303	1400			1628	3145	1312
Flt Permitted	1.00	1.00			0.95	1.00	1.00			0.19	1.00	1.00
Satd. Flow (perm)	3303	1300			1652	3303	1400			328	3145	1312
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	558	49	24	33	133	511	71	7	7	67	487	184
RTOR Reduction (vph)	0	57	0	0	0	0	60	0	0	0	0	0
Lane Group Flow (vph)	558	16	0	0	166	511	18	0	0	74	505	166
Confl. Peds. (#/hr)		24	17	24	17		24	12	27	24		13
Turn Type	NA	Perm		Prot	Prot	NA	Perm		Perm	Perm	NA	Perm
Protected Phases	6			5	5	2					10	
Permitted Phases		6					2		10	10		10
Actuated Green, G (s)	40.3	40.3			21.0	41.5	41.5			55.6	55.6	55.6
Effective Green, g (s)	40.3	40.3			21.0	41.5	41.5			55.6	55.6	55.6
Actuated g/C Ratio	0.22	0.22			0.12	0.23	0.23			0.31	0.31	0.31
Clearance Time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	739	291			192	761	322			101	971	405
v/s Ratio Prot	c0.17				c0.10	0.15					0.16	
v/s Ratio Perm		0.01					0.01			0.23		0.13
v/c Ratio	0.76	0.06			0.86	0.67	0.06			0.73	0.52	0.41
Uniform Delay, d1	65.2	54.9			78.1	63.0	54.0			55.6	51.2	49.2
Progression Factor	1.00	1.00			1.25	0.80	3.40			1.00	1.00	1.00
Incremental Delay, d2	7.1	0.4			16.5	2.2	0.1			23.7	0.5	0.7
Delay (s)	72.3	55.3			113.8	52.8	183.7			79.3	51.7	49.9
Level of Service	E	E			F	D	F			E	D	D
Approach Delay (s)	75.2					79.7					53.9	
Approach LOS	E					E					D	

Intersection Summary

Movement	SER2	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	7	68	621	271	42
Future Volume (vph)	7	68	621	271	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	7.6	7.6	7.6	7.6	
Lane Util. Factor	1.00	1.00	0.91	0.91	
Frpb, ped/bikes	0.94	1.00	1.00	0.94	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	
Frt	0.85	1.00	0.99	0.85	
Flt Protected	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1392	1649	3135	1263	
Flt Permitted	1.00	0.33	1.00	1.00	
Satd. Flow (perm)	1392	578	3135	1263	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	74	675	295	46
RTOR Reduction (vph)	6	0	0	72	0
Lane Group Flow (vph)	2	74	710	234	0
Confl. Peds. (#/hr)	24	2		27	24
Turn Type	Perm	Perm	NA	Perm	
Protected Phases			14		
Permitted Phases	10	14		14	
Actuated Green, G (s)	55.6	55.6	55.6	55.6	
Effective Green, g (s)	55.6	55.6	55.6	55.6	
Actuated g/C Ratio	0.31	0.31	0.31	0.31	
Clearance Time (s)	7.6	7.6	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	429	178	968	390	
v/s Ratio Prot			c0.23		
v/s Ratio Perm	0.00	0.13		0.19	
v/c Ratio	0.01	0.42	0.73	0.60	
Uniform Delay, d1	43.1	49.3	55.6	52.8	
Progression Factor	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.6	2.9	2.6	
Delay (s)	43.1	50.9	58.5	55.4	
Level of Service	D	D	E	E	
Approach Delay (s)			57.1		
Approach LOS			E		

Intersection Summary

Future without Project Conditions – Year 2037

Morning Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1709	7	0	1371	0	1	0	67	817	29	252
Future Volume (veh/h)	0	1709	7	0	1371	0	1	0	67	817	29	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1858	8	0	1490	0	1	0	73	597	439	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2117	9	0	1434	0	2	0	130	590	356	222
Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Sat Flow, veh/h	0	5416	23	0	3741	0	21	0	1547	1781	1075	671
Grp Volume(v), veh/h	0	1205	661	0	1490	0	74	0	0	597	0	713
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1569	0	0	1781	0	1747
Q Serve(g_s), s	0.0	29.4	29.4	0.0	36.3	0.0	4.1	0.0	0.0	29.8	0.0	29.8
Cycle Q Clear(g_c), s	0.0	29.4	29.4	0.0	36.3	0.0	4.1	0.0	0.0	29.8	0.0	29.8
Prop In Lane	0.00		0.01	0.00		0.00	0.01		0.99	1.00		0.38
Lane Grp Cap(c), veh/h	0	1374	753	0	1434	0	132	0	0	590	0	578
V/C Ratio(X)	0.00	0.88	0.88	0.00	1.04	0.00	0.56	0.00	0.00	1.01	0.00	1.23
Avail Cap(c_a), veh/h	0	1374	753	0	1434	0	157	0	0	590	0	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.8	24.8	0.0	26.8	0.0	39.6	0.0	0.0	30.1	0.0	30.1
Incr Delay (d2), s/veh	0.0	8.2	13.7	0.0	34.6	0.0	3.7	0.0	0.0	40.1	0.0	119.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	18.1	21.0	0.0	29.0	0.0	3.1	0.0	0.0	25.6	0.0	45.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	33.0	38.5	0.0	61.4	0.0	43.3	0.0	0.0	70.2	0.0	149.4
LnGrp LOS	A	C	D	A	F	A	D	A	A	F	A	F
Approach Vol, veh/h		1866			1490			74			1310	
Approach Delay, s/veh		34.9			61.4			43.3			113.3	
Approach LOS		C			E			D			F	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	41.4	35.0	41.4	13.6
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	31.4	31.8	38.3	6.1
Green Ext Time (p_c), s	2.9	0.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	65.0
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1709	7	0	1371	0	1	0	67	817	29	252
Future Volume (veh/h)	0	1709	7	0	1371	0	1	0	67	817	29	252
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1858	8	0	1490	0	1	0	73	597	439	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2117	9	0	1434	0	2	0	130	590	356	222
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	33.0	38.5	0.0	61.4	0.0	43.3	0.0	0.0	70.2	0.0	149.4
Ln Grp LOS	A	C	D	A	F	A	D	A	A	F	A	F
Approach Vol, veh/h		1866			1490			74			1310	
Approach Delay, s/veh		34.9			61.4			43.3			113.3	
Approach LOS		C			E			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		41.4	13.6	35.0		41.4		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		31.4	6.1	31.8		38.3		
Green Ext Time (g_e), s		2.9	0.1	0.0		0.0		
Prob of Phs Call (p_c)		1.00	0.85	1.00		1.00		
Prob of Max Out (p_x)		1.00	1.00	1.00		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	21	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5416	0	1075		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		23	1547	671		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	74	597	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1569	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	4.1	29.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	4.1	29.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	36.3	0.0	0.0	0.0	36.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	132	590	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.56	1.01	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	157	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	39.6	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.7	40.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	43.3	70.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.6	11.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	6.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.39	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	3.1	25.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.28	2.74	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1205	0	0	0	1490	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	29.4	0.0	0.0	0.0	36.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.4	0.0	0.0	0.0	36.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1374	0	0	0	1434	0	0
V/C Ratio (X)	0.00	0.88	0.00	0.00	0.00	1.04	0.00	0.00
Avail Cap (c_a), veh/h	0	1374	0	0	0	1434	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.8	0.0	0.0	0.0	26.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.2	0.0	0.0	0.0	34.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.0	0.0	0.0	0.0	61.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.8	0.0	0.0	0.0	13.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	0.0	0.0	6.9	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.47	1.00	1.00	0.00	1.40	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	18.1	0.0	0.0	0.0	29.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	0.00	0.00	4.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	14.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	661	0	713	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1747	0	0	0	0
Q Serve Time (g_s), s	0.0	29.4	0.0	29.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.4	0.0	29.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.99	0.38	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	753	0	578	0	0	0	0
V/C Ratio (X)	0.00	0.88	0.00	1.23	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	753	0	578	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.8	0.0	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	13.7	0.0	119.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.5	0.0	149.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.8	0.0	11.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.9	0.0	19.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.43	1.00	1.47	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	21.0	0.0	45.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.89	0.00	4.84	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	33.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.0
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1181	178	86	1625	35	170	361	120	72	375	269
Future Volume (veh/h)	70	1181	178	86	1625	35	170	361	120	72	375	269
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.95	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	1284	193	93	1766	38	185	392	130	78	408	292
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	216	1860	815	171	1860	815	205	657	528	235	657	528
Arrive On Green	0.52	0.52	0.52	1.00	1.00	1.00	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	260	3554	1558	358	3554	1558	737	1870	1505	866	1870	1505
Grp Volume(v), veh/h	76	1284	193	93	1766	38	185	392	130	78	408	292
Grp Sat Flow(s),veh/h/ln	260	1777	1558	358	1777	1558	737	1870	1505	866	1870	1505
Q Serve(g_s), s	17.7	24.3	6.1	22.8	0.0	0.0	15.3	15.5	5.5	7.3	16.3	14.1
Cycle Q Clear(g_c), s	17.7	24.3	6.1	47.1	0.0	0.0	31.6	15.5	5.5	22.8	16.3	14.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	1860	815	171	1860	815	205	657	528	235	657	528
V/C Ratio(X)	0.35	0.69	0.24	0.54	0.95	0.05	0.90	0.60	0.25	0.33	0.62	0.55
Avail Cap(c_a), veh/h	216	1860	815	171	1860	815	205	657	528	235	657	528
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.50	0.50	0.50	0.63	0.63	0.63	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	16.0	11.7	12.4	0.0	0.0	39.8	24.0	20.7	33.3	24.2	23.5
Incr Delay (d2), s/veh	4.4	2.1	0.7	6.1	7.0	0.1	26.5	0.9	0.2	0.8	1.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	14.1	3.7	2.7	3.2	0.0	8.6	9.9	3.3	2.7	11.4	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	18.1	12.4	18.5	7.0	0.1	66.3	24.9	20.9	34.1	26.0	24.8
LnGrp LOS	B	B	B	B	A	A	E	C	C	C	C	C
Approach Vol, veh/h		1553			1897			707			778	
Approach Delay, s/veh		17.5			7.4			35.0			26.4	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	52.6	37.4	52.6	37.4
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 47	31.6	* 47	31.6
Max Q Clear Time (g_c+I1), s	26.3	33.6	49.1	24.8
Green Ext Time (p_c), s	12.0	0.0	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1181	178	86	1625	35	170	361	120	72	375	269
Future Volume (veh/h)	70	1181	178	86	1625	35	170	361	120	72	375	269
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	0.99		0.95	0.98		0.95
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	1284	193	93	1766	38	185	392	130	78	408	292
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	216	1860	815	171	1860	815	205	657	528	235	657	528
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.52	0.52	0.52	1.00	1.00	1.00	0.35	0.35	0.35	0.35	0.35	0.35
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.9	18.1	12.4	18.5	7.0	0.1	66.3	24.9	20.9	34.1	26.0	24.8
Ln Grp LOS	B	B	B	B	A	A	E	C	C	C	C	C
Approach Vol, veh/h		1553			1897			707			778	
Approach Delay, s/veh		17.5			7.4			35.0			26.4	
Approach LOS		B			A			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		52.6		37.4		52.6		37.4
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 47		31.6		* 47		31.6
Max Allow Headway (MAH), s		5.3		5.1		5.3		4.7
Max Q Clear (g_c+l1), s		26.3		33.6		49.1		24.8
Green Ext Time (g_e), s		12.0		0.0		0.0		2.3
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.65
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		260		737		358		866
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1558		1505		1558		1505
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	76	0	185	0	93	0	78
Grp Sat Flow (s), veh/h/ln	0	260	0	737	0	358	0	866
Q Serve Time (g_s), s	0.0	17.7	0.0	15.3	0.0	22.8	0.0	7.3
Cycle Q Clear Time (g_c), s	0.0	17.7	0.0	31.6	0.0	47.1	0.0	22.8
Perm LT Sat Flow (s_l), veh/h/ln	0	260	0	737	0	358	0	866
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.1	0.0	31.6	0.0	47.1	0.0	31.6
Perm LT Serve Time (g_u), s	0.0	47.1	0.0	15.3	0.0	22.8	0.0	16.1
Perm LT Q Serve Time (g_ps), s	0.0	17.7	0.0	15.3	0.0	22.8	0.0	7.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	216	0	205	0	171	0	235
V/C Ratio (X)	0.00	0.35	0.00	0.90	0.00	0.54	0.00	0.33
Avail Cap (c_a), veh/h	0	216	0	205	0	171	0	235
Upstream Filter (I)	0.00	1.00	0.00	0.63	0.00	0.50	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.4	0.0	39.8	0.0	12.4	0.0	33.3
Incr Delay (d2), s/veh	0.0	4.4	0.0	26.5	0.0	6.1	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.9	0.0	66.3	0.0	18.5	0.0	34.1
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	4.0	0.0	1.2	0.0	1.5
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	1.5	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.55	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.1	0.0	8.6	0.0	2.7	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	3.35	0.00	0.49	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1284	0	392	0	1766	0	408
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	24.3	0.0	15.5	0.0	0.0	0.0	16.3
Cycle Q Clear Time (g_c), s	0.0	24.3	0.0	15.5	0.0	0.0	0.0	16.3
Lane Grp Cap (c), veh/h	0	1860	0	657	0	1860	0	657
V/C Ratio (X)	0.00	0.69	0.00	0.60	0.00	0.95	0.00	0.62
Avail Cap (c_a), veh/h	0	1860	0	657	0	1860	0	657
Upstream Filter (I)	0.00	1.00	0.00	0.63	0.00	0.50	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.0	0.0	24.0	0.0	0.0	0.0	24.2
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.9	0.0	7.0	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.1	0.0	24.9	0.0	7.0	0.0	26.0
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	6.4	0.0	0.0	0.0	6.7
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.2	0.0	1.8	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.54	0.00	1.51	0.00	1.80	0.00	1.62
%ile Back of Q (95%), veh/ln	0.0	14.1	0.0	9.9	0.0	3.2	0.0	11.4
%ile Storage Ratio (RQ%)	0.00	3.04	0.00	0.21	0.00	0.29	0.00	0.77
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	193	0	130	0	38	0	292
Grp Sat Flow (s), veh/h/ln	0	1558	0	1505	0	1558	0	1505
Q Serve Time (g_s), s	0.0	6.1	0.0	5.5	0.0	0.0	0.0	14.1
Cycle Q Clear Time (g_c), s	0.0	6.1	0.0	5.5	0.0	0.0	0.0	14.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	815	0	528	0	815	0	528
V/C Ratio (X)	0.00	0.24	0.00	0.25	0.00	0.05	0.00	0.55
Avail Cap (c_a), veh/h	0	815	0	528	0	815	0	528
Upstream Filter (I)	0.00	1.00	0.00	0.63	0.00	0.50	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.7	0.0	20.7	0.0	0.0	0.0	23.5
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.2	0.0	0.1	0.0	1.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.4	0.0	20.9	0.0	0.1	0.0	24.8
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	1.8	0.0	0.0	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.75
%ile Back of Q (95%), veh/ln	0.0	3.7	0.0	3.3	0.0	0.0	0.0	8.4
%ile Storage Ratio (RQ%)	0.00	0.85	0.00	0.89	0.00	0.01	0.00	2.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
4: SR 170 NB Off-Ramp/Troost Ave & Burbank Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1411	0	0	1043	3	490	23	243	13	0	58
Future Volume (veh/h)	11	1411	0	0	1043	3	490	23	243	13	0	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1534	0	0	1134	3	411	196	264	14	0	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	183	1637	0	0	1637	724	477	193	260	28	0	125
Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.27	0.27	0.27	0.09	0.00	0.09
Sat Flow, veh/h	495	3647	0	0	3647	1571	1781	722	972	293	0	1320
Grp Volume(v), veh/h	12	1534	0	0	1134	3	411	0	460	77	0	0
Grp Sat Flow(s),veh/h/ln	495	1777	0	0	1777	1571	1781	0	1694	1614	0	0
Q Serve(g_s), s	1.3	22.4	0.0	0.0	22.7	0.1	19.8	0.0	24.1	4.1	0.0	0.0
Cycle Q Clear(g_c), s	24.1	22.4	0.0	0.0	22.7	0.1	19.8	0.0	24.1	4.1	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.57	0.18		0.82
Lane Grp Cap(c), veh/h	183	1637	0	0	1637	724	477	0	454	153	0	0
V/C Ratio(X)	0.07	0.94	0.00	0.00	0.69	0.00	0.86	0.00	1.01	0.50	0.00	0.00
Avail Cap(c_a), veh/h	183	1637	0	0	1637	724	477	0	454	179	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.00	0.00	0.28	0.28	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.8	2.8	0.0	0.0	19.2	13.1	31.4	0.0	33.0	38.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	8.7	0.0	0.0	0.7	0.0	14.9	0.0	45.8	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	5.6	0.0	0.0	11.1	0.1	15.1	0.0	21.6	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.3	11.4	0.0	0.0	19.9	13.1	46.2	0.0	78.8	41.2	0.0	0.0
LnGrp LOS	B	B	A	A	B	B	D	A	F	D	A	A
Approach Vol, veh/h		1546			1137			871			77	
Approach Delay, s/veh		11.4			19.9			63.4			41.2	
Approach LOS		B			B			E			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	46.6	13.9	46.6	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	26.1	6.1	24.7	26.1
Green Ext Time (p_c), s	11.6	0.1	10.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1411	0	0	1043	3	490	23	243	13	0	58
Future Volume (veh/h)	11	1411	0	0	1043	3	490	23	243	13	0	58
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1534	0	0	1134	3	411	196	264	14	0	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	183	1637	0	0	1637	724	477	193	260	28	0	125
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.27	0.27	0.27	0.09	0.00	0.09
Unsig. Movement Delay												
Ln Grp Delay, s/veh	10.3	11.4	0.0	0.0	19.9	13.1	46.2	0.0	78.8	41.2	0.0	0.0
Ln Grp LOS	B	B	A	A	B	B	D	A	F	D	A	A
Approach Vol, veh/h		1546			1137			871			77	
Approach Delay, s/veh		11.4			19.9			63.4			41.2	
Approach LOS		B			B			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		46.6	29.5	13.9		46.6		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.8	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		26.1	26.1	6.1		24.7		
Green Ext Time (g_e), s		11.6	0.0	0.1		10.0		
Prob of Phs Call (p_c)		1.00	1.00	0.86		1.00		
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		495	1781	293		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	722	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	972	1320		1571		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	12	411	77	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	495	1781	1614	0	0	0	0
Q Serve Time (g_s), s	0.0	1.3	19.8	4.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.1	19.8	4.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	495	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.5	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	18.7	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	41.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.18	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	183	477	153	0	0	0	0
V/C Ratio (X)	0.00	0.07	0.86	0.50	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	183	477	179	0	0	0	0
Upstream Filter (I)	0.00	0.69	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.8	31.4	38.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	14.9	2.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.3	46.2	41.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.1	8.0	1.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.52	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.2	15.1	3.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.09	1.16	0.20	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1534	0	0	0	1134	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.4	0.0	0.0	0.0	22.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.4	0.0	0.0	0.0	22.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1637	0	0	0	1637	0	0
V/C Ratio (X)	0.00	0.94	0.00	0.00	0.00	0.69	0.00	0.00
Avail Cap (c_a), veh/h	0	1637	0	0	0	1637	0	0
Upstream Filter (I)	0.00	0.69	0.00	0.00	0.00	0.28	0.00	0.00
Uniform Delay (d1), s/veh	0.0	2.8	0.0	0.0	0.0	19.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.7	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.4	0.0	0.0	0.0	19.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	0.0	0.0	8.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.76	1.00	1.00	0.00	1.30	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	5.6	0.0	0.0	0.0	11.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	460	0	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1694	0	0	1571	0	0
Q Serve Time (g_s), s	0.0	0.0	24.1	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	24.1	0.0	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.57	0.82	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	454	0	0	724	0	0
V/C Ratio (X)	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	454	0	0	724	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.28	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.0	0.0	0.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	45.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	78.8	0.0	0.0	13.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.44	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	21.6	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.66	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	754	605	155	697	85	179	524	94	109	1268	49
Future Volume (veh/h)	167	754	605	155	697	85	179	524	94	109	1268	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	820	658	168	758	92	195	570	102	118	1378	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	597	631	186	966	117	208	662	538	230	1170	45
Arrive On Green	0.09	0.32	0.32	0.07	0.30	0.30	0.08	0.35	0.35	0.07	0.34	0.34
Sat Flow, veh/h	1781	1870	1563	1781	3184	386	1781	1870	1520	1781	3485	134
Grp Volume(v), veh/h	182	820	658	168	423	427	195	570	102	118	701	730
Grp Sat Flow(s),veh/h/ln	1781	1870	1563	1781	1777	1794	1781	1870	1520	1781	1777	1842
Q Serve(g_s), s	8.3	38.3	38.3	7.8	26.1	26.1	9.0	34.0	5.6	5.1	40.3	40.3
Cycle Q Clear(g_c), s	8.3	38.3	38.3	7.8	26.1	26.1	9.0	34.0	5.6	5.1	40.3	40.3
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	270	597	631	186	539	544	208	662	538	230	597	619
V/C Ratio(X)	0.67	1.37	1.04	0.90	0.78	0.79	0.94	0.86	0.19	0.51	1.18	1.18
Avail Cap(c_a), veh/h	300	597	631	186	539	544	208	662	538	248	597	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.45	0.45	0.45	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	40.8	35.9	31.5	38.2	38.2	31.7	36.0	26.9	28.0	39.8	39.9
Incr Delay (d2), s/veh	0.5	169.1	24.3	22.5	5.2	5.2	44.5	13.8	0.8	1.8	95.6	96.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.4	59.3	25.2	6.7	15.6	15.7	10.5	24.6	3.8	4.0	46.9	48.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.3	210.0	60.2	54.0	43.4	43.4	76.2	49.9	27.6	29.8	135.5	136.5
LnGrp LOS	C	F	F	D	D	D	E	D	C	C	F	F
Approach Vol, veh/h		1660			1018			867			1549	
Approach Delay, s/veh		130.8			45.1			53.2			127.9	
Approach LOS		F			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	44.0	16.0	46.0	15.9	42.1	13.8	48.2
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 8.5	* 38	10.0	* 40	* 12	* 34	9.0	* 41
Max Q Clear Time (g_c+I1), s	10.3	40.3	11.0	42.3	10.3	28.1	7.1	36.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	2.6	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	99.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	754	605	155	697	85	179	524	94	109	1268	49
Future Volume (veh/h)	167	754	605	155	697	85	179	524	94	109	1268	49
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	820	658	168	758	92	195	570	102	118	1378	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	270	597	631	186	966	117	208	662	538	230	1170	45
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.32	0.32	0.07	0.30	0.30	0.08	0.35	0.35	0.07	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	29.3	210.0	60.2	54.0	43.4	43.4	76.2	49.9	27.6	29.8	135.5	136.5
Ln Grp LOS	C	F	F	D	D	D	E	D	C	C	F	F
Approach Vol, veh/h		1660			1018			867			1549	
Approach Delay, s/veh		130.8			45.1			53.2			127.9	
Approach LOS		F			D			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	14.0	44.0	16.0	46.0	15.9	42.1	13.8	48.2
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 8.5	* 38	10.0	* 40	* 12	* 34	9.0	* 41
Max Allow Headway (MAH), s	3.7	4.6	3.8	5.1	3.7	5.0	3.8	5.0
Max Q Clear (g_c+l1), s	9.8	40.3	11.0	42.3	10.3	28.1	7.1	36.0
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.1	2.6	0.0	1.9
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3485		3184		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1563		134		386		1520

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	168	0	195	0	182	0	118	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.8	0.0	9.0	0.0	8.3	0.0	5.1	0.0
Cycle Q Clear Time (g_c), s	7.8	0.0	9.0	0.0	8.3	0.0	5.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	357	0	374	0	648	0	766	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	36.4	0.0	40.3	0.0	36.4	0.0	40.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	10.3	0.0	8.5	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	10.2	0.0	5.8	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	186	0	208	0	270	0	230	0
V/C Ratio (X)	0.90	0.00	0.94	0.00	0.67	0.00	0.51	0.00
Avail Cap (c_a), veh/h	186	0	208	0	300	0	248	0
Upstream Filter (I)	0.45	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	31.5	0.0	31.7	0.0	28.8	0.0	28.0	0.0
Incr Delay (d2), s/veh	22.5	0.0	44.5	0.0	0.5	0.0	1.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	54.0	0.0	76.2	0.0	29.3	0.0	29.8	0.0
1st-Term Q (Q1), veh/ln	3.2	0.0	3.8	0.0	3.4	0.0	2.1	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	2.6	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.52	0.00	1.65	0.00	1.26	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	6.7	0.0	10.5	0.0	4.4	0.0	4.0	0.0
%ile Storage Ratio (RQ%)	1.07	0.00	3.69	0.00	0.40	0.00	0.80	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	820	0	701	0	423	0	570
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	38.3	0.0	40.3	0.0	26.1	0.0	34.0
Cycle Q Clear Time (g_c), s	0.0	38.3	0.0	40.3	0.0	26.1	0.0	34.0
Lane Grp Cap (c), veh/h	0	597	0	597	0	539	0	662
V/C Ratio (X)	0.00	1.37	0.00	1.18	0.00	0.78	0.00	0.86
Avail Cap (c_a), veh/h	0	597	0	597	0	539	0	662
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.45	0.00	1.00
Uniform Delay (d1), s/veh	0.0	40.8	0.0	39.8	0.0	38.2	0.0	36.0
Incr Delay (d2), s/veh	0.0	169.1	0.0	95.6	0.0	5.2	0.0	13.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	210.0	0.0	135.5	0.0	43.4	0.0	49.9
1st-Term Q (Q1), veh/ln	0.0	17.0	0.0	17.1	0.0	11.0	0.0	15.1
2nd-Term Q (Q2), veh/ln	0.0	28.0	0.0	15.9	0.0	0.8	0.0	2.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.32	0.00	1.43	0.00	1.32	0.00	1.39
%ile Back of Q (95%), veh/ln	0.0	59.3	0.0	46.9	0.0	15.6	0.0	24.6
%ile Storage Ratio (RQ%)	0.00	0.69	0.00	9.32	0.00	0.16	0.00	8.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	55.8	0.0	26.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	658	0	730	0	427	0	102
Grp Sat Flow (s), veh/h/ln	0	1563	0	1842	0	1794	0	1520
Q Serve Time (g_s), s	0.0	38.3	0.0	40.3	0.0	26.1	0.0	5.6
Cycle Q Clear Time (g_c), s	0.0	38.3	0.0	40.3	0.0	26.1	0.0	5.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.07	0.00	0.22	0.00	1.00
Lane Grp Cap (c), veh/h	0	631	0	619	0	544	0	538
V/C Ratio (X)	0.00	1.04	0.00	1.18	0.00	0.79	0.00	0.19
Avail Cap (c_a), veh/h	0	631	0	619	0	544	0	538
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.45	0.00	1.00
Uniform Delay (d1), s/veh	0.0	35.9	0.0	39.9	0.0	38.2	0.0	26.9
Incr Delay (d2), s/veh	0.0	24.3	0.0	96.7	0.0	5.2	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.2	0.0	136.5	0.0	43.4	0.0	27.6
1st-Term Q (Q1), veh/ln	0.0	17.8	0.0	17.7	0.0	11.1	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	4.3	0.0	16.6	0.0	0.8	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.14	0.00	1.42	0.00	1.32	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	25.2	0.0	48.8	0.0	15.7	0.0	3.8
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	9.69	0.00	0.16	0.00	1.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	6.8	0.0	27.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	99.6
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	644	290	97	530	53	94	609	129	126	1283	144
Future Volume (veh/h)	103	644	290	97	530	53	94	609	129	126	1283	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.86	0.97		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	112	700	315	105	576	58	102	662	140	137	1395	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	840	692	146	840	692	80	1520	586	276	1355	150
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	792	1870	1541	555	1870	1541	333	3554	1370	660	3167	352
Grp Volume(v), veh/h	112	700	315	105	576	58	102	662	140	137	774	778
Grp Sat Flow(s),veh/h/ln	792	1870	1541	555	1870	1541	333	1777	1370	660	1777	1742
Q Serve(g_s), s	11.8	29.7	12.7	10.7	22.1	1.9	0.0	11.8	5.9	16.6	38.5	38.5
Cycle Q Clear(g_c), s	33.9	29.7	12.7	40.4	22.1	1.9	38.5	11.8	5.9	28.4	38.5	38.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	241	840	692	146	840	692	80	1520	586	276	760	745
V/C Ratio(X)	0.46	0.83	0.46	0.72	0.69	0.08	1.27	0.44	0.24	0.50	1.02	1.04
Avail Cap(c_a), veh/h	241	840	692	146	840	692	80	1520	586	276	760	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	21.8	17.2	41.6	19.7	14.2	45.0	18.1	16.4	28.1	25.7	25.8
Incr Delay (d2), s/veh	0.6	1.0	0.2	26.0	4.5	0.2	183.0	0.2	0.2	1.4	37.4	45.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	13.6	5.2	6.0	14.8	1.2	10.4	7.7	3.1	4.6	30.6	32.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	22.8	17.4	67.6	24.3	14.4	228.0	18.3	16.6	29.5	63.1	70.7
LnGrp LOS	C	C	B	E	C	B	F	B	B	C	F	F
Approach Vol, veh/h		1127			739			904			1689	
Approach Delay, s/veh		22.4			29.7			41.7			63.9	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	46.0	44.0	46.0	44.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 40	* 39	* 40	* 39
Max Q Clear Time (g_c+I1), s	35.9	40.5	42.4	40.5
Green Ext Time (p_c), s	2.5	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	644	290	97	530	53	94	609	129	126	1283	144
Future Volume (veh/h)	103	644	290	97	530	53	94	609	129	126	1283	144
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.86	0.97		0.86
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	112	700	315	105	576	58	102	662	140	137	1395	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	241	840	692	146	840	692	80	1520	586	276	1355	150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.43	0.43	0.43	0.43	0.43	0.43
Unsig. Movement Delay												
Ln Grp Delay, s/veh	33.8	22.8	17.4	67.6	24.3	14.4	228.0	18.3	16.6	29.5	63.1	70.7
Ln Grp LOS	C	C	B	E	C	B	F	B	B	C	F	F
Approach Vol, veh/h		1127			739			904			1689	
Approach Delay, s/veh		22.4			29.7			41.7			63.9	
Approach LOS		C			C			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		46.0		44.0		46.0		44.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 40		* 39		* 40		* 39
Max Allow Headway (MAH), s		4.8		5.7		5.3		5.2
Max Q Clear (g_c+l1), s		35.9		40.5		42.4		40.5
Green Ext Time (g_e), s		2.5		0.0		0.0		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		792		333		555		660
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		3167
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1541		1370		1541		352
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	112	0	102	0	105	0	137
Grp Sat Flow (s), veh/h/ln	0	792	0	333	0	555	0	660
Q Serve Time (g_s), s	0.0	11.8	0.0	0.0	0.0	10.7	0.0	16.6
Cycle Q Clear Time (g_c), s	0.0	33.9	0.0	38.5	0.0	40.4	0.0	28.4
Perm LT Sat Flow (s_l), veh/h/ln	0	792	0	333	0	555	0	660
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	40.4	0.0	38.5	0.0	40.4	0.0	38.5
Perm LT Serve Time (g_u), s	0.0	18.3	0.0	0.0	0.0	10.7	0.0	26.7
Perm LT Q Serve Time (g_ps), s	0.0	11.8	0.0	0.0	0.0	10.7	0.0	16.6
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	241	0	80	0	146	0	276
V/C Ratio (X)	0.00	0.46	0.00	1.27	0.00	0.72	0.00	0.50
Avail Cap (c_a), veh/h	0	241	0	80	0	146	0	276
Upstream Filter (I)	0.00	0.09	0.00	0.84	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	33.2	0.0	45.0	0.0	41.6	0.0	28.1
Incr Delay (d2), s/veh	0.0	0.6	0.0	183.0	0.0	26.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.8	0.0	228.0	0.0	67.6	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	1.7	0.0	2.3	0.0	2.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.1	0.0	1.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.33	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.9	0.0	10.4	0.0	6.0	0.0	4.6
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	3.79	0.00	1.13	0.00	1.47
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	700	0	662	0	576	0	774
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	29.7	0.0	11.8	0.0	22.1	0.0	38.5
Cycle Q Clear Time (g_c), s	0.0	29.7	0.0	11.8	0.0	22.1	0.0	38.5
Lane Grp Cap (c), veh/h	0	840	0	1520	0	840	0	760
V/C Ratio (X)	0.00	0.83	0.00	0.44	0.00	0.69	0.00	1.02
Avail Cap (c_a), veh/h	0	840	0	1520	0	840	0	760
Upstream Filter (I)	0.00	0.09	0.00	0.84	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.8	0.0	18.1	0.0	19.7	0.0	25.7
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.2	0.0	4.5	0.0	37.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.8	0.0	18.3	0.0	24.3	0.0	63.1
1st-Term Q (Q1), veh/ln	0.0	11.6	0.0	4.5	0.0	8.7	0.0	14.6
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	1.1	0.0	7.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.14	0.00	1.71	0.00	1.53	0.00	1.36
%ile Back of Q (95%), veh/ln	0.0	13.6	0.0	7.7	0.0	14.8	0.0	30.6
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.16	0.00	1.05	0.00	1.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	315	0	140	0	58	0	778
Grp Sat Flow (s), veh/h/ln	0	1541	0	1370	0	1541	0	1742
Q Serve Time (g_s), s	0.0	12.7	0.0	5.9	0.0	1.9	0.0	38.5
Cycle Q Clear Time (g_c), s	0.0	12.7	0.0	5.9	0.0	1.9	0.0	38.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	692	0	586	0	692	0	745
V/C Ratio (X)	0.00	0.46	0.00	0.24	0.00	0.08	0.00	1.04
Avail Cap (c_a), veh/h	0	692	0	586	0	692	0	745
Upstream Filter (I)	0.00	0.09	0.00	0.84	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.2	0.0	16.4	0.0	14.2	0.0	25.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.2	0.0	45.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.4	0.0	16.6	0.0	14.4	0.0	70.7
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	1.7	0.0	0.6	0.0	14.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.24	0.00	1.80	0.00	1.80	0.00	1.38
%ile Back of Q (95%), veh/ln	0.0	5.2	0.0	3.1	0.0	1.2	0.0	32.6
%ile Storage Ratio (RQ%)	0.00	0.82	0.00	0.72	0.00	0.31	0.00	1.77
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	61	70	336	426	37
Future Vol, veh/h	9	61	70	336	426	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	66	76	365	463	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	818	483	503	0	-	0
Stage 1	483	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	329	583	1060	-	-	-
Stage 1	619	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	305	583	1060	-	-	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	574	-	-	-	-	-
Stage 2	697	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1060	-	556	-	-
HCM Lane V/C Ratio	0.072	-	0.137	-	-
HCM Control Delay (s)	8.7	-	12.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	8	87	262	20	425
Future Vol, veh/h	38	8	87	262	20	425
Conflicting Peds, #/hr	10	6	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	9	95	285	22	462

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	612	102	0	0	381	0
Stage 1	96	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	456	953	-	-	1177	-
Stage 1	928	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	443	948	-	-	1176	-
Mov Cap-2 Maneuver	503	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	583	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	548	1176	-
HCM Lane V/C Ratio	-	-	0.091	0.018	-
HCM Control Delay (s)	-	-	12.2	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	84	102	84	39	147	21	490	75	264	1302	16
Future Volume (veh/h)	122	84	102	84	39	147	21	490	75	264	1302	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	91	111	91	42	160	23	533	82	287	1415	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	207	252	283	92	349	212	2159	922	466	2184	26
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.20	0.20	0.20	0.61	0.61	0.61
Sat Flow, veh/h	1170	760	927	1169	336	1280	374	3554	1517	802	3594	43
Grp Volume(v), veh/h	133	0	202	91	0	202	23	533	82	287	699	733
Grp Sat Flow(s),veh/h/ln	1170	0	1686	1169	0	1616	374	1777	1517	802	1777	1860
Q Serve(g_s), s	9.6	0.0	8.9	6.3	0.0	9.4	5.0	11.4	4.0	26.0	22.9	23.0
Cycle Q Clear(g_c), s	19.0	0.0	8.9	15.2	0.0	9.4	28.0	11.4	4.0	37.4	22.9	23.0
Prop In Lane	1.00		0.55	1.00		0.79	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	277	0	459	283	0	440	212	2159	922	466	1080	1130
V/C Ratio(X)	0.48	0.00	0.44	0.32	0.00	0.46	0.11	0.25	0.09	0.62	0.65	0.65
Avail Cap(c_a), veh/h	455	0	716	460	0	686	212	2159	922	466	1080	1130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	27.1	33.3	0.0	27.2	35.6	18.7	15.7	18.8	11.4	11.4
Incr Delay (d2), s/veh	1.3	0.0	0.7	0.7	0.0	0.7	1.0	0.3	0.2	6.0	3.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	0.0	6.6	3.3	0.0	6.6	1.0	9.1	2.4	8.9	13.4	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	0.0	27.7	34.0	0.0	28.0	36.7	18.9	15.9	24.8	14.4	14.3
LnGrp LOS	D	A	C	C	A	C	D	B	B	C	B	B
Approach Vol, veh/h		335			293			638			1719	
Approach Delay, s/veh		31.2			29.8			19.2			16.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	59.7	30.3	59.7	30.3
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	39.4	21.0	30.0	17.2
Green Ext Time (p_c), s	1.4	1.6	3.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	84	102	84	39	147	21	490	75	264	1302	16
Future Volume (veh/h)	122	84	102	84	39	147	21	490	75	264	1302	16
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.98	0.99		0.98	1.00		0.96	0.99		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	91	111	91	42	160	23	533	82	287	1415	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	277	207	252	283	92	349	212	2159	922	466	2184	26
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.20	0.20	0.20	0.61	0.61	0.61
Unsig. Movement Delay												
Ln Grp Delay, s/veh	36.4	0.0	27.7	34.0	0.0	28.0	36.7	18.9	15.9	24.8	14.4	14.3
Ln Grp LOS	D	A	C	C	A	C	D	B	B	C	B	B
Approach Vol, veh/h		335			293			638			1719	
Approach Delay, s/veh		31.2			29.8			19.2			16.1	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		59.7		30.3		59.7		30.3
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.2		5.1		5.2		5.3
Max Q Clear (g_c+I1), s		39.4		21.0		30.0		17.2
Green Ext Time (g_e), s		1.4		1.6		3.1		1.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.01		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		802		1170		374		1169
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3594		760		3554		336
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		43		927		1517		1280
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	287	0	133	0	23	0	91
Grp Sat Flow (s), veh/h/ln	0	802	0	1170	0	374	0	1169
Q Serve Time (g_s), s	0.0	26.0	0.0	9.6	0.0	5.0	0.0	6.3
Cycle Q Clear Time (g_c), s	0.0	37.4	0.0	19.0	0.0	28.0	0.0	15.2
Perm LT Sat Flow (s_l), veh/h/ln	0	802	0	1170	0	374	0	1169
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.7	0.0	24.5	0.0	54.7	0.0	24.5
Perm LT Serve Time (g_u), s	0.0	43.3	0.0	15.2	0.0	31.7	0.0	15.6
Perm LT Q Serve Time (g_ps), s	0.0	26.0	0.0	9.6	0.0	5.0	0.0	6.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	466	0	277	0	212	0	283
V/C Ratio (X)	0.00	0.62	0.00	0.48	0.00	0.11	0.00	0.32
Avail Cap (c_a), veh/h	0	466	0	455	0	212	0	460
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.99	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.8	0.0	35.1	0.0	35.6	0.0	33.3
Incr Delay (d2), s/veh	0.0	6.0	0.0	1.3	0.0	1.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.8	0.0	36.4	0.0	36.7	0.0	34.0
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	2.7	0.0	0.5	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	5.1	0.0	1.0	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	1.51	0.00	3.22	0.00	0.25	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	699	0	0	0	533	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.9	0.0	0.0	0.0	11.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.9	0.0	0.0	0.0	11.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1080	0	0	0	2159	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.00	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	1080	0	0	0	2159	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.99	0.00	0.00
Uniform Delay (d1), s/veh	0.0	11.4	0.0	0.0	0.0	18.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.0	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.4	0.0	0.0	0.0	18.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.7	0.0	0.0	0.0	5.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.56	0.00	1.00	0.00	1.71	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	13.4	0.0	0.0	0.0	9.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.52	0.00	0.00	0.00	0.75	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	733	0	202	0	82	0	202
Grp Sat Flow (s), veh/h/ln	0	1860	0	1686	0	1517	0	1616
Q Serve Time (g_s), s	0.0	23.0	0.0	8.9	0.0	4.0	0.0	9.4
Cycle Q Clear Time (g_c), s	0.0	23.0	0.0	8.9	0.0	4.0	0.0	9.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.55	0.00	1.00	0.00	0.79
Lane Grp Cap (c), veh/h	0	1130	0	459	0	922	0	440
V/C Ratio (X)	0.00	0.65	0.00	0.44	0.00	0.09	0.00	0.46
Avail Cap (c_a), veh/h	0	1130	0	716	0	922	0	686
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.99	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.4	0.0	27.1	0.0	15.7	0.0	27.2
Incr Delay (d2), s/veh	0.0	2.9	0.0	0.7	0.0	0.2	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.3	0.0	27.7	0.0	15.9	0.0	28.0
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	3.6	0.0	1.3	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.55	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	14.0	0.0	6.6	0.0	2.4	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	0.61	0.00	0.60	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	80	373	223	11	34	57
Future Vol, veh/h	80	373	223	11	34	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	87	405	242	12	37	62
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	13.1	10.3	9.3
HCM LOS	B	B	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	37%
Vol Thru, %	0%	100%	95%	0%
Vol Right, %	0%	0%	5%	63%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	80	373	234	91
LT Vol	80	0	0	34
Through Vol	0	373	223	0
RT Vol	0	0	11	57
Lane Flow Rate	87	405	254	99
Geometry Grp	7	7	5	2
Degree of Util (X)	0.133	0.563	0.339	0.145
Departure Headway (Hd)	5.502	4.999	4.799	5.29
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	650	722	748	675
Service Time	3.243	2.74	2.844	3.348
HCM Lane V/C Ratio	0.134	0.561	0.34	0.147
HCM Control Delay	9.1	14	10.3	9.3
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.5	3.5	1.5	0.5

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	105	152	69	15	64
Future Vol, veh/h	42	105	152	69	15	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	114	165	75	16	70
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.5	8.9	7.9
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	19%
Vol Thru, %	0%	100%	69%	0%
Vol Right, %	0%	0%	31%	81%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	42	105	221	79
LT Vol	42	0	0	15
Through Vol	0	105	152	0
RT Vol	0	0	69	64
Lane Flow Rate	46	114	240	86
Geometry Grp	7	7	5	2
Degree of Util (X)	0.069	0.156	0.282	0.105
Departure Headway (Hd)	5.418	4.916	4.224	4.382
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	665	734	853	819
Service Time	3.118	2.616	2.24	2.402
HCM Lane V/C Ratio	0.069	0.155	0.281	0.105
HCM Control Delay	8.5	8.5	8.9	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.6	1.2	0.4

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	11	91	62	108	3	97	2	12	7	48	36
Future Vol, veh/h	0	11	91	62	108	3	97	2	12	7	48	36
Conflicting Peds, #/hr	41	0	57	57	0	41	13	0	50	50	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	99	67	117	3	105	2	13	8	52	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	168	0	0	380	364	119	413	462	173
Stage 1	-	-	-	-	-	-	69	69	-	294	294	-
Stage 2	-	-	-	-	-	-	311	295	-	119	168	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1410	-	-	578	564	933	549	497	871
Stage 1	0	-	-	-	-	-	941	837	-	714	670	-
Stage 2	0	-	-	-	-	-	699	669	-	885	759	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1346	-	-	460	495	855	481	436	834
Mov Cap-2 Maneuver	-	-	-	-	-	-	503	530	-	556	489	-
Stage 1	-	-	-	-	-	-	941	799	-	714	616	-
Stage 2	-	-	-	-	-	-	573	615	-	835	725	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.8	13.5	12.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	503	855	-	-	1346	-	-	594
HCM Lane V/C Ratio	0.21	0.015	-	-	0.05	-	-	0.154
HCM Control Delay (s)	14	9.3	-	-	7.8	-	-	12.2
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.2	-	-	0.5

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	61	30	112	21	11	201
Future Vol, veh/h	61	30	112	21	11	201
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	33	122	23	12	218

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	376	134	0	0	145	0
Stage 1	134	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	625	915	-	-	1437	-
Stage 1	892	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	620	915	-	-	1437	-
Mov Cap-2 Maneuver	662	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	792	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	728	1437	-
HCM Lane V/C Ratio	-	-	0.136	0.008	-
HCM Control Delay (s)	-	-	10.7	7.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	921	189	139	368	78	143	434	76	124	534	25
Future Volume (veh/h)	126	921	189	139	368	78	143	434	76	124	534	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.88	1.00		0.85	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	1001	205	151	400	85	155	472	83	135	580	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	1098	430	171	1108	435	174	617	443	161	604	432
Arrive On Green	0.09	0.31	0.31	0.10	0.31	0.31	0.10	0.33	0.33	0.09	0.32	0.32
Sat Flow, veh/h	1781	3554	1393	1781	3554	1394	1781	1870	1344	1781	1870	1339
Grp Volume(v), veh/h	137	1001	205	151	400	85	155	472	83	135	580	27
Grp Sat Flow(s),veh/h/ln	1781	1777	1393	1781	1777	1394	1781	1870	1344	1781	1870	1339
Q Serve(g_s), s	9.1	32.5	14.3	10.0	10.5	5.4	10.3	27.1	5.3	9.0	36.5	1.7
Cycle Q Clear(g_c), s	9.1	32.5	14.3	10.0	10.5	5.4	10.3	27.1	5.3	9.0	36.5	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	1098	430	171	1108	435	174	617	443	161	604	432
V/C Ratio(X)	0.83	0.91	0.48	0.88	0.36	0.20	0.89	0.77	0.19	0.84	0.96	0.06
Avail Cap(c_a), veh/h	286	1098	430	171	1108	435	174	617	443	168	608	435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	53.5	39.9	33.6	53.6	32.0	30.3	53.5	36.0	28.7	53.7	39.9	28.1
Incr Delay (d2), s/veh	10.0	12.8	3.7	38.2	0.9	1.0	39.4	5.7	0.2	24.0	23.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.9	22.2	9.0	10.3	8.1	3.4	10.7	19.1	3.1	8.3	26.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.5	52.7	37.3	91.7	32.9	31.3	92.9	41.7	28.9	77.7	63.1	28.1
LnGrp LOS	E	D	D	F	C	C	F	D	C	E	E	C
Approach Vol, veh/h		1343			636			710			742	
Approach Delay, s/veh		51.5			46.7			51.4			64.5	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	42.4	16.7	43.7	17.5	42.1	15.8	44.6
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	19.3	* 29	11.7	* 39	11.5	* 37	11.3	* 39
Max Q Clear Time (g_c+I1), s	11.1	12.5	12.3	38.5	12.0	34.5	11.0	29.1
Green Ext Time (p_c), s	0.2	2.5	0.0	0.2	0.0	1.5	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	53.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	921	189	139	368	78	143	434	76	124	534	25
Future Volume (veh/h)	126	921	189	139	368	78	143	434	76	124	534	25
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.88	1.00		0.88	1.00		0.85	1.00		0.84
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	1001	205	151	400	85	155	472	83	135	580	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	165	1098	430	171	1108	435	174	617	443	161	604	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.31	0.31	0.10	0.31	0.31	0.10	0.33	0.33	0.09	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	63.5	52.7	37.3	91.7	32.9	31.3	92.9	41.7	28.9	77.7	63.1	28.1
Ln Grp LOS	E	D	D	F	C	C	F	D	C	E	E	C
Approach Vol, veh/h		1343			636			710			742	
Approach Delay, s/veh		51.5			46.7			51.4			64.5	
Approach LOS		D			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.1	42.4	16.7	43.7	17.5	42.1	15.8	44.6
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	19.3	* 29	11.7	* 39	11.5	* 37	11.3	* 39
Max Allow Headway (MAH), s	3.7	4.9	3.8	5.1	3.7	4.9	3.8	5.0
Max Q Clear (g_c+l1), s	11.1	12.5	12.3	38.5	12.0	34.5	11.0	29.1
Green Ext Time (g_e), s	0.2	2.5	0.0	0.2	0.0	1.5	0.0	2.3
Prob of Phs Call (p_c)	0.99	1.00	0.99	1.00	0.99	1.00	0.99	1.00
Prob of Max Out (p_x)	0.01	0.00	1.00	1.00	1.00	0.00	1.00	0.28

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1394		1339		1393		1344

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	137	0	155	0	151	0	135	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.1	0.0	10.3	0.0	10.0	0.0	9.0	0.0
Cycle Q Clear Time (g_c), s	9.1	0.0	10.3	0.0	10.0	0.0	9.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	165	0	174	0	171	0	161	0
V/C Ratio (X)	0.83	0.00	0.89	0.00	0.88	0.00	0.84	0.00
Avail Cap (c_a), veh/h	286	0	174	0	171	0	168	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.79	0.00
Uniform Delay (d1), s/veh	53.5	0.0	53.5	0.0	53.6	0.0	53.7	0.0
Incr Delay (d2), s/veh	10.0	0.0	39.4	0.0	38.2	0.0	24.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.5	0.0	92.9	0.0	91.7	0.0	77.7	0.0
1st-Term Q (Q1), veh/ln	4.0	0.0	4.6	0.0	4.4	0.0	4.0	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	1.9	0.0	1.8	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.78	0.00	1.64	0.00	1.66	0.00	1.65	0.00
%ile Back of Q (95%), veh/ln	7.9	0.0	10.7	0.0	10.3	0.0	8.3	0.0
%ile Storage Ratio (RQ%)	0.93	0.00	2.16	0.00	1.31	0.00	2.35	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	400	0	580	0	1001	0	472
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	10.5	0.0	36.5	0.0	32.5	0.0	27.1
Cycle Q Clear Time (g_c), s	0.0	10.5	0.0	36.5	0.0	32.5	0.0	27.1
Lane Grp Cap (c), veh/h	0	1108	0	604	0	1098	0	617
V/C Ratio (X)	0.00	0.36	0.00	0.96	0.00	0.91	0.00	0.77
Avail Cap (c_a), veh/h	0	1108	0	608	0	1098	0	617
Upstream Filter (I)	0.00	1.00	0.00	0.79	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.0	0.0	39.9	0.0	39.9	0.0	36.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	23.2	0.0	12.8	0.0	5.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.9	0.0	63.1	0.0	52.7	0.0	41.7
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	16.4	0.0	13.7	0.0	12.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	3.9	0.0	2.0	0.0	1.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.32	0.00	1.41	0.00	1.45
%ile Back of Q (95%), veh/ln	0.0	8.1	0.0	26.8	0.0	22.2	0.0	19.1
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.56	0.00	0.68	0.00	0.90
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	85	0	27	0	205	0	83
Grp Sat Flow (s), veh/h/ln	0	1394	0	1339	0	1393	0	1344
Q Serve Time (g_s), s	0.0	5.4	0.0	1.7	0.0	14.3	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	5.4	0.0	1.7	0.0	14.3	0.0	5.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	435	0	432	0	430	0	443
V/C Ratio (X)	0.00	0.20	0.00	0.06	0.00	0.48	0.00	0.19
Avail Cap (c_a), veh/h	0	435	0	435	0	430	0	443
Upstream Filter (I)	0.00	1.00	0.00	0.79	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.3	0.0	28.1	0.0	33.6	0.0	28.7
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	3.7	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.3	0.0	28.1	0.0	37.3	0.0	28.9
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	0.5	0.0	4.8	0.0	1.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.72	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.4	0.0	1.0	0.0	9.0	0.0	3.1
%ile Storage Ratio (RQ%)	0.00	0.87	0.00	0.22	0.00	2.28	0.00	0.45
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.4
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	83	234	119	0	270	0	0	445	63
Future Volume (veh/h)	0	0	0	83	234	119	0	270	0	0	445	63
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	0	0	1870	1870
Adj Flow Rate, veh/h				90	254	129	0	293	0	0	484	68
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	0	0	2	2
Cap, veh/h				123	372	204	0	2769	0	0	1247	175
Arrive On Green				0.14	0.14	0.14	0.00	1.00	0.00	0.00	0.78	0.78
Sat Flow, veh/h				898	2704	1481	0	3741	0	0	1601	225
Grp Volume(v), veh/h				183	161	129	0	293	0	0	0	552
Grp Sat Flow(s),veh/h/ln				1825	1777	1481	0	1777	0	0	0	1826
Q Serve(g_s), s				11.5	10.3	9.9	0.0	0.0	0.0	0.0	0.0	11.5
Cycle Q Clear(g_c), s				11.5	10.3	9.9	0.0	0.0	0.0	0.0	0.0	11.5
Prop In Lane				0.49		1.00	0.00		0.00	0.00		0.12
Lane Grp Cap(c), veh/h				251	244	204	0	2769	0	0	0	1422
V/C Ratio(X)				0.73	0.66	0.63	0.00	0.11	0.00	0.00	0.00	0.39
Avail Cap(c_a), veh/h				426	415	346	0	2769	0	0	0	1422
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.63	0.63	0.63	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				49.6	49.1	48.9	0.0	0.0	0.0	0.0	0.0	4.2
Incr Delay (d2), s/veh				2.6	1.9	2.1	0.0	0.1	0.0	0.0	0.0	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				8.3	7.4	6.2	0.0	0.1	0.0	0.0	0.0	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.2	51.0	50.9	0.0	0.1	0.0	0.0	0.0	5.0
LnGrp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					473			293			552	
Approach Delay, s/veh					51.4			0.1			5.0	
Approach LOS					D			A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	98.5	21.5	98.5
Change Period (Y+Rc), s	* 5	* 5	* 5
Max Green Setting (Gmax), s	* 82	* 28	* 82
Max Q Clear Time (g_c+I1), s	13.5	13.5	2.0
Green Ext Time (p_c), s	6.3	2.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	83	234	119	0	270	0	0	445	63
Future Volume (veh/h)	0	0	0	83	234	119	0	270	0	0	445	63
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.93	1.00		1.00	1.00		0.98
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	0	0	1870	1870
Adj Flow Rate, veh/h				90	254	129	0	293	0	0	484	68
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	0	0	2	2
Opposing Right Turn Influence				Yes			No			No		
Cap, veh/h				123	372	204	0	2769	0	0	1247	175
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Prop Arrive On Green				0.14	0.14	0.14	0.00	1.00	0.00	0.00	0.78	0.78
Unsig. Movement Delay												
Ln Grp Delay, s/veh				52.2	51.0	50.9	0.0	0.1	0.0	0.0	0.0	5.0
Ln Grp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					473			293			552	
Approach Delay, s/veh					51.4			0.1			5.0	
Approach LOS					D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		8.0		11.0		8.0		
Phs Duration (G+Y+Rc), s		98.5		21.5		98.5		
Change Period (Y+Rc), s		* 5		* 5		* 5		
Max Green (Gmax), s		* 82		* 28		* 82		
Max Allow Headway (MAH), s		6.2		4.8		6.1		
Max Q Clear (g_c+I1), s		13.5		13.5		2.0		
Green Ext Time (g_e), s		6.3		2.0		3.0		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		0.04		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		0		898		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1601		2704		3741		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		225		1481		0		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment				L+T				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	183	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1825	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	93.5	0.0	0.0	0.0	93.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	251	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	426	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	52.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.56	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment				T		T		
Lanes in Grp	0	0	0	1	0	2	0	0
Grp Vol (v), veh/h	0	0	0	161	0	293	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	244	0	2769	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.66	0.00	0.11	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	415	0	2769	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.63	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.9	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	51.0	0.0	0.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.61	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.4	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.41	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	552	0	129	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1826	0	1481	0	0	0	0
Q Serve Time (g_s), s	0.0	11.5	0.0	9.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.5	0.0	9.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1422	0	204	0	0	0	0
V/C Ratio (X)	0.00	0.39	0.00	0.63	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1422	0	346	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.63	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.2	0.0	48.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	2.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.0	0.0	50.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.4	0.0	3.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.68	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	6.6	0.0	6.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.80	0.00	0.34	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	190	587	1421	81
Future Volume (veh/h)	0	0	190	587	1421	81
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.89
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			207	638	1545	88
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			247	3352	2535	143
Arrive On Green			0.14	0.94	0.99	0.99
Sat Flow, veh/h			1781	3647	3486	192
Grp Volume(v), veh/h			207	638	803	830
Grp Sat Flow(s),veh/h/ln			1781	1777	1777	1807
Q Serve(g_s), s			10.2	1.1	0.6	0.7
Cycle Q Clear(g_c), s			10.2	1.1	0.6	0.7
Prop In Lane			1.00			0.11
Lane Grp Cap(c), veh/h			247	3352	1327	1350
V/C Ratio(X)			0.84	0.19	0.61	0.61
Avail Cap(c_a), veh/h			392	3352	1327	1350
HCM Platoon Ratio			1.00	1.00	1.33	1.33
Upstream Filter(I)			0.90	0.90	0.74	0.74
Uniform Delay (d), s/veh			37.8	0.2	0.1	0.1
Incr Delay (d2), s/veh			8.0	0.1	1.5	1.6
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln			8.4	0.1	1.1	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			45.8	0.3	1.6	1.6
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				845	1633	
Approach Delay, s/veh				11.4	1.6	
Approach LOS				B	A	

Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	90.0			17.7	72.3
Change Period (Y+Rc), s	5.1			* 5.2	5.1
Max Green Setting (Gmax), s	84.9			* 20	59.9
Max Q Clear Time (g_c+I1), s	3.1			12.2	2.7
Green Ext Time (p_c), s	5.2			0.3	20.6

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	190	587	1421	81
Future Volume (veh/h)	0	0	190	587	1421	81
Number			5	2	6	16
Initial Q, veh			0	0	0	0
Ped-Bike Adj (A_pbT)			1.00			0.89
Parking Bus Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			207	638	1545	88
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Opposing Right Turn Influence			Yes			
Cap, veh/h			247	3352	2535	143
HCM Platoon Ratio			1.00	1.00	1.33	1.33
Prop Arrive On Green			0.14	0.94	0.99	0.99
Unsig. Movement Delay						
Ln Grp Delay, s/veh			45.8	0.3	1.6	1.6
Ln Grp LOS			D	A	A	A
Approach Vol, veh/h				845	1633	
Approach Delay, s/veh				11.4	1.6	
Approach LOS				B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		
Case No		4.0			2.0	8.0		
Phs Duration (G+Y+Rc), s		90.0			17.7	72.3		
Change Period (Y+Rc), s		5.1			* 5.2	5.1		
Max Green (Gmax), s		84.9			* 20	59.9		
Max Allow Headway (MAH), s		5.2			3.8	5.3		
Max Q Clear (g_c+I1), s		3.1			12.2	2.7		
Green Ext Time (g_e), s		5.2			0.3	20.6		
Prob of Phs Call (p_c)		1.00			0.99	1.00		
Prob of Max Out (p_x)		0.00			0.06	0.15		
Left-Turn Movement Data								
Assigned Mvmt					5	1		
Mvmt Sat Flow, veh/h					1781	0		
Through Movement Data								
Assigned Mvmt		2				6		
Mvmt Sat Flow, veh/h		3647				3486		
Right-Turn Movement Data								
Assigned Mvmt		12				16		
Mvmt Sat Flow, veh/h		0				192		
Left Lane Group Data								
Assigned Mvmt	0	0	0	0	5	1	0	0
Lane Assignment					L (Prot)			

Lanes in Grp	0	0	0	0	1	0	0	0
Grp Vol (v), veh/h	0	0	0	0	207	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	10.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	10.2	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	67.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	247	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	392	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	37.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	45.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	1.70	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	4.25	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	638	0	0	0	803	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	1.1	0.0	0.0	0.0	0.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	0.0	0.0	0.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	3352	0	0	0	1327	0	0
V/C Ratio (X)	0.00	0.19	0.00	0.00	0.00	0.61	0.00	0.00
Avail Cap (c_a), veh/h	0	3352	0	0	0	1327	0	0
Upstream Filter (I)	0.00	0.90	0.00	0.00	0.00	0.74	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	1.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.3	0.0	0.0	0.0	1.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	1.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	0	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	830	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1807	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1350	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1350	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.74	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	0.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	15	1	0	15	0	0	242	4	0	492	0
Future Volume (veh/h)	0	15	1	0	15	0	0	242	4	0	492	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	16	1	0	16	0	0	263	4	0	535	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Cap, veh/h	0	44	3	0	47	0	0	3134	48	0	1636	0
Arrive On Green	0.00	0.03	0.03	0.00	0.03	0.00	0.00	0.87	0.87	0.00	1.00	0.00
Sat Flow, veh/h	0	1742	109	0	1870	0	0	3676	54	0	1870	0
Grp Volume(v), veh/h	0	0	17	0	16	0	0	130	137	0	535	0
Grp Sat Flow(s),veh/h/ln	0	0	1851	0	1870	0	0	1777	1860	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.1	0.0	1.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.1	0.0	1.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0
Prop In Lane	0.00		0.06	0.00		0.00	0.00		0.03	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	47	0	47	0	0	1554	1627	0	1636	0
V/C Ratio(X)	0.00	0.00	0.36	0.00	0.34	0.00	0.00	0.08	0.08	0.00	0.33	0.00
Avail Cap(c_a), veh/h	0	0	108	0	109	0	0	1554	1627	0	1636	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.98	0.98	0.00	0.91	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.5	0.0	57.5	0.0	0.0	1.0	1.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	20.6	0.0	18.4	0.0	0.0	0.1	0.1	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.4	0.0	1.3	0.0	0.0	0.4	0.4	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	78.1	0.0	75.9	0.0	0.0	1.1	1.1	0.0	0.5	0.0
LnGrp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		17			16			267			535	
Approach Delay, s/veh		78.1			75.9			1.1			0.5	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.0	10.0	110.0	10.0
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	3.2	3.1	2.0	3.0
Green Ext Time (p_c), s	2.4	0.0	5.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	15	1	0	15	0	0	242	4	0	492	0
Future Volume (veh/h)	0	15	1	0	15	0	0	242	4	0	492	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	16	1	0	16	0	0	263	4	0	535	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	44	3	0	47	0	0	3134	48	0	1636	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.03	0.03	0.00	0.03	0.00	0.00	0.87	0.87	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	78.1	0.0	75.9	0.0	0.0	1.1	1.1	0.0	0.5	0.0
Ln Grp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		17			16			267			535	
Approach Delay, s/veh		78.1			75.9			1.1			0.5	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.0		10.0		110.0		10.0
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+I1), s		3.2		3.1		2.0		3.0
Green Ext Time (g_e), s		2.4		0.0		5.9		0.0
Prob of Phs Call (p_c)		1.00		0.43		1.00		0.41
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3676		1742		1870		1870

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		54		109		0		0

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.0	0.0	3.0	0.0	105.0	0.0	3.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	130	0	0	0	535	0	16
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	1870
Q Serve Time (g_s), s	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.0
Lane Grp Cap (c), veh/h	0	1554	0	0	0	1636	0	47
V/C Ratio (X)	0.00	0.08	0.00	0.00	0.00	0.33	0.00	0.34
Avail Cap (c_a), veh/h	0	1554	0	0	0	1636	0	109
Upstream Filter (I)	0.00	0.98	0.00	0.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	0.0	0.0	0.0	0.0	57.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.5	0.0	18.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.1	0.0	0.0	0.0	0.5	0.0	75.9
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.00	0.00	0.13	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	137	0	17	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1860	0	1851	0	0	0	0
Q Serve Time (g_s), s	0.0	1.2	0.0	1.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.2	0.0	1.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.03	0.00	0.06	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1627	0	47	0	0	0	0
V/C Ratio (X)	0.00	0.08	0.00	0.36	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1627	0	108	0	0	0	0
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	57.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	20.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.1	0.0	78.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	1.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	751	281	99	0	20	0	143	114	42	460	0
Future Volume (veh/h)	95	751	281	99	0	20	0	143	114	42	460	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.69	1.00		0.94	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	103	816	305	108	0	22	0	155	124	46	500	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	898	924	373	134	0	83	0	920	671	616	1068	0
Arrive On Green	0.26	0.26	0.26	0.08	0.00	0.08	0.00	0.48	0.48	0.06	0.57	0.00
Sat Flow, veh/h	3456	3554	1435	1781	0	1101	0	2001	1391	1781	1870	0
Grp Volume(v), veh/h	103	816	305	108	0	22	0	143	136	46	500	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1435	1781	0	1101	0	1777	1521	1781	1870	0
Q Serve(g_s), s	3.5	34.0	30.8	9.2	0.0	2.9	0.0	7.0	7.8	1.8	24.1	0.0
Cycle Q Clear(g_c), s	3.5	34.0	30.8	9.2	0.0	2.9	0.0	7.0	7.8	1.8	24.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.91	1.00		0.00
Lane Grp Cap(c), veh/h	898	924	373	134	0	83	0	857	734	616	1068	0
V/C Ratio(X)	0.11	0.88	0.82	0.81	0.00	0.27	0.00	0.17	0.18	0.07	0.47	0.00
Avail Cap(c_a), veh/h	942	969	391	468	0	290	0	857	734	632	1068	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.95	0.95	0.00
Uniform Delay (d), s/veh	43.5	54.7	53.6	70.1	0.0	67.2	0.0	22.4	22.6	16.2	19.4	0.0
Incr Delay (d2), s/veh	0.1	9.7	13.0	10.8	0.0	1.7	0.0	0.4	0.6	0.0	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	22.9	18.1	8.1	0.0	1.5	0.0	5.5	5.3	1.4	16.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	64.5	66.5	80.9	0.0	68.9	0.0	22.9	23.2	16.3	20.8	0.0
LnGrp LOS	D	E	E	F	A	E	A	C	C	B	C	A
Approach Vol, veh/h		1224			130			279			546	
Approach Delay, s/veh		63.2			78.9			23.0			20.4	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	2	4	5	6	8
Phs Duration (G+Y+Rc), s	92.9	45.0	13.6	79.3	16.1
Change Period (Y+Rc), s	* 5	* 5	* 5	* 5	4.5
Max Green Setting (Gmax), s	* 57	* 42	* 10	* 42	40.5
Max Q Clear Time (g_c+I1), s	26.1	36.0	3.8	9.8	11.2
Green Ext Time (p_c), s	6.7	4.1	0.0	3.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	48.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	751	281	99	0	20	0	143	114	42	460	0
Future Volume (veh/h)	95	751	281	99	0	20	0	143	114	42	460	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.91	1.00		0.69	1.00		0.94	0.99		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	103	816	305	108	0	22	0	155	124	46	500	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	898	924	373	134	0	83	0	920	671	616	1068	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.26	0.26	0.26	0.08	0.00	0.08	0.00	0.48	0.48	0.06	0.57	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	43.5	64.5	66.5	80.9	0.0	68.9	0.0	22.9	23.2	16.3	20.8	0.0
Ln Grp LOS	D	E	E	F	A	E	A	C	C	B	C	A
Approach Vol, veh/h		1224			130			279			546	
Approach Delay, s/veh		63.2			78.9			23.0			20.4	
Approach LOS		E			E			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	10.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		92.9	16.1	45.0	13.6	79.3		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 57	40.5	* 42	* 10	* 42		
Max Allow Headway (MAH), s		7.1	4.2	5.7	3.8	7.3		
Max Q Clear (g_c+I1), s		26.1	11.2	36.0	3.8	9.8		
Green Ext Time (g_e), s		6.7	0.4	4.1	0.0	3.3		
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.86	1.00		
Prob of Max Out (p_x)		0.04	0.00	0.98	0.03	0.00		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		2001		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1101	1435		1391		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L	LL (Pr/Pm)				

Lanes in Grp	0	0	1	2	1	0	0	0
Grp Vol (v), veh/h	0	0	108	103	46	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	9.2	3.5	1.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	9.2	3.5	1.8	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1781	1728	1087	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	76.3	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	66.5	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	74.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	134	898	616	0	0	0
V/C Ratio (X)	0.00	0.00	0.81	0.11	0.07	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	468	942	632	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.95	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	70.1	43.5	16.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	10.8	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	80.9	43.5	16.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.2	1.5	0.8	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.77	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	8.1	2.7	1.4	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.50	1.38	0.58	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	500	0	816	0	143	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	24.1	0.0	34.0	0.0	7.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.1	0.0	34.0	0.0	7.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1068	0	924	0	857	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.88	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	0	1068	0	969	0	857	0	0
Upstream Filter (I)	0.00	0.95	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.4	0.0	54.7	0.0	22.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	9.7	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.8	0.0	64.5	0.0	22.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.4	0.0	15.0	0.0	3.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	1.2	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	1.00	1.41	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	16.1	0.0	22.9	0.0	5.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	5.31	0.00	0.97	0.00	0.41	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	22	305	0	136	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1101	1435	0	1521	0	0
Q Serve Time (g_s), s	0.0	0.0	2.9	30.8	0.0	7.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	2.9	30.8	0.0	7.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	0.91	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	83	373	0	734	0	0
V/C Ratio (X)	0.00	0.00	0.27	0.82	0.00	0.18	0.00	0.00
Avail Cap (c_a), veh/h	0	0	290	391	0	734	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	67.2	53.6	0.0	22.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.7	13.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	68.9	66.5	0.0	23.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.8	11.0	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.3	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.47	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	1.5	18.1	0.0	5.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.10	6.12	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.3
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	747	48	172	186	9	91
Future Vol, veh/h	747	48	172	186	9	91
Conflicting Peds, #/hr	0	53	53	0	14	32
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	40	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	812	52	187	202	10	99

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	917	0	1455	491
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	590	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	742	-	132	524
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	553	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	711	-	92	489
Mov Cap-2 Maneuver	-	-	-	-	215	-
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	403	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.7	15.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	439	-	-	711	-
HCM Lane V/C Ratio	0.248	-	-	0.263	-
HCM Control Delay (s)	15.9	-	-	11.9	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	1	-	-	1.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	531	121	106	148	235	57	394	55	166	1034	153
Future Volume (veh/h)	191	531	121	106	148	235	57	394	55	166	1034	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.86	0.96		0.85	0.99		0.86	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	208	577	132	115	161	255	62	428	60	180	1124	166
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	415	1003	386	307	490	486	139	1285	623	446	1483	218
Arrive On Green	0.10	0.28	0.28	0.08	0.26	0.26	0.36	0.36	0.36	0.08	0.49	0.49
Sat Flow, veh/h	1781	3554	1368	1781	1870	1351	423	3554	1367	1781	3018	443
Grp Volume(v), veh/h	208	577	132	115	161	255	62	428	60	180	659	631
Grp Sat Flow(s),veh/h/ln	1781	1777	1368	1781	1870	1351	423	1777	1367	1781	1777	1684
Q Serve(g_s), s	10.1	16.7	9.2	5.4	8.3	18.3	16.8	10.5	3.1	7.3	36.0	36.6
Cycle Q Clear(g_c), s	10.1	16.7	9.2	5.4	8.3	18.3	37.8	10.5	3.1	7.3	36.0	36.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	415	1003	386	307	490	486	139	1285	623	446	873	828
V/C Ratio(X)	0.50	0.58	0.34	0.38	0.33	0.52	0.45	0.33	0.10	0.40	0.75	0.76
Avail Cap(c_a), veh/h	439	1007	388	310	490	486	139	1285	623	449	873	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	0.63	0.63	0.63
Uniform Delay (d), s/veh	27.9	36.9	34.2	28.6	35.7	31.7	46.5	27.8	19.5	20.2	24.7	24.8
Incr Delay (d2), s/veh	0.9	0.8	0.5	0.8	0.4	1.0	9.8	0.7	0.3	0.4	3.9	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.9	11.8	5.6	4.3	7.0	10.1	3.8	8.1	1.9	5.3	20.8	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	37.7	34.7	29.4	36.1	32.7	56.3	28.5	19.8	20.6	28.5	29.1
LnGrp LOS	C	D	C	C	D	C	E	C	B	C	C	C
Approach Vol, veh/h		917			531			550			1470	
Approach Delay, s/veh		35.3			33.0			30.7			27.8	
Approach LOS		D			C			C			C	

Timer - Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		64.8	17.8	37.5	15.6	49.2	15.4	39.9
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s		* 59	13.8	* 31	10.2	* 43	10.0	* 34
Max Q Clear Time (g_c+I1), s		38.6	12.1	20.3	9.3	39.8	7.4	18.7
Green Ext Time (p_c), s		9.5	0.1	1.5	0.0	1.1	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	531	121	106	148	235	57	394	55	166	1034	153
Future Volume (veh/h)	191	531	121	106	148	235	57	394	55	166	1034	153
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.93		0.86	0.96		0.85	0.99		0.86	0.95		0.83
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	208	577	132	115	161	255	62	428	60	180	1124	166
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	415	1003	386	307	490	486	139	1285	623	446	1483	218
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.28	0.28	0.08	0.26	0.26	0.36	0.36	0.36	0.08	0.49	0.49
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.8	37.7	34.7	29.4	36.1	32.7	56.3	28.5	19.8	20.6	28.5	29.1
Ln Grp LOS	C	D	C	C	D	C	E	C	B	C	C	C
Approach Vol, veh/h		917			531			550			1470	
Approach Delay, s/veh		35.3			33.0			30.7			27.8	
Approach LOS		D			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		4.0	1.1	3.0	1.2	5.3	1.1	3.0
Phs Duration (G+Y+Rc), s		64.8	17.8	37.5	15.6	49.2	15.4	39.9
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s		* 59	13.8	* 31	10.2	* 43	10.0	* 34
Max Allow Headway (MAH), s		5.3	3.8	4.7	3.8	5.6	3.8	5.1
Max Q Clear (g_c+I1), s		38.6	12.1	20.3	9.3	39.8	7.4	18.7
Green Ext Time (g_e), s		9.5	0.1	1.5	0.0	1.1	0.1	4.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	0.98	1.00
Prob of Max Out (p_x)		0.00	1.00	0.14	1.00	0.00	1.00	0.13

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			1781		1781	423	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3018		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		443		1351		1367		1368

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		LL (Pr/Pm)		

Lanes in Grp	0	0	1	0	1	1	1	0
Grp Vol (v), veh/h	0	0	208	0	180	62	115	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	1781	423	1781	0
Q Serve Time (g_s), s	0.0	0.0	10.1	0.0	7.3	16.8	5.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	10.1	0.0	7.3	37.8	5.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	904	0	867	423	708	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	31.5	0.0	45.4	43.4	31.5	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	23.1	0.0	32.9	22.4	17.2	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.5	0.0	3.3	16.8	2.8	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	415	0	446	139	307	0
V/C Ratio (X)	0.00	0.00	0.50	0.00	0.40	0.45	0.38	0.00
Avail Cap (c_a), veh/h	0	0	439	0	449	139	310	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.63	0.97	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	27.9	0.0	20.2	46.5	28.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	0.0	0.4	9.8	0.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	28.8	0.0	20.6	56.3	29.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.3	0.0	3.0	1.8	2.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.0	0.4	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.78	0.00	1.74	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	7.9	0.0	5.3	3.8	4.3	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.33	0.00	1.23	0.65	0.81	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	2	0	2
Grp Vol (v), veh/h	0	659	0	161	0	428	0	577
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	36.0	0.0	8.3	0.0	10.5	0.0	16.7
Cycle Q Clear Time (g_c), s	0.0	36.0	0.0	8.3	0.0	10.5	0.0	16.7
Lane Grp Cap (c), veh/h	0	873	0	490	0	1285	0	1003
V/C Ratio (X)	0.00	0.75	0.00	0.33	0.00	0.33	0.00	0.58
Avail Cap (c_a), veh/h	0	873	0	490	0	1285	0	1007
Upstream Filter (I)	0.00	0.63	0.00	1.00	0.00	0.97	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.7	0.0	35.7	0.0	27.8	0.0	36.9
Incr Delay (d2), s/veh	0.0	3.9	0.0	0.4	0.0	0.7	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.5	0.0	36.1	0.0	28.5	0.0	37.7
1st-Term Q (Q1), veh/ln	0.0	14.7	0.0	3.8	0.0	4.5	0.0	7.2
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	0.1	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.33	0.00	1.80	0.00	1.75	0.00	1.60
%ile Back of Q (95%), veh/ln	0.0	20.8	0.0	7.0	0.0	8.1	0.0	11.8
%ile Storage Ratio (RQ%)	0.00	2.24	0.00	0.52	0.00	0.58	0.00	2.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	631	0	255	0	60	0	132
Grp Sat Flow (s), veh/h/ln	0	1684	0	1351	0	1367	0	1368
Q Serve Time (g_s), s	0.0	36.6	0.0	18.3	0.0	3.1	0.0	9.2
Cycle Q Clear Time (g_c), s	0.0	36.6	0.0	18.3	0.0	3.1	0.0	9.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	10.0	0.0	9.8	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.26	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	828	0	486	0	623	0	386
V/C Ratio (X)	0.00	0.76	0.00	0.52	0.00	0.10	0.00	0.34
Avail Cap (c_a), veh/h	0	828	0	486	0	623	0	388
Upstream Filter (I)	0.00	0.63	0.00	1.00	0.00	0.97	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.8	0.0	31.7	0.0	19.5	0.0	34.2
Incr Delay (d2), s/veh	0.0	4.2	0.0	1.0	0.0	0.3	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.1	0.0	32.7	0.0	19.8	0.0	34.7
1st-Term Q (Q1), veh/ln	0.0	14.2	0.0	5.9	0.0	1.0	0.0	3.1
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.33	0.00	1.66	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	20.2	0.0	10.1	0.0	1.9	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	2.18	0.00	1.91	0.00	0.13	0.00	0.96
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	644	30	15	451	1	23
Future Vol, veh/h	644	30	15	451	1	23
Conflicting Peds, #/hr	0	39	39	0	2	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	700	33	16	490	1	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	772	0	1280	406
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	524	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	841	-	170	595
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	593	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	815	-	160	577
Mov Cap-2 Maneuver	-	-	-	-	289	-
Stage 1	-	-	-	-	412	-
Stage 2	-	-	-	-	576	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	554	-	-	815	-
HCM Lane V/C Ratio	0.047	-	-	0.02	-
HCM Control Delay (s)	11.8	-	-	9.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	594	6	2	333	136	2	1	7	127	1	152
Future Volume (veh/h)	117	594	6	2	333	136	2	1	7	127	1	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.99		0.96	0.96		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	646	7	2	362	148	2	1	8	138	1	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	480	2196	24	486	760	311	96	64	302	451	3	421
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	887	3599	39	774	1247	510	178	236	1104	1351	9	1539
Grp Volume(v), veh/h	127	319	334	2	0	510	11	0	0	138	0	166
Grp Sat Flow(s),veh/h/ln	887	1777	1862	774	0	1756	1518	0	0	1351	0	1548
Q Serve(g_s), s	8.3	7.7	7.7	0.1	0.0	14.4	0.0	0.0	0.0	6.9	0.0	7.9
Cycle Q Clear(g_c), s	22.6	7.7	7.7	7.8	0.0	14.4	0.5	0.0	0.0	7.3	0.0	7.9
Prop In Lane	1.00		0.02	1.00		0.29	0.18		0.73	1.00		0.99
Lane Grp Cap(c), veh/h	480	1084	1136	486	0	1071	462	0	0	451	0	423
V/C Ratio(X)	0.26	0.29	0.29	0.00	0.00	0.48	0.02	0.00	0.00	0.31	0.00	0.39
Avail Cap(c_a), veh/h	480	1084	1136	486	0	1071	462	0	0	451	0	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.84	0.00	0.84	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.9	8.3	8.3	10.2	0.0	9.6	23.9	0.0	0.0	26.4	0.0	26.6
Incr Delay (d2), s/veh	1.3	0.7	0.7	0.0	0.0	1.3	0.1	0.0	0.0	0.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.1	4.8	5.1	0.0	0.0	8.3	0.3	0.0	0.0	4.4	0.0	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.2	9.0	9.0	10.2	0.0	10.9	24.0	0.0	0.0	26.8	0.0	27.2
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		780			512			11			304	
Approach Delay, s/veh		10.4			10.9			24.0			27.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	16.4	9.9	24.6	2.5
Green Ext Time (p_c), s	6.1	1.3	7.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	594	6	2	333	136	2	1	7	127	1	152
Future Volume (veh/h)	117	594	6	2	333	136	2	1	7	127	1	152
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	0.99		0.96	0.99		0.96	0.96		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	646	7	2	362	148	2	1	8	138	1	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	480	2196	24	486	760	311	96	64	302	451	3	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	17.2	9.0	9.0	10.2	0.0	10.9	24.0	0.0	0.0	26.8	0.0	27.2
Ln Grp LOS	B	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		780			512			11			304	
Approach Delay, s/veh		10.4			10.9			24.0			27.0	
Approach LOS		B			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		4.9		6.3		5.8
Max Q Clear (g_c+l1), s		16.4		9.9		24.6		2.5
Green Ext Time (g_e), s		6.1		1.3		7.9		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.01		0.02		0.08		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		774		1351		887		178
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1247		9		3599		236
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		510		1539		39		1104
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	2	0	138	0	127	0	11
Grp Sat Flow (s), veh/h/ln	0	774	0	1351	0	887	0	1518
Q Serve Time (g_s), s	0.0	0.1	0.0	6.9	0.0	8.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.8	0.0	7.3	0.0	22.6	0.0	0.5
Perm LT Sat Flow (s_l), veh/h/ln	0	774	0	1351	0	887	0	1224
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1712	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	47.2	0.0	24.1	0.0	40.5	0.0	16.7
Perm LT Q Serve Time (g_ps), s	0.0	0.1	0.0	6.9	0.0	8.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.18
Lane Grp Cap (c), veh/h	0	486	0	451	0	480	0	462
V/C Ratio (X)	0.00	0.00	0.00	0.31	0.00	0.26	0.00	0.02
Avail Cap (c_a), veh/h	0	486	0	451	0	480	0	462
Upstream Filter (I)	0.00	0.84	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.2	0.0	26.4	0.0	15.9	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	1.3	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.2	0.0	26.8	0.0	17.2	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.4	0.0	1.5	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	4.4	0.0	3.1	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	2.91	0.00	0.52	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	319	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	510	0	166	0	334	0	0
Grp Sat Flow (s), veh/h/ln	0	1756	0	1548	0	1862	0	0
Q Serve Time (g_s), s	0.0	14.4	0.0	7.9	0.0	7.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.4	0.0	7.9	0.0	7.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	0.99	0.00	0.02	0.00	0.73
Lane Grp Cap (c), veh/h	0	1071	0	423	0	1136	0	0
V/C Ratio (X)	0.00	0.48	0.00	0.39	0.00	0.29	0.00	0.00
Avail Cap (c_a), veh/h	0	1071	0	423	0	1136	0	0
Upstream Filter (I)	0.00	0.84	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.6	0.0	26.6	0.0	8.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.6	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.9	0.0	27.2	0.0	9.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	2.9	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.67	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.3	0.0	5.3	0.0	5.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	3.55	0.00	0.58	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	425	290	102	600	1209	321
Future Volume (veh/h)	425	290	102	600	1209	321
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	462	315	111	652	1314	349
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	778	357	137	2431	2039	890
Arrive On Green	0.23	0.23	0.08	0.68	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1551
Grp Volume(v), veh/h	462	315	111	652	1314	349
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1551
Q Serve(g_s), s	14.3	23.1	7.4	8.5	0.0	0.0
Cycle Q Clear(g_c), s	14.3	23.1	7.4	8.5	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	778	357	137	2431	2039	890
V/C Ratio(X)	0.59	0.88	0.81	0.27	0.64	0.39
Avail Cap(c_a), veh/h	950	436	223	2431	2039	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.90	0.90	0.81	0.81	0.74	0.74
Uniform Delay (d), s/veh	41.6	45.0	54.5	7.3	0.0	0.0
Incr Delay (d2), s/veh	0.7	15.0	8.9	0.2	1.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.1	15.5	6.4	5.3	0.6	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.2	60.0	63.4	7.6	1.2	1.0
LnGrp LOS	D	E	E	A	A	A
Approach Vol, veh/h	777			763	1663	
Approach Delay, s/veh	49.4			15.7	1.1	
Approach LOS	D			B	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.2	73.7		33.0		87.0
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	9.4	2.0		25.1		10.5
Green Ext Time (p_c), s	0.1	18.0		2.0		3.6

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	425	290	102	600	1209	321
Future Volume (veh/h)	425	290	102	600	1209	321
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	462	315	111	652	1314	349
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	778	357	137	2431	2039	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.23	0.23	0.08	0.68	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	42.2	60.0	63.4	7.6	1.2	1.0
Ln Grp LOS	D	E	E	A	A	A
Approach Vol, veh/h	777			763	1663	
Approach Delay, s/veh	49.4			15.7	1.1	
Approach LOS	D			B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	13.2	73.7		33.0		87.0		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.8		3.9		5.0		
Max Q Clear (g_c+I1), s	9.4	2.0		25.1		10.5		
Green Ext Time (g_e), s	0.1	18.0		2.0		3.6		
Prob of Phs Call (p_c)	0.98	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.14	0.75		0.29		0.11		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1551		1585		0		

Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	111	0	0	462	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	7.4	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	7.4	0.0	0.0	14.3	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	68.8	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	137	0	0	778	0	0	0	0
V/C Ratio (X)	0.81	0.00	0.00	0.59	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.81	0.00	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	54.5	0.0	0.0	41.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	8.9	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.4	0.0	0.0	42.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.2	0.0	0.0	6.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.78	1.00	0.00	1.63	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	6.4	0.0	0.0	10.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.77	0.00	0.00	2.32	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1314	0	0	0	652	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	8.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	8.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2039	0	0	0	2431	0	0
V/C Ratio (X)	0.00	0.64	0.00	0.00	0.00	0.27	0.00	0.00
Avail Cap (c_a), veh/h	0	2039	0	0	0	2431	0	0
Upstream Filter (I)	0.00	0.74	0.00	0.00	0.00	0.81	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.2	0.0	0.0	0.0	7.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.6	0.0	0.0	0.0	5.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	349	0	315	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1551	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	23.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	23.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	890	0	357	0	0	0	0
V/C Ratio (X)	0.00	0.39	0.00	0.88	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	890	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.74	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	15.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.0	0.0	60.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.48	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	15.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.36	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		16.3						
HCM 6th LOS		B						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	97	31	806	196	47	1467
Future Volume (veh/h)	97	31	806	196	47	1467
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.92		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	34	876	213	51	1595
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	180	58	1948	473	66	2696
Arrive On Green	0.14	0.14	1.00	1.00	0.04	0.76
Sat Flow, veh/h	1267	410	2923	688	1781	3647
Grp Volume(v), veh/h	140	0	550	539	51	1595
Grp Sat Flow(s),veh/h/ln	1690	0	1777	1741	1781	1777
Q Serve(g_s), s	9.3	0.0	0.0	0.0	3.4	23.6
Cycle Q Clear(g_c), s	9.3	0.0	0.0	0.0	3.4	23.6
Prop In Lane	0.75	0.24		0.40	1.00	
Lane Grp Cap(c), veh/h	240	0	1223	1198	66	2696
V/C Ratio(X)	0.58	0.00	0.45	0.45	0.77	0.59
Avail Cap(c_a), veh/h	324	0	1223	1198	223	2696
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.85	0.85	0.09	0.09
Uniform Delay (d), s/veh	48.1	0.0	0.0	0.0	57.3	6.3
Incr Delay (d2), s/veh	2.2	0.0	1.0	1.0	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.3	0.0	0.6	0.6	2.2	8.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.4	0.0	1.0	1.0	59.0	6.4
LnGrp LOS	D	A	A	A	E	A
Approach Vol, veh/h	140		1089			1646
Approach Delay, s/veh	50.4		1.0			8.1
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		97.9		22.1	8.5	89.5
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		25.6		11.3	5.4	2.0
Green Ext Time (p_c), s		0.0		0.3	0.0	20.7

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	97	31	806	196	47	1467
Future Volume (veh/h)	97	31	806	196	47	1467
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.92		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	34	876	213	51	1595
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	180	58	1948	473	66	2696
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	1.00	1.00	0.04	0.76
Unsig. Movement Delay						
Ln Grp Delay, s/veh	50.4	0.0	1.0	1.0	59.0	6.4
Ln Grp LOS	D	A	A	A	E	A
Approach Vol, veh/h	140		1089			1646
Approach Delay, s/veh	50.4		1.0			8.1
Approach LOS	D		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		97.9		22.1	8.5	89.5		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+I1), s		25.6		11.3	5.4	2.0		
Green Ext Time (g_e), s		0.0		0.3	0.0	20.7		
Prob of Phs Call (p_c)		1.00		1.00	0.82	1.00		
Prob of Max Out (p_x)		1.00		0.00	0.00	0.10		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1267	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		12		2923		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		410		688		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	140	51	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1690	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	9.3	3.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.3	3.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	82.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.75	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	240	66	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.58	0.77	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	324	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	48.1	57.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.2	1.7	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.4	59.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.9	1.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.40	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.3	2.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.15	0.41	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1595	0	0	0	550	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	23.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.6	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2696	0	0	0	1223	0	0
V/C Ratio (X)	0.00	0.59	0.00	0.00	0.00	0.45	0.00	0.00
Avail Cap (c_a), veh/h	0	2696	0	0	0	1223	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.85	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.4	0.0	0.0	0.0	1.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.19	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.1	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.00	0.00	0.16	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	539	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1741	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.24	0.00	0.40	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1198	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1198	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	36	34	124	69	8	28	87	49	12	176	27
Future Vol, veh/h	8	36	34	124	69	8	28	87	49	12	176	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	39	37	135	75	9	30	95	53	13	191	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	10.5	9.5	10.2
HCM LOS	A	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	10%	62%	6%
Vol Thru, %	53%	46%	34%	82%
Vol Right, %	30%	44%	4%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	164	78	201	215
LT Vol	28	8	124	12
Through Vol	87	36	69	176
RT Vol	49	34	8	27
Lane Flow Rate	178	85	218	234
Geometry Grp	1	1	1	1
Degree of Util (X)	0.24	0.117	0.311	0.316
Departure Headway (Hd)	4.856	4.988	5.126	4.863
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	733	710	695	734
Service Time	2.935	3.085	3.207	2.936
HCM Lane V/C Ratio	0.243	0.12	0.314	0.319
HCM Control Delay	9.5	8.8	10.5	10.2
HCM Lane LOS	A	A	B	B
HCM 95th-tile Q	0.9	0.4	1.3	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	38	26	57	49	73	22	486	92	63	1301	21
Future Volume (veh/h)	6	38	26	57	49	73	22	486	92	63	1301	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	1.00		0.93	0.98		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	41	28	62	53	79	24	528	100	68	1414	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	138	86	161	120	210	294	2189	412	617	2657	43
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	63	1014	628	730	878	1543	372	2944	554	782	3573	58
Grp Volume(v), veh/h	76	0	0	115	0	79	24	317	311	68	702	735
Grp Sat Flow(s),veh/h/ln	1705	0	0	1608	0	1543	372	1777	1721	782	1777	1855
Q Serve(g_s), s	0.0	0.0	0.0	2.0	0.0	4.2	2.6	5.0	5.1	2.7	15.1	15.1
Cycle Q Clear(g_c), s	3.6	0.0	0.0	5.6	0.0	4.2	17.8	5.0	5.1	7.8	15.1	15.1
Prop In Lane	0.09		0.37	0.54		1.00	1.00		0.32	1.00		0.03
Lane Grp Cap(c), veh/h	276	0	0	281	0	210	294	1321	1280	617	1321	1379
V/C Ratio(X)	0.28	0.00	0.00	0.41	0.00	0.38	0.08	0.24	0.24	0.11	0.53	0.53
Avail Cap(c_a), veh/h	570	0	0	549	0	484	294	1321	1280	617	1321	1379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.68	0.68	0.68	0.63	0.63	0.63
Uniform Delay (d), s/veh	35.1	0.0	0.0	35.9	0.0	35.4	8.7	3.6	3.6	4.8	4.9	4.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	1.0	0.0	1.1	0.4	0.3	0.3	0.2	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	0.0	4.3	0.0	3.0	0.4	2.5	2.4	0.7	6.8	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.6	0.0	0.0	36.8	0.0	36.5	9.0	3.9	3.9	5.1	5.9	5.8
LnGrp LOS	D	A	A	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		76			194			652			1505	
Approach Delay, s/veh		35.6			36.7			4.1			5.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	71.9	18.1	71.9	18.1
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	17.1	7.6	19.8	5.6
Green Ext Time (p_c), s	13.6	0.9	4.6	0.4

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	38	26	57	49	73	22	486	92	63	1301	21
Future Volume (veh/h)	6	38	26	57	49	73	22	486	92	63	1301	21
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.97	0.98		0.97	1.00		0.93	0.98		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	41	28	62	53	79	24	528	100	68	1414	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	52	138	86	161	120	210	294	2189	412	617	2657	43
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.74	0.74	0.74	0.74	0.74	0.74
Unsig. Movement Delay												
Ln Grp Delay, s/veh	35.6	0.0	0.0	36.8	0.0	36.5	9.0	3.9	3.9	5.1	5.9	5.8
Ln Grp LOS	D	A	A	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		76			194			652			1505	
Approach Delay, s/veh		35.6			36.7			4.1			5.8	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		71.9		18.1		71.9		18.1
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.1		5.0		5.4		5.6
Max Q Clear (g_c+I1), s		17.1		7.6		19.8		5.6
Green Ext Time (g_e), s		13.6		0.9		4.6		0.4
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		782		730		372		63

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3573		878		2944		1014

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		58		1543		554		628

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	68	0	115	0	24	0	76
Grp Sat Flow (s), veh/h/ln	0	782	0	1608	0	372	0	1705
Q Serve Time (g_s), s	0.0	2.7	0.0	2.0	0.0	2.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.8	0.0	5.6	0.0	17.8	0.0	3.6
Perm LT Sat Flow (s_l), veh/h/ln	0	782	0	1325	0	372	0	1256
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1800	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	66.9	0.0	12.3	0.0	66.9	0.0	12.3
Perm LT Serve Time (g_u), s	0.0	61.8	0.0	8.7	0.0	51.8	0.0	6.7
Perm LT Q Serve Time (g_ps), s	0.0	2.7	0.0	2.0	0.0	2.6	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	7.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	3.6
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.54	0.00	1.00	0.00	0.09
Lane Grp Cap (c), veh/h	0	617	0	281	0	294	0	276
V/C Ratio (X)	0.00	0.11	0.00	0.41	0.00	0.08	0.00	0.28
Avail Cap (c_a), veh/h	0	617	0	549	0	294	0	570
Upstream Filter (I)	0.00	0.63	0.00	1.00	0.00	0.68	0.00	1.00
Uniform Delay (d1), s/veh	0.0	4.8	0.0	35.9	0.0	8.7	0.0	35.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	1.0	0.0	0.4	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.1	0.0	36.8	0.0	9.0	0.0	35.6
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	2.3	0.0	0.2	0.0	1.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.7	0.0	4.3	0.0	0.4	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.24	0.00	0.08	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	702	0	0	0	317	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	15.1	0.0	0.0	0.0	5.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.1	0.0	0.0	0.0	5.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1321	0	0	0	1321	0	0
V/C Ratio (X)	0.00	0.53	0.00	0.00	0.00	0.24	0.00	0.00
Avail Cap (c_a), veh/h	0	1321	0	0	0	1321	0	0
Upstream Filter (I)	0.00	0.63	0.00	0.00	0.00	0.68	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.9	0.0	0.0	0.0	3.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.9	0.0	0.0	0.0	3.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.8	0.0	0.0	0.0	1.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.8	0.0	0.0	0.0	2.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	735	0	79	0	311	0	0
Grp Sat Flow (s), veh/h/ln	0	1855	0	1543	0	1721	0	0
Q Serve Time (g_s), s	0.0	15.1	0.0	4.2	0.0	5.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.1	0.0	4.2	0.0	5.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.03	0.00	1.00	0.00	0.32	0.00	0.37
Lane Grp Cap (c), veh/h	0	1379	0	210	0	1280	0	0
V/C Ratio (X)	0.00	0.53	0.00	0.38	0.00	0.24	0.00	0.00
Avail Cap (c_a), veh/h	0	1379	0	484	0	1280	0	0
Upstream Filter (I)	0.00	0.63	0.00	1.00	0.00	0.68	0.00	0.00
Uniform Delay (d1), s/veh	0.0	4.9	0.0	35.4	0.0	3.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	1.1	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.8	0.0	36.5	0.0	3.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	1.6	0.0	1.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.62	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	7.1	0.0	3.0	0.0	2.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	1.87	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	649	676	266	1122	0	0	0	0	843	388	308
Future Volume (veh/h)	0	649	676	266	1122	0	0	0	0	843	388	308
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	705	735	289	1220	0				836	533	335
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	934	808	114	1868	0				653	393	247
Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	1870	1537	371	3647	0				1781	1072	674
Grp Volume(v), veh/h	0	705	735	289	1220	0				836	0	868
Grp Sat Flow(s),veh/h/ln	0	1777	1537	371	1777	0				1781	0	1746
Q Serve(g_s), s	0.0	28.1	39.1	8.2	22.3	0.0				33.0	0.0	33.0
Cycle Q Clear(g_c), s	0.0	28.1	39.1	47.3	22.3	0.0				33.0	0.0	33.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.39
Lane Grp Cap(c), veh/h	0	934	808	114	1868	0				653	0	640
V/C Ratio(X)	0.00	0.75	0.91	2.54	0.65	0.00				1.28	0.00	1.36
Avail Cap(c_a), veh/h	0	934	808	114	1868	0				653	0	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.75	0.75	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.8	19.4	43.8	15.4	0.0				28.5	0.0	28.5
Incr Delay (d2), s/veh	0.0	5.6	16.1	713.9	1.3	0.0				137.5	0.0	170.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	17.3	22.5	45.0	12.6	0.0				55.8	0.0	64.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.4	35.5	757.7	16.8	0.0				166.0	0.0	198.8
LnGrp LOS	A	C	D	F	B	A				F	A	F
Approach Vol, veh/h		1440			1509						1704	
Approach Delay, s/veh		29.1			158.7						182.7	
Approach LOS		C			F						F	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7
Max Green Setting (Gmax), s		* 47		33.0		* 47
Max Q Clear Time (g_c+I1), s		49.3		35.0		41.1
Green Ext Time (p_c), s		0.0		0.0		4.5

Intersection Summary	
HCM 6th Ctrl Delay	127.4
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	649	676	266	1122	0	0	0	0	843	388	308
Future Volume (veh/h)	0	649	676	266	1122	0	0	0	0	843	388	308
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	705	735	289	1220	0				836	533	335
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	934	808	114	1868	0				653	393	247
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	22.4	35.5	757.7	16.8	0.0				166.0	0.0	198.8
Ln Grp LOS	A	C	D	F	B	A				F	A	F
Approach Vol, veh/h		1440			1509						1704	
Approach Delay, s/veh		29.1			158.7						182.7	
Approach LOS		C			F						F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		6.2		4.5		5.3		
Max Q Clear (g_c+I1), s		49.3		35.0		41.1		
Green Ext Time (g_e), s		0.0		0.0		4.5		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		1.00		0.96		

Left-Turn Movement Data			
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		371		1781		0		

Through Movement Data			
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1072		1870		

Right-Turn Movement Data			
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		674		1537		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	289	0	836	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	371	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	8.2	0.0	33.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	47.3	0.0	33.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	371	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	47.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	114	0	653	0	0	0	0
V/C Ratio (X)	0.00	2.54	0.00	1.28	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	114	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.75	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	43.8	0.0	28.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	713.9	0.0	137.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	757.7	0.0	166.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	12.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	22.5	0.0	25.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.47	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	45.0	0.0	55.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	3.49	0.00	2.93	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	43.9	0.0	45.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.6	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1220	0	0	0	705	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.3	0.0	0.0	0.0	28.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.3	0.0	0.0	0.0	28.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	1868	0	0	0	934	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.00	0.00	0.75	0.00	0.00
Avail Cap (c_a), veh/h	0	1868	0	0	0	934	0	0
Upstream Filter (I)	0.00	0.75	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	15.4	0.0	0.0	0.0	16.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	5.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.8	0.0	0.0	0.0	22.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	0.0	0.0	10.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	1.5	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	0.00	1.00	0.00	1.48	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	12.6	0.0	0.0	0.0	17.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.98	0.00	0.00	0.00	0.93	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	868	0	735	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1746	0	1537	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	33.0	0.0	39.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	33.0	0.0	39.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.39	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	640	0	808	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.36	0.00	0.91	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	640	0	808	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.5	0.0	19.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	170.3	0.0	16.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	198.8	0.0	35.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.6	0.0	12.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	30.3	0.0	3.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.50	0.00	1.41	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	64.2	0.0	22.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	3.38	0.00	1.21	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	57.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	127.4
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1329	0	0	937	418	462	3	221	0	0	0
Future Volume (veh/h)	164	1329	0	0	937	418	462	3	221	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	178	1445	0	0	1018	454	372	184	240			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	199	2121	0	0	2037	908	494	203	265			
Arrive On Green	1.00	1.00	0.00	0.00	0.20	0.20	0.28	0.28	0.28			
Sat Flow, veh/h	359	3647	0	0	3581	1522	1781	732	955			
Grp Volume(v), veh/h	178	1445	0	0	1015	457	372	0	424			
Grp Sat Flow(s),veh/h/ln	359	1777	0	0	1702	1531	1781	0	1687			
Q Serve(g_s), s	29.8	0.0	0.0	0.0	23.9	23.9	17.2	0.0	21.8			
Cycle Q Clear(g_c), s	53.7	0.0	0.0	0.0	23.9	23.9	17.2	0.0	21.8			
Prop In Lane	1.00		0.00	0.00		0.99	1.00		0.57			
Lane Grp Cap(c), veh/h	199	2121	0	0	2032	914	494	0	468			
V/C Ratio(X)	0.89	0.68	0.00	0.00	0.50	0.50	0.75	0.00	0.91			
Avail Cap(c_a), veh/h	199	2121	0	0	2032	914	523	0	495			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.51	0.51	1.00	0.00	1.00			
Uniform Delay (d), s/veh	16.9	0.0	0.0	0.0	24.2	24.2	29.7	0.0	31.4			
Incr Delay (d2), s/veh	6.1	0.2	0.0	0.0	0.1	0.2	5.8	0.0	19.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	4.8	0.1	0.0	0.0	14.6	13.4	12.3	0.0	16.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	0.2	0.0	0.0	24.3	24.4	35.4	0.0	50.9			
LnGrp LOS	C	A	A	A	C	C	D	A	D			
Approach Vol, veh/h		1623			1472			796				
Approach Delay, s/veh		2.7			24.3			43.7				
Approach LOS		A			C			D				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	59.4	30.6	59.4
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	55.7	23.8	25.9
Green Ext Time (p_c), s	0.0	1.0	12.2

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1329	0	0	937	418	462	3	221	0	0	0
Future Volume (veh/h)	164	1329	0	0	937	418	462	3	221	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	178	1445	0	0	1018	454	372	184	240			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	199	2121	0	0	2037	908	494	203	265			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.20	0.20	0.28	0.28	0.28			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.0	0.2	0.0	0.0	24.3	24.4	35.4	0.0	50.9			
Ln Grp LOS	C	A	A	A	C	C	D	A	D			
Approach Vol, veh/h		1623			1472			796				
Approach Delay, s/veh		2.7			24.3			43.7				
Approach LOS		A			C			D				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		59.4		30.6		59.4		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		5.7		4.5		5.2		
Max Q Clear (g_c+I1), s		55.7		23.8		25.9		
Green Ext Time (g_e), s		0.0		1.0		12.2		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		1.00		0.28		

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		359		1781		0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		732		3581		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		955		1522		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	178	0	372	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	359	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	29.8	0.0	17.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	53.7	0.0	17.2	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	359	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	53.7	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	29.8	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	29.8	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	53.7	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	199	0	494	0	0	0	0
V/C Ratio (X)	0.00	0.89	0.00	0.75	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	199	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	29.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.1	0.0	5.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.0	0.0	35.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	6.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.25	0.00	1.59	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.8	0.0	12.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.74	0.00	0.69	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1445	0	0	0	1015	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	23.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	23.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2121	0	0	0	2032	0	0
V/C Ratio (X)	0.00	0.68	0.00	0.00	0.00	0.50	0.00	0.00
Avail Cap (c_a), veh/h	0	2121	0	0	0	2032	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.51	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	24.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.2	0.0	0.0	0.0	24.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.36	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	14.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.41	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	424	0	457	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1687	0	1531	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	21.8	0.0	23.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.8	0.0	23.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.57	0.00	0.99	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	468	0	914	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.91	0.00	0.50	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	495	0	914	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.51	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.4	0.0	24.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	19.5	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.9	0.0	24.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.4	0.0	9.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.5	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.50	0.00	1.38	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	16.3	0.0	13.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.91	0.00	0.38	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	857	548	230	946	0	156	164	122	54	560	250
Future Volume (veh/h)	114	857	548	230	946	0	156	164	122	54	560	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	932	596	250	1028	0	170	178	133	59	609	272
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	742	454	219	1343	599	170	790	773	461	790	649
Arrive On Green	0.02	0.12	0.12	0.16	0.76	0.00	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1781	2086	1278	1781	3554	1585	630	1870	1538	1053	1870	1538
Grp Volume(v), veh/h	124	788	740	250	1028	0	170	178	133	59	609	272
Grp Sat Flow(s),veh/h/ln	1781	1777	1586	1781	1777	1585	630	1870	1538	1053	1870	1538
Q Serve(g_s), s	3.9	32.0	32.0	7.0	15.1	0.0	12.9	5.5	4.3	3.4	25.1	11.2
Cycle Q Clear(g_c), s	3.9	32.0	32.0	7.0	15.1	0.0	38.0	5.5	4.3	8.9	25.1	11.2
Prop In Lane	1.00		0.81	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	632	564	219	1343	599	170	790	773	461	790	649
V/C Ratio(X)	0.42	1.25	1.31	1.14	0.77	0.00	1.00	0.23	0.17	0.13	0.77	0.42
Avail Cap(c_a), veh/h	294	632	564	219	1343	599	170	790	773	461	790	649
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	39.7	39.7	21.1	8.7	0.0	41.6	16.6	12.3	19.4	22.3	18.3
Incr Delay (d2), s/veh	0.6	119.4	148.2	105.1	4.2	0.0	68.6	0.7	0.5	0.6	7.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	50.4	52.6	14.3	6.5	0.0	11.3	4.3	2.7	1.6	17.7	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.3	159.1	187.9	126.2	12.9	0.0	110.2	17.3	12.8	20.0	29.5	20.2
LnGrp LOS	B	F	F	F	B	A	F	B	B	C	C	C
Approach Vol, veh/h		1652			1278			481			940	
Approach Delay, s/veh		161.5			35.1			48.9			26.2	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	39.0		43.0	10.0	37.0		43.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	5.0	* 34		* 38	7.0	* 32		* 38
Max Q Clear Time (g_c+I1), s	5.9	17.1		27.1	9.0	34.0		40.0
Green Ext Time (p_c), s	0.0	6.7		4.1	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	82.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	857	548	230	946	0	156	164	122	54	560	250
Future Volume (veh/h)	114	857	548	230	946	0	156	164	122	54	560	250
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	0.99		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	124	932	596	250	1028	0	170	178	133	59	609	272
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	294	742	454	219	1343	599	170	790	773	461	790	649
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.12	0.12	0.16	0.76	0.00	0.42	0.42	0.42	0.42	0.42	0.42
Unsig. Movement Delay												
Ln Grp Delay, s/veh	19.3	159.1	187.9	126.2	12.9	0.0	110.2	17.3	12.8	20.0	29.5	20.2
Ln Grp LOS	B	F	F	F	B	A	F	B	B	C	C	C
Approach Vol, veh/h		1652			1278			481			940	
Approach Delay, s/veh		161.5			35.1			48.9			26.2	
Approach LOS		F			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	8.0	39.0		43.0	10.0	37.0		43.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	5.0	* 34		* 38	7.0	* 32		* 38
Max Allow Headway (MAH), s	3.8	5.1		4.9	3.8	5.3		5.5
Max Q Clear (g_c+I1), s	5.9	17.1		27.1	9.0	34.0		40.0
Green Ext Time (g_e), s	0.0	6.7		4.1	0.0	0.0		0.0
Prob of Phs Call (p_c)	0.95	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			1053	1781			630

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		2086		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1538		1278		1538

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	124	0	0	59	250	0	0	170
Grp Sat Flow (s), veh/h/ln	1781	0	0	1053	1781	0	0	630
Q Serve Time (g_s), s	3.9	0.0	0.0	3.4	7.0	0.0	0.0	12.9
Cycle Q Clear Time (g_c), s	3.9	0.0	0.0	8.9	7.0	0.0	0.0	38.0
Perm LT Sat Flow (s_l), veh/h/ln	547	0	0	1053	341	0	0	630
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	32.0	0.0	0.0	38.0	33.0	0.0	0.0	38.0
Perm LT Serve Time (g_u), s	18.9	0.0	0.0	32.5	0.0	0.0	0.0	12.9
Perm LT Q Serve Time (g_ps), s	4.0	0.0	0.0	3.4	0.0	0.0	0.0	12.9
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	294	0	0	461	219	0	0	170
V/C Ratio (X)	0.42	0.00	0.00	0.13	1.14	0.00	0.00	1.00
Avail Cap (c_a), veh/h	294	0	0	461	219	0	0	170
Upstream Filter (I)	0.61	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	18.7	0.0	0.0	19.4	21.1	0.0	0.0	41.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.6	105.1	0.0	0.0	68.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	19.3	0.0	0.0	20.0	126.2	0.0	0.0	110.2
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	0.8	2.4	0.0	0.0	3.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	6.4	0.0	0.0	3.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.63	0.00	0.00	1.62
%ile Back of Q (95%), veh/ln	3.0	0.0	0.0	1.6	14.3	0.0	0.0	11.3
%ile Storage Ratio (RQ%)	0.50	0.00	0.00	0.23	2.59	0.00	0.00	1.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	7.9	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1028	0	609	0	788	0	178
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	15.1	0.0	25.1	0.0	32.0	0.0	5.5
Cycle Q Clear Time (g_c), s	0.0	15.1	0.0	25.1	0.0	32.0	0.0	5.5
Lane Grp Cap (c), veh/h	0	1343	0	790	0	632	0	790
V/C Ratio (X)	0.00	0.77	0.00	0.77	0.00	1.25	0.00	0.23
Avail Cap (c_a), veh/h	0	1343	0	790	0	632	0	790
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.61	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.7	0.0	22.3	0.0	39.7	0.0	16.6
Incr Delay (d2), s/veh	0.0	4.2	0.0	7.2	0.0	119.4	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.9	0.0	29.5	0.0	159.1	0.0	17.3
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	10.4	0.0	15.1	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	1.6	0.0	21.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.47	0.00	1.40	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	6.5	0.0	17.7	0.0	50.4	0.0	4.3
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.66	0.00	1.42	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	39.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	272	0	740	0	133
Grp Sat Flow (s), veh/h/ln	0	1585	0	1538	0	1586	0	1538
Q Serve Time (g_s), s	0.0	0.0	0.0	11.2	0.0	32.0	0.0	4.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.2	0.0	32.0	0.0	4.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.81	0.00	1.00
Lane Grp Cap (c), veh/h	0	599	0	649	0	564	0	773
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	1.31	0.00	0.17
Avail Cap (c_a), veh/h	0	599	0	649	0	564	0	773
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.61	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.3	0.0	39.7	0.0	12.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.0	0.0	148.2	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	20.2	0.0	187.9	0.0	12.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.8	0.0	13.4	0.0	1.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.4	0.0	23.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.43	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.5	0.0	52.6	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.91	0.00	1.48	0.00	0.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	44.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	82.7
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	665	239	58	860	89	101	323	51	103	1047	173
Future Volume (veh/h)	242	665	239	58	860	89	101	323	51	103	1047	173
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.89	1.00		0.83	0.95		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	263	723	260	63	935	97	110	351	55	112	1138	188
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	737	578	67	957	380	148	1199	184	473	1543	253
Arrive On Green	0.08	0.39	0.39	0.27	0.27	0.27	0.40	0.40	0.40	0.07	0.51	0.51
Sat Flow, veh/h	1781	1870	1467	572	3554	1412	412	2991	459	1781	3011	495
Grp Volume(v), veh/h	263	723	260	63	935	97	110	205	201	112	669	657
Grp Sat Flow(s),veh/h/ln	1781	1870	1467	572	1777	1412	412	1777	1673	1781	1777	1729
Q Serve(g_s), s	9.6	45.8	15.7	1.5	31.3	6.5	25.6	9.4	9.8	4.2	35.3	35.9
Cycle Q Clear(g_c), s	9.6	45.8	15.7	32.3	31.3	6.5	48.1	9.4	9.8	4.2	35.3	35.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.29
Lane Grp Cap(c), veh/h	207	737	578	67	957	380	148	712	671	473	911	886
V/C Ratio(X)	1.27	0.98	0.45	0.94	0.98	0.26	0.74	0.29	0.30	0.24	0.73	0.74
Avail Cap(c_a), veh/h	207	737	578	67	957	380	148	712	671	476	911	886
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.71	0.71	0.71	0.94	0.94	0.94	0.76	0.76	0.76
Uniform Delay (d), s/veh	33.1	35.9	26.8	59.9	43.5	34.4	49.8	24.4	24.5	17.8	22.9	23.0
Incr Delay (d2), s/veh	154.0	28.3	0.5	72.6	19.3	0.2	26.9	1.0	1.1	0.2	4.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.7	34.6	9.4	5.8	21.7	4.1	7.8	7.3	7.2	3.1	20.7	20.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	187.1	64.2	27.3	132.6	62.8	34.7	76.7	25.3	25.6	18.0	26.9	27.3
LnGrp LOS	F	E	C	F	E	C	E	C	C	B	C	C
Approach Vol, veh/h		1246			1095			516			1438	
Approach Delay, s/veh		82.4			64.3			36.4			26.4	
Approach LOS		F			E			D			C	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	67.0	15.0	38.0	13.4	53.6	53.0
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 62	* 9.6	* 32	8.0	* 48	* 47
Max Q Clear Time (g_c+I1), s	37.9	11.6	34.3	6.2	50.1	47.8
Green Ext Time (p_c), s	10.1	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	242	665	239	58	860	89	101	323	51	103	1047	173
Future Volume (veh/h)	242	665	239	58	860	89	101	323	51	103	1047	173
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.93	1.00		0.89	1.00		0.83	0.95		0.92
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	263	723	260	63	935	97	110	351	55	112	1138	188
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	207	737	578	67	957	380	148	1199	184	473	1543	253
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.39	0.39	0.27	0.27	0.27	0.40	0.40	0.40	0.07	0.51	0.51
Unsig. Movement Delay												
Ln Grp Delay, s/veh	187.1	64.2	27.3	132.6	62.8	34.7	76.7	25.3	25.6	18.0	26.9	27.3
Ln Grp LOS	F	E	C	F	E	C	E	C	C	B	C	C
Approach Vol, veh/h		1246			1095			516			1438	
Approach Delay, s/veh		82.4			64.3			36.4			26.4	
Approach LOS		F			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		67.0	15.0	38.0	13.4	53.6		53.0
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 62	* 9.6	* 32	8.0	* 48		* 47
Max Allow Headway (MAH), s		5.2	3.8	5.3	3.8	6.2		5.0
Max Q Clear (g_c+I1), s		37.9	11.6	34.3	6.2	50.1		47.8
Green Ext Time (g_e), s		10.1	0.0	0.0	0.0	0.0		0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.98	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	572	1781	412		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3011		3554		2991		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		495		1412		459		1467

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L (Pr/Pm)		LL (Pr/Pm)	L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	263	63	112	110	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	572	1781	412	0	0
Q Serve Time (g_s), s	0.0	0.0	9.6	1.5	4.2	25.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	9.6	32.3	4.2	48.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	547	572	930	412	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	34.3	32.3	50.1	48.1	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	1.0	1.5	38.3	25.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.0	1.5	1.6	25.6	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	207	67	473	148	0	0
V/C Ratio (X)	0.00	0.00	1.27	0.94	0.24	0.74	0.00	0.00
Avail Cap (c_a), veh/h	0	0	207	67	476	148	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.71	0.76	0.94	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.1	59.9	17.8	49.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	154.0	72.6	0.2	26.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	187.1	132.6	18.0	76.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.3	1.9	1.7	3.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	8.9	1.4	0.0	1.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.58	1.76	1.80	1.76	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	20.7	5.8	3.1	7.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.50	0.73	0.87	0.94	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	14.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	669	0	935	0	205	0	723
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	35.3	0.0	31.3	0.0	9.4	0.0	45.8
Cycle Q Clear Time (g_c), s	0.0	35.3	0.0	31.3	0.0	9.4	0.0	45.8
Lane Grp Cap (c), veh/h	0	911	0	957	0	712	0	737
V/C Ratio (X)	0.00	0.73	0.00	0.98	0.00	0.29	0.00	0.98
Avail Cap (c_a), veh/h	0	911	0	957	0	712	0	737
Upstream Filter (I)	0.00	0.76	0.00	0.71	0.00	0.94	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.9	0.0	43.5	0.0	24.4	0.0	35.9
Incr Delay (d2), s/veh	0.0	4.0	0.0	19.3	0.0	1.0	0.0	28.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.9	0.0	62.8	0.0	25.3	0.0	64.2
1st-Term Q (Q1), veh/ln	0.0	14.1	0.0	13.6	0.0	3.9	0.0	20.4
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	2.6	0.0	0.2	0.0	5.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.37	0.00	1.34	0.00	1.78	0.00	1.32
%ile Back of Q (95%), veh/ln	0.0	20.7	0.0	21.7	0.0	7.3	0.0	34.6
%ile Storage Ratio (RQ%)	0.00	0.72	0.00	0.47	0.00	0.07	0.00	1.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	657	0	97	0	201	0	260
Grp Sat Flow (s), veh/h/ln	0	1729	0	1412	0	1673	0	1467
Q Serve Time (g_s), s	0.0	35.9	0.0	6.5	0.0	9.8	0.0	15.7
Cycle Q Clear Time (g_c), s	0.0	35.9	0.0	6.5	0.0	9.8	0.0	15.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	0.27	0.00	1.00
Lane Grp Cap (c), veh/h	0	886	0	380	0	671	0	578
V/C Ratio (X)	0.00	0.74	0.00	0.26	0.00	0.30	0.00	0.45
Avail Cap (c_a), veh/h	0	886	0	380	0	671	0	578
Upstream Filter (I)	0.00	0.76	0.00	0.71	0.00	0.94	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.0	0.0	34.4	0.0	24.5	0.0	26.8
Incr Delay (d2), s/veh	0.0	4.3	0.0	0.2	0.0	1.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.3	0.0	34.7	0.0	25.6	0.0	27.3
1st-Term Q (Q1), veh/ln	0.0	13.9	0.0	2.2	0.0	3.8	0.0	5.5
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.0	0.0	0.2	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.37	0.00	1.80	0.00	1.79	0.00	1.70
%ile Back of Q (95%), veh/ln	0.0	20.5	0.0	4.1	0.0	7.2	0.0	9.4
%ile Storage Ratio (RQ%)	0.00	0.71	0.00	0.86	0.00	0.07	0.00	1.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	641	39	103	701	128	153	419	84	300	909	203
Future Volume (veh/h)	74	641	39	103	701	128	153	419	84	300	909	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	697	42	112	762	139	166	455	91	326	988	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	806	655	147	1284	234	198	869	369	239	963	400
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.04	0.08	0.08	0.13	0.27	0.27
Sat Flow, veh/h	614	1870	1520	717	2979	543	1781	3554	1511	1781	3554	1474
Grp Volume(v), veh/h	80	697	42	112	454	447	166	455	91	326	988	221
Grp Sat Flow(s),veh/h/ln	614	1870	1520	717	1777	1745	1781	1777	1511	1781	1777	1474
Q Serve(g_s), s	10.3	30.4	1.5	8.4	17.6	17.6	8.3	11.1	5.1	12.1	24.4	11.6
Cycle Q Clear(g_c), s	27.9	30.4	1.5	38.8	17.6	17.6	8.3	11.1	5.1	12.1	24.4	11.6
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	806	655	147	766	752	198	869	369	239	963	400
V/C Ratio(X)	0.36	0.86	0.06	0.76	0.59	0.59	0.84	0.52	0.25	1.36	1.03	0.55
Avail Cap(c_a), veh/h	225	806	655	147	766	752	198	869	369	239	963	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.20	0.20	0.20	1.00	1.00	1.00	0.92	0.92	0.92	0.38	0.38	0.38
Uniform Delay (d), s/veh	30.2	23.2	15.0	42.5	19.6	19.6	42.5	36.3	33.6	38.9	32.8	28.1
Incr Delay (d2), s/veh	0.9	2.7	0.0	30.6	3.4	3.4	24.3	0.5	0.3	172.7	24.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	15.6	0.9	6.7	12.0	11.8	8.7	8.7	3.4	23.6	17.1	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	25.9	15.0	73.1	22.9	23.0	66.9	36.9	33.9	211.6	57.5	28.8
LnGrp LOS	C	C	B	E	C	C	E	D	C	F	F	C
Approach Vol, veh/h		819			1013			712			1535	
Approach Delay, s/veh		25.9			28.5			43.5			86.1	
Approach LOS		C			C			D			F	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.8	15.6	29.6		44.8	18.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green Setting (Gmax), s		* 39	10.0	* 24		* 39	12.1	* 22
Max Q Clear Time (g_c+I1), s		40.8	10.3	26.4		32.4	14.1	13.1
Green Ext Time (p_c), s		0.0	0.0	0.0		2.9	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	52.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	641	39	103	701	128	153	419	84	300	909	203
Future Volume (veh/h)	74	641	39	103	701	128	153	419	84	300	909	203
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.96	1.00		0.96	1.00		0.95	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	697	42	112	762	139	166	455	91	326	988	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	225	806	655	147	1284	234	198	869	369	239	963	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.04	0.08	0.08	0.13	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.1	25.9	15.0	73.1	22.9	23.0	66.9	36.9	33.9	211.6	57.5	28.8
Ln Grp LOS	C	C	B	E	C	C	E	D	C	F	F	C
Approach Vol, veh/h		819			1013			712			1535	
Approach Delay, s/veh		25.9			28.5			43.5			86.1	
Approach LOS		C			C			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		44.8	15.6	29.6		44.8	18.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 39	10.0	* 24		* 39	12.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.9		5.2	3.7	4.9
Max Q Clear (g_c+I1), s		40.8	10.3	26.4		32.4	14.1	13.1
Green Ext Time (g_e), s		0.0	0.0	0.0		2.9	0.0	2.1
Prob of Phs Call (p_c)		1.00	0.98	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00	1.00	0.31

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		717	1781			614	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2979		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		543		1474		1520		1511

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	112	166	0	0	80	326	0
Grp Sat Flow (s), veh/h/ln	0	717	1781	0	0	614	1781	0
Q Serve Time (g_s), s	0.0	8.4	8.3	0.0	0.0	10.3	12.1	0.0
Cycle Q Clear Time (g_c), s	0.0	38.8	8.3	0.0	0.0	27.9	12.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	717	0	0	0	614	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.8	0.0	0.0	0.0	38.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	8.4	0.0	0.0	0.0	21.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	8.4	0.0	0.0	0.0	10.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	147	198	0	0	225	239	0
V/C Ratio (X)	0.00	0.76	0.84	0.00	0.00	0.36	1.36	0.00
Avail Cap (c_a), veh/h	0	147	198	0	0	225	239	0
Upstream Filter (I)	0.00	1.00	0.92	0.00	0.00	0.20	0.38	0.00
Uniform Delay (d1), s/veh	0.0	42.5	42.5	0.0	0.0	30.2	38.9	0.0
Incr Delay (d2), s/veh	0.0	30.6	24.3	0.0	0.0	0.9	172.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	73.1	66.9	0.0	0.0	31.1	211.6	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	3.8	0.0	0.0	1.5	5.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.2	1.3	0.0	0.0	0.1	11.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.70	0.00	0.00	1.59	1.43	0.00
%ile Back of Q (95%), veh/ln	0.0	6.7	8.7	0.0	0.0	2.4	23.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.97	2.20	0.00	0.00	0.35	4.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	21.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	454	0	988	0	697	0	455
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	17.6	0.0	24.4	0.0	30.4	0.0	11.1
Cycle Q Clear Time (g_c), s	0.0	17.6	0.0	24.4	0.0	30.4	0.0	11.1
Lane Grp Cap (c), veh/h	0	766	0	963	0	806	0	869
V/C Ratio (X)	0.00	0.59	0.00	1.03	0.00	0.86	0.00	0.52
Avail Cap (c_a), veh/h	0	766	0	963	0	806	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.38	0.00	0.20	0.00	0.92
Uniform Delay (d1), s/veh	0.0	19.6	0.0	32.8	0.0	23.2	0.0	36.3
Incr Delay (d2), s/veh	0.0	3.4	0.0	24.7	0.0	2.7	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.9	0.0	57.5	0.0	25.9	0.0	36.9
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	9.8	0.0	12.3	0.0	5.1
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	3.3	0.0	0.6	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.60	0.00	1.30	0.00	1.20	0.00	1.69
%ile Back of Q (95%), veh/ln	0.0	12.0	0.0	17.1	0.0	15.6	0.0	8.7
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.39	0.00	0.33	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	447	0	221	0	42	0	91
Grp Sat Flow (s), veh/h/ln	0	1745	0	1474	0	1520	0	1511
Q Serve Time (g_s), s	0.0	17.6	0.0	11.6	0.0	1.5	0.0	5.1
Cycle Q Clear Time (g_c), s	0.0	17.6	0.0	11.6	0.0	1.5	0.0	5.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	752	0	400	0	655	0	369
V/C Ratio (X)	0.00	0.59	0.00	0.55	0.00	0.06	0.00	0.25
Avail Cap (c_a), veh/h	0	752	0	400	0	655	0	369
Upstream Filter (I)	0.00	1.00	0.00	0.38	0.00	0.20	0.00	0.92
Uniform Delay (d1), s/veh	0.0	19.6	0.0	28.1	0.0	15.0	0.0	33.6
Incr Delay (d2), s/veh	0.0	3.4	0.0	0.6	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.0	0.0	28.8	0.0	15.0	0.0	33.9
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	3.9	0.0	0.5	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.60	0.00	1.51	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.8	0.0	5.9	0.0	0.9	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	1.01	0.00	0.22	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.3
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	48	461	0	0	1131
Future Vol, veh/h	22	48	461	0	0	1131
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	52	501	0	0	1229

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1116	501	0	-	-	-
Stage 1	501	-	-	-	-	-
Stage 2	615	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	215	569	-	0	0	-
Stage 1	608	-	-	0	0	-
Stage 2	503	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	215	569	-	-	-	-
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	503	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	348	569	-
HCM Lane V/C Ratio	-	0.069	0.092	-
HCM Control Delay (s)	-	16.1	12	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.2	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	887	210	251	199	141	49	510	694	247	806	38
Future Volume (veh/h)	44	887	210	251	199	141	49	510	694	247	806	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	964	228	273	216	153	53	554	754	268	876	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	476	906	214	229	1277	569	243	1146	511	277	1192	531
Arrive On Green	0.05	0.32	0.32	0.09	0.36	0.36	0.06	0.32	0.32	0.07	0.34	0.34
Sat Flow, veh/h	1781	2853	673	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	48	600	592	273	216	153	53	554	754	268	876	41
Grp Sat Flow(s),veh/h/ln	1781	1777	1749	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.1	38.1	38.1	11.4	5.0	8.2	2.3	15.0	38.7	9.0	26.1	2.1
Cycle Q Clear(g_c), s	2.1	38.1	38.1	11.4	5.0	8.2	2.3	15.0	38.7	9.0	26.1	2.1
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	476	564	555	229	1277	569	243	1146	511	277	1192	531
V/C Ratio(X)	0.10	1.06	1.07	1.19	0.17	0.27	0.22	0.48	1.48	0.97	0.74	0.08
Avail Cap(c_a), veh/h	500	564	555	229	1277	569	265	1146	511	277	1192	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.10	0.10	0.10	0.82	0.82	0.82	1.00	1.00	1.00	0.41	0.41	0.41
Uniform Delay (d), s/veh	24.4	41.0	41.0	34.7	26.2	27.3	26.2	32.6	40.6	34.8	35.2	27.2
Incr Delay (d2), s/veh	0.0	33.0	34.4	115.8	0.1	0.2	0.4	1.5	224.2	27.0	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	24.8	24.7	18.5	3.7	5.6	1.7	10.7	70.7	8.2	14.7	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	73.9	75.4	150.5	26.3	27.5	26.6	34.1	264.8	61.8	36.9	27.3
LnGrp LOS	C	F	F	F	C	C	C	C	F	E	D	C
Approach Vol, veh/h		1240			642			1361			1185	
Approach Delay, s/veh		72.7			79.4			161.6			42.2	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	45.6	12.0	49.0	14.9	44.1	17.0	44.0
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	38.7	8.0	41.5	9.0	38.7	11.4	38.1
Max Q Clear Time (g_c+I1), s	4.3	28.1	4.1	10.2	11.0	40.7	13.4	40.1
Green Ext Time (p_c), s	0.0	4.3	0.0	1.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	92.8
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	887	210	251	199	141	49	510	694	247	806	38
Future Volume (veh/h)	44	887	210	251	199	141	49	510	694	247	806	38
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	964	228	273	216	153	53	554	754	268	876	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	476	906	214	229	1277	569	243	1146	511	277	1192	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.32	0.32	0.09	0.36	0.36	0.06	0.32	0.32	0.07	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	24.4	73.9	75.4	150.5	26.3	27.5	26.6	34.1	264.8	61.8	36.9	27.3
Ln Grp LOS	C	F	F	F	C	C	C	C	F	E	D	C
Approach Vol, veh/h		1240			642			1361			1185	
Approach Delay, s/veh		72.7			79.4			161.6			42.2	
Approach LOS		E			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.4	45.6	12.0	49.0	14.9	44.1	17.0	44.0
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	38.7	8.0	41.5	9.0	38.7	11.4	38.1
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.4	3.7	5.1
Max Q Clear (g_c+l1), s	4.3	28.1	4.1	10.2	11.0	40.7	13.4	40.1
Green Ext Time (g_e), s	0.0	4.3	0.0	1.8	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.83	1.00	0.80	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.26	0.00	0.78	0.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	3554	3554	2853

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1585	1585	1585	673

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	53	0	48	0	268	0	273	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.3	0.0	2.1	0.0	9.0	0.0	11.4	0.0
Cycle Q Clear Time (g_c), s	2.3	0.0	2.1	0.0	9.0	0.0	11.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	609	0	1013	0	421	0	470	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	38.7	0.0	38.1	0.0	38.7	0.0	39.5	0.0
Perm LT Serve Time (g_u), s	14.1	0.0	38.1	0.0	23.7	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.3	0.0	0.0	0.0	23.7	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	243	0	476	0	277	0	229	0
V/C Ratio (X)	0.22	0.00	0.10	0.00	0.97	0.00	1.19	0.00
Avail Cap (c_a), veh/h	265	0	500	0	277	0	229	0
Upstream Filter (I)	1.00	0.00	0.10	0.00	0.41	0.00	0.82	0.00
Uniform Delay (d1), s/veh	26.2	0.0	24.4	0.0	34.8	0.0	34.7	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	27.0	0.0	115.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.6	0.0	24.4	0.0	61.8	0.0	150.5	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	0.9	0.0	3.6	0.0	4.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	2.1	0.0	7.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.56	0.00	1.44	0.00	1.52	0.00
%ile Back of Q (95%), veh/ln	1.7	0.0	1.4	0.0	8.2	0.0	18.5	0.0
%ile Storage Ratio (RQ%)	0.21	0.00	0.43	0.00	0.92	0.00	3.92	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	10.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	876	0	216	0	554	0	600
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	26.1	0.0	5.0	0.0	15.0	0.0	38.1
Cycle Q Clear Time (g_c), s	0.0	26.1	0.0	5.0	0.0	15.0	0.0	38.1
Lane Grp Cap (c), veh/h	0	1192	0	1277	0	1146	0	564
V/C Ratio (X)	0.00	0.74	0.00	0.17	0.00	0.48	0.00	1.06
Avail Cap (c_a), veh/h	0	1192	0	1277	0	1146	0	564
Upstream Filter (I)	0.00	0.41	0.00	0.82	0.00	1.00	0.00	0.10
Uniform Delay (d1), s/veh	0.0	35.2	0.0	26.2	0.0	32.6	0.0	41.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.1	0.0	1.5	0.0	33.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.9	0.0	26.3	0.0	34.1	0.0	73.9
1st-Term Q (Q1), veh/ln	0.0	10.9	0.0	2.1	0.0	6.3	0.0	16.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	5.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.31	0.00	1.80	0.00	1.64	0.00	1.17
%ile Back of Q (95%), veh/ln	0.0	14.7	0.0	3.7	0.0	10.7	0.0	24.8
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.11	0.00	0.86	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	41	0	153	0	754	0	592
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1749
Q Serve Time (g_s), s	0.0	2.1	0.0	8.2	0.0	38.7	0.0	38.1
Cycle Q Clear Time (g_c), s	0.0	2.1	0.0	8.2	0.0	38.7	0.0	38.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.38
Lane Grp Cap (c), veh/h	0	531	0	569	0	511	0	555
V/C Ratio (X)	0.00	0.08	0.00	0.27	0.00	1.48	0.00	1.07
Avail Cap (c_a), veh/h	0	531	0	569	0	511	0	555
Upstream Filter (I)	0.00	0.41	0.00	0.82	0.00	1.00	0.00	0.10
Uniform Delay (d1), s/veh	0.0	27.2	0.0	27.3	0.0	40.6	0.0	41.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	224.2	0.0	34.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.3	0.0	27.5	0.0	264.8	0.0	75.4
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	3.1	0.0	14.5	0.0	15.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	31.8	0.0	5.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.53	0.00	1.17
%ile Back of Q (95%), veh/ln	0.0	1.5	0.0	5.6	0.0	70.7	0.0	24.7
%ile Storage Ratio (RQ%)	0.00	0.30	0.00	1.17	0.00	11.23	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	60.7	0.0	9.2
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	92.8
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	508	0	301	0	415	0	0	1406	0
Future Volume (veh/h)	0	0	0	508	0	301	0	415	0	0	1406	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	552	0	327	0	451	0	0	1528	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Cap, veh/h	0	649	0	738	0	539	0	1763	0	0	1763	0
Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.00	0.50	0.00	0.00	0.50	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1554	0	3741	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	552	0	327	0	451	0	0	1528	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1554	0	1777	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	17.6	0.0	10.4	0.0	4.4	0.0	0.0	22.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	17.6	0.0	10.4	0.0	4.4	0.0	0.0	22.8	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	649	0	738	0	539	0	1763	0	0	1763	0
V/C Ratio(X)	0.00	0.00	0.00	0.75	0.00	0.61	0.00	0.26	0.00	0.00	0.87	0.00
Avail Cap(c_a), veh/h	0	701	0	788	0	583	0	1763	0	0	1763	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.97	0.00	0.00	0.09	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.5	0.0	16.2	0.0	8.7	0.0	0.0	13.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.7	0.0	1.6	0.0	0.3	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	11.5	0.0	6.4	0.0	2.6	0.0	0.0	8.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.2	0.0	17.8	0.0	9.1	0.0	0.0	14.0	0.0
LnGrp LOS	A	A	A	C	A	B	A	A	A	A	B	A
Approach Vol, veh/h		0			879			451			1528	
Approach Delay, s/veh		0.0			20.6			9.1			14.0	
Approach LOS					C			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	34.7	25.3	34.7	25.3
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	28.1	22.5	28.1	22.5
Max Q Clear Time (g_c+I1), s	6.4	19.6	24.8	0.0
Green Ext Time (p_c), s	2.9	1.2	2.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	508	0	301	0	415	0	0	1406	0
Future Volume (veh/h)	0	0	0	508	0	301	0	415	0	0	1406	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	552	0	327	0	451	0	0	1528	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	649	0	738	0	539	0	1763	0	0	1763	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.00	0.50	0.00	0.00	0.50	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	22.2	0.0	17.8	0.0	9.1	0.0	0.0	14.0	0.0
Ln Grp LOS	A	A	A	C	A	B	A	A	A	A	B	A
Approach Vol, veh/h		0			879			451			1528	
Approach Delay, s/veh		0.0			20.6			9.1			14.0	
Approach LOS					C			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		34.7		25.3		34.7		25.3
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		28.1		22.5		28.1		22.5
Max Allow Headway (MAH), s		5.1		4.4		5.1		0.0
Max Q Clear (g_c+I1), s		6.4		19.6		24.8		0.0
Green Ext Time (g_e), s		2.9		1.2		2.6		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3741		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1554		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	552	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	17.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	17.6	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	29.8	0.0	0.0	0.0	29.8	0.0	20.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	738	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	788	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.61	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	451	0	0	0	1528	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	4.4	0.0	0.0	0.0	22.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.4	0.0	0.0	0.0	22.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	1763	0	0	0	1763	0	649
V/C Ratio (X)	0.00	0.26	0.00	0.00	0.00	0.87	0.00	0.00
Avail Cap (c_a), veh/h	0	1763	0	0	0	1763	0	701
Upstream Filter (I)	0.00	0.97	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.7	0.0	0.0	0.0	13.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.1	0.0	0.0	0.0	14.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	0.0	0.0	7.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.18	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	2.6	0.0	0.0	0.0	8.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.00	0.00	0.15	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	327	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1554	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	10.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	539	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	583	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	454	229	86	355	63	102	279	69	233	1239	413
Future Volume (veh/h)	55	454	229	86	355	63	102	279	69	233	1239	413
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	493	249	93	386	68	111	303	75	253	1347	449
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	339	594	299	245	817	143	215	1257	552	570	1391	612
Arrive On Green	0.06	0.26	0.26	0.07	0.27	0.27	0.07	0.35	0.35	0.11	0.39	0.39
Sat Flow, veh/h	1781	2276	1143	1781	3016	526	1781	3554	1562	1781	3554	1564
Grp Volume(v), veh/h	60	384	358	93	226	228	111	303	75	253	1347	449
Grp Sat Flow(s),veh/h/ln	1781	1777	1642	1781	1777	1766	1781	1777	1562	1781	1777	1564
Q Serve(g_s), s	2.1	18.4	18.5	3.3	9.6	9.7	3.4	5.4	2.9	7.7	33.4	22.1
Cycle Q Clear(g_c), s	2.1	18.4	18.5	3.3	9.6	9.7	3.4	5.4	2.9	7.7	33.4	22.1
Prop In Lane	1.00		0.70	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	464	429	245	481	478	215	1257	552	570	1391	612
V/C Ratio(X)	0.18	0.83	0.83	0.38	0.47	0.48	0.52	0.24	0.14	0.44	0.97	0.73
Avail Cap(c_a), veh/h	370	582	538	258	582	579	224	1257	552	630	1391	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.96	0.96	0.96	0.09	0.09	0.09
Uniform Delay (d), s/veh	21.9	31.3	31.4	23.4	27.4	27.5	21.4	20.6	19.8	14.5	26.8	23.4
Incr Delay (d2), s/veh	0.0	0.8	0.9	1.0	0.7	0.7	1.8	0.4	0.5	0.0	3.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	8.9	8.3	2.5	7.1	7.2	2.6	4.0	2.0	3.7	15.5	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	32.1	32.3	24.4	28.1	28.2	23.2	21.0	20.2	14.6	29.8	24.1
LnGrp LOS	C	C	C	C	C	C	C	C	C	B	C	C
Approach Vol, veh/h		802			547			489			2049	
Approach Delay, s/veh		31.4			27.5			21.4			26.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	40.6	9.4	29.4	14.0	37.2	10.3	28.5
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.6	28.1	7.0	* 30	13.0	22.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	5.4	35.4	4.1	11.7	9.7	7.4	5.3	20.5
Green Ext Time (p_c), s	0.0	0.0	0.0	2.3	0.2	1.8	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	454	229	86	355	63	102	279	69	233	1239	413
Future Volume (veh/h)	55	454	229	86	355	63	102	279	69	233	1239	413
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	493	249	93	386	68	111	303	75	253	1347	449
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	339	594	299	245	817	143	215	1257	552	570	1391	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.26	0.26	0.07	0.27	0.27	0.07	0.35	0.35	0.11	0.39	0.39
Unsig. Movement Delay												
Ln Grp Delay, s/veh	21.9	32.1	32.3	24.4	28.1	28.2	23.2	21.0	20.2	14.6	29.8	24.1
Ln Grp LOS	C	C	C	C	C	C	C	C	C	B	C	C
Approach Vol, veh/h		802			547			489			2049	
Approach Delay, s/veh		31.4			27.5			21.4			26.7	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	10.6	40.6	9.4	29.4	14.0	37.2	10.3	28.5
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	13.0	22.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.9	3.7	5.1	3.8	4.9	3.7	5.1
Max Q Clear (g_c+l1), s	5.4	35.4	4.1	11.7	9.7	7.4	5.3	20.5
Green Ext Time (g_e), s	0.0	0.0	0.0	2.3	0.2	1.8	0.0	3.0
Prob of Phs Call (p_c)	0.94	1.00	0.78	1.00	1.00	1.00	0.90	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.02	1.00	0.00	1.00	0.51

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	3016	3554	2276

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1564	526	1562	1143

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	111	0	60	0	253	0	93	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.4	0.0	2.1	0.0	7.7	0.0	3.3	0.0
Cycle Q Clear Time (g_c), s	3.4	0.0	2.1	0.0	7.7	0.0	3.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	263	0	930	0	999	0	716	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	31.8	0.0	23.5	0.0	33.2	0.0	23.5	0.0
Perm LT Serve Time (g_u), s	1.8	0.0	14.6	0.0	26.4	0.0	5.0	0.0
Perm LT Q Serve Time (g_ps), s	1.8	0.0	0.6	0.0	2.3	0.0	2.8	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	215	0	339	0	570	0	245	0
V/C Ratio (X)	0.52	0.00	0.18	0.00	0.44	0.00	0.38	0.00
Avail Cap (c_a), veh/h	224	0	370	0	630	0	258	0
Upstream Filter (I)	0.96	0.00	0.09	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.4	0.0	21.9	0.0	14.5	0.0	23.4	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	23.2	0.0	21.9	0.0	14.6	0.0	24.4	0.0
1st-Term Q (Q1), veh/ln	1.3	0.0	0.8	0.0	2.9	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.53	0.00	1.29	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.6	0.0	1.3	0.0	3.7	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	0.37	0.00	0.28	0.00	0.54	0.00	0.63	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1347	0	226	0	303	0	384
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	33.4	0.0	9.6	0.0	5.4	0.0	18.4
Cycle Q Clear Time (g_c), s	0.0	33.4	0.0	9.6	0.0	5.4	0.0	18.4
Lane Grp Cap (c), veh/h	0	1391	0	481	0	1257	0	464
V/C Ratio (X)	0.00	0.97	0.00	0.47	0.00	0.24	0.00	0.83
Avail Cap (c_a), veh/h	0	1391	0	582	0	1257	0	582
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.96	0.00	0.09
Uniform Delay (d1), s/veh	0.0	26.8	0.0	27.4	0.0	20.6	0.0	31.3
Incr Delay (d2), s/veh	0.0	3.0	0.0	0.7	0.0	0.4	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	0.0	28.1	0.0	21.0	0.0	32.1
1st-Term Q (Q1), veh/ln	0.0	13.1	0.0	3.9	0.0	2.2	0.0	7.4
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.13	0.00	1.80	0.00	1.80	0.00	1.18
%ile Back of Q (95%), veh/ln	0.0	15.5	0.0	7.1	0.0	4.0	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	1.11	0.00	0.14	0.00	0.16	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	449	0	228	0	75	0	358
Grp Sat Flow (s), veh/h/ln	0	1564	0	1766	0	1562	0	1642
Q Serve Time (g_s), s	0.0	22.1	0.0	9.7	0.0	2.9	0.0	18.5
Cycle Q Clear Time (g_c), s	0.0	22.1	0.0	9.7	0.0	2.9	0.0	18.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.30	0.00	1.00	0.00	0.70
Lane Grp Cap (c), veh/h	0	612	0	478	0	552	0	429
V/C Ratio (X)	0.00	0.73	0.00	0.48	0.00	0.14	0.00	0.83
Avail Cap (c_a), veh/h	0	612	0	579	0	552	0	538
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.96	0.00	0.09
Uniform Delay (d1), s/veh	0.0	23.4	0.0	27.5	0.0	19.8	0.0	31.4
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.7	0.0	0.5	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.1	0.0	28.2	0.0	20.2	0.0	32.3
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	3.9	0.0	1.0	0.0	6.9
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.18	0.00	1.80	0.00	1.80	0.00	1.19
%ile Back of Q (95%), veh/ln	0.0	9.0	0.0	7.2	0.0	2.0	0.0	8.3
%ile Storage Ratio (RQ%)	0.00	1.75	0.00	0.15	0.00	0.38	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	372	176	60	378	32	53	375	39	20	1451	131
Future Volume (veh/h)	64	372	176	60	378	32	53	375	39	20	1451	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	404	191	65	411	35	58	408	42	22	1577	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	493	233	212	770	648	120	1344	137	425	1364	121
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	941	1198	566	821	1870	1575	283	3240	331	925	3288	293
Grp Volume(v), veh/h	70	0	595	65	411	35	58	223	227	22	844	875
Grp Sat Flow(s),veh/h/ln	941	0	1764	821	1870	1575	283	1777	1795	925	1777	1804
Q Serve(g_s), s	3.6	0.0	18.0	4.6	9.9	0.8	0.0	5.0	5.1	1.0	24.9	24.9
Cycle Q Clear(g_c), s	13.6	0.0	18.0	22.5	9.9	0.8	24.9	5.0	5.1	6.1	24.9	24.9
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.18	1.00		0.16
Lane Grp Cap(c), veh/h	352	0	726	212	770	648	120	737	745	425	737	748
V/C Ratio(X)	0.20	0.00	0.82	0.31	0.53	0.05	0.48	0.30	0.31	0.05	1.14	1.17
Avail Cap(c_a), veh/h	356	0	735	216	779	656	120	737	745	425	737	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	18.4	0.0	15.7	25.7	13.3	10.6	30.0	11.7	11.8	13.8	17.6	17.6
Incr Delay (d2), s/veh	0.3	0.0	7.2	0.8	0.7	0.0	13.3	1.1	1.1	0.0	66.9	77.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	11.9	1.6	6.6	0.4	2.2	3.4	3.5	0.3	27.2	30.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	0.0	22.9	26.5	14.0	10.6	43.3	12.8	12.8	13.8	84.5	95.3
LnGrp LOS	B	A	C	C	B	B	D	B	B	B	F	F
Approach Vol, veh/h		665			511			508			1741	
Approach Delay, s/veh		22.4			15.3			16.3			89.0	
Approach LOS		C			B			B			F	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	29.9	30.1	29.9	30.1
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	26.9	20.0	26.9	24.5
Green Ext Time (p_c), s	0.0	1.9	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	54.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	372	176	60	378	32	53	375	39	20	1451	131
Future Volume (veh/h)	64	372	176	60	378	32	53	375	39	20	1451	131
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	404	191	65	411	35	58	408	42	22	1577	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	352	493	233	212	770	648	120	1344	137	425	1364	121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.7	0.0	22.9	26.5	14.0	10.6	43.3	12.8	12.8	13.8	84.5	95.3
Ln Grp LOS	B	A	C	C	B	B	D	B	B	B	F	F
Approach Vol, veh/h		665			511			508			1741	
Approach Delay, s/veh		22.4			15.3			16.3			89.0	
Approach LOS		C			B			B			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		29.9		30.1		29.9		30.1
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		6.1		5.2		5.2		5.1
Max Q Clear (g_c+I1), s		26.9		20.0		26.9		24.5
Green Ext Time (g_e), s		0.0		1.9		0.0		0.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		283		941		925		821
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3240		1198		3288		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		331		566		293		1575
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	70	0	22	0	65
Grp Sat Flow (s), veh/h/ln	0	283	0	941	0	925	0	821
Q Serve Time (g_s), s	0.0	0.0	0.0	3.6	0.0	1.0	0.0	4.6
Cycle Q Clear Time (g_c), s	0.0	24.9	0.0	13.6	0.0	6.1	0.0	22.5
Perm LT Sat Flow (s_l), veh/h/ln	0	283	0	941	0	925	0	821
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	24.9	0.0	24.7	0.0	24.9	0.0	24.7
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.8	0.0	19.8	0.0	6.7
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	3.6	0.0	1.0	0.0	4.6
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	120	0	352	0	425	0	212
V/C Ratio (X)	0.00	0.48	0.00	0.20	0.00	0.05	0.00	0.31
Avail Cap (c_a), veh/h	0	120	0	356	0	425	0	216
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.0	0.0	18.4	0.0	13.8	0.0	25.7
Incr Delay (d2), s/veh	0.0	13.3	0.0	0.3	0.0	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	43.3	0.0	18.7	0.0	13.8	0.0	26.5
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	0.7	0.0	0.2	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.2	0.0	1.3	0.0	0.3	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.56	0.00	0.34	0.00	0.08	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	223	0	0	0	844	0	411
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	5.0	0.0	0.0	0.0	24.9	0.0	9.9
Cycle Q Clear Time (g_c), s	0.0	5.0	0.0	0.0	0.0	24.9	0.0	9.9
Lane Grp Cap (c), veh/h	0	737	0	0	0	737	0	770
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	1.14	0.00	0.53
Avail Cap (c_a), veh/h	0	737	0	0	0	737	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.7	0.0	0.0	0.0	17.6	0.0	13.3
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	66.9	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.8	0.0	0.0	0.0	84.5	0.0	14.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	8.4	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	13.7	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.23	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.4	0.0	0.0	0.0	27.2	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.00	0.00	1.05	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	26.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	227	0	595	0	875	0	35
Grp Sat Flow (s), veh/h/ln	0	1795	0	1764	0	1804	0	1575
Q Serve Time (g_s), s	0.0	5.1	0.0	18.0	0.0	24.9	0.0	0.8
Cycle Q Clear Time (g_c), s	0.0	5.1	0.0	18.0	0.0	24.9	0.0	0.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.18	0.00	0.32	0.00	0.16	0.00	1.00
Lane Grp Cap (c), veh/h	0	745	0	726	0	748	0	648
V/C Ratio (X)	0.00	0.31	0.00	0.82	0.00	1.17	0.00	0.05
Avail Cap (c_a), veh/h	0	745	0	735	0	748	0	656
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	15.7	0.0	17.6	0.0	10.6
Incr Delay (d2), s/veh	0.0	1.1	0.0	7.2	0.0	77.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.8	0.0	22.9	0.0	95.3	0.0	10.6
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	6.0	0.0	8.5	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.5	0.0	16.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.60	0.00	1.24	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.5	0.0	11.9	0.0	30.7	0.0	0.4
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.34	0.00	1.19	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	31.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.3
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/10/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	172	453	247	131	22	231	476	135	30	454	45	82
Future Volume (vph)	172	453	247	131	22	231	476	135	30	454	45	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.99	0.97			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Frt	1.00	0.97	0.85			1.00	0.97		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1651	3045	1304			1651	3178		1649	3175		
Flt Permitted	0.19	1.00	1.00			0.14	1.00		0.16	1.00		
Satd. Flow (perm)	329	3045	1304			235	3178		278	3175		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	187	492	268	142	24	251	517	147	33	493	49	89
RTOR Reduction (vph)	0	0	139	0	0	0	19	0	0	9	0	0
Lane Group Flow (vph)	187	626	137	0	0	275	645	0	33	622	0	0
Confl. Peds. (#/hr)	7		9	2	9	2		7	11		1	9
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	44.7	30.4	30.4			49.6	33.4		25.0	25.0		
Effective Green, g (s)	44.7	30.4	30.4			49.6	33.4		25.0	25.0		
Actuated g/C Ratio	0.32	0.22	0.22			0.35	0.24		0.18	0.18		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	240	661	283			247	758		49	566		
v/s Ratio Prot	0.08	0.21				c0.13	0.20			0.20		
v/s Ratio Perm	0.17		0.10			c0.27			0.12			
v/c Ratio	0.78	0.95	0.48			1.11	0.85		0.67	1.10		
Uniform Delay, d1	37.8	54.0	47.9			38.2	50.9		53.7	57.5		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	14.7	24.2	5.8			91.1	11.6		55.1	67.7		
Delay (s)	52.5	78.2	53.7			129.3	62.5		108.8	125.2		
Level of Service	D	E	D			F	E		F	F		
Approach Delay (s)		67.6					82.1			124.4		
Approach LOS		E					F			F		

Intersection Summary			
HCM 2000 Control Delay	119.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	118.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	13	239	1186	51	142	164	122	9
Future Volume (vph)	13	239	1186	51	142	164	122	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	1.00			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.99			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1652	3279			3195	1345	
Flt Permitted		0.13	1.00			0.95	1.00	
Satd. Flow (perm)		223	3279			3195	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	260	1289	55	154	178	133	10
RTOR Reduction (vph)	0	0	2	0	0	0	109	0
Lane Group Flow (vph)	0	274	1342	0	0	345	21	0
Confl. Peds. (#/hr)	1	9		11	2	11	7	1
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		44.4	44.4			22.2	22.2	
Effective Green, g (s)		44.4	44.4			22.2	22.2	
Actuated g/C Ratio		0.32	0.32			0.16	0.16	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		205	1039			506	213	
v/s Ratio Prot		0.13	c0.41			c0.11	0.02	
v/s Ratio Perm		c0.30						
v/c Ratio		1.34	1.29			0.68	0.10	
Uniform Delay, d1		40.7	47.8			55.6	50.3	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		180.7	138.5			4.5	0.4	
Delay (s)		221.4	186.3			60.1	50.7	
Level of Service		F	F			E	D	
Approach Delay (s)			192.2			57.5		
Approach LOS			F			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	12	30	218	30	72	12	59	388	29	9	15	47
Future Volume (vph)	12	30	218	30	72	12	59	388	29	9	15	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.99				1.00	1.00			1.00	1.00
Flpb, ped/bikes		0.99	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.99			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1632	3125				1645	3247			1652	1652
Flt Permitted		0.26	1.00				0.39	1.00			0.95	0.95
Satd. Flow (perm)		455	3125				683	3247			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	33	237	33	78	13	64	422	32	10	16	51
RTOR Reduction (vph)	0	0	15	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	46	333	0	0	0	77	463	0	0	16	51
Confl. Peds. (#/hr)	4	17		1	5	1	5		4	17	3	4
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		35.1	35.1				35.1	35.1			16.0	16.0
Effective Green, g (s)		35.1	35.1				35.1	35.1			16.0	16.0
Actuated g/C Ratio		0.20	0.20				0.20	0.20			0.09	0.09
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		88	609				133	633			146	146
v/s Ratio Prot			0.11					c0.14			0.01	0.03
v/s Ratio Perm		0.10					0.11					
v/c Ratio		0.52	0.55				0.58	0.73			0.11	0.35
Uniform Delay, d1		64.9	65.3				65.7	68.0			75.4	77.1
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		5.5	1.0				6.0	4.4			0.3	1.4
Delay (s)		70.4	66.3				71.7	72.4			75.8	78.6
Level of Service		E	E				E	E			E	E
Approach Delay (s)			66.8					72.3				
Approach LOS			E					E				

Intersection Summary			
HCM 2000 Control Delay	111.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	147.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL2	SBL	SBT	SBR	SBR2	SEL	SET	SER	SER2	NWL
Lane Configurations												
Traffic Volume (vph)	245	6	16	237	816	106	1	33	1070	265	36	29
Future Volume (vph)	245	6	16	237	816	106	1	33	1070	265	36	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Lane Util. Factor	0.95	1.00		1.00	0.95	1.00		1.00	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.97		1.00	1.00	0.98		1.00	1.00	0.98	0.97	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	0.85	1.00
Flt Protected	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	1.00	0.95
Satd. Flow (prot)	3303	1437		1652	3303	1448		1645	3151	1321	1440	1651
Flt Permitted	1.00	1.00		0.95	1.00	1.00		0.48	1.00	1.00	1.00	0.08
Satd. Flow (perm)	3303	1437		1652	3303	1448		834	3151	1321	1440	141
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	266	7	17	258	887	115	1	36	1163	288	39	32
RTOR Reduction (vph)	0	0	0	0	0	73	0	0	0	0	28	0
Lane Group Flow (vph)	266	7	0	275	887	43	0	36	1192	259	11	32
Confl. Peds. (#/hr)		6	6	1		3	4	6		5	3	3
Turn Type	NA	Perm	Prot	Prot	NA	Perm		Perm	NA	Perm	Perm	Perm
Protected Phases	6		5	5	2				10			
Permitted Phases		6				2		10		10	10	14
Actuated Green, G (s)	34.0	34.0		33.7	51.9	51.9		49.3	49.3	49.3	49.3	49.3
Effective Green, g (s)	34.0	34.0		33.7	51.9	51.9		49.3	49.3	49.3	49.3	49.3
Actuated g/C Ratio	0.19	0.19		0.19	0.29	0.29		0.27	0.27	0.27	0.27	0.27
Clearance Time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	623	271		309	952	417		228	863	361	394	38
v/s Ratio Prot	0.08			c0.17	c0.27				c0.38			
v/s Ratio Perm		0.00				0.03		0.04		0.20	0.01	0.23
v/c Ratio	0.43	0.03		0.89	0.93	0.10		0.16	1.38	0.72	0.03	0.84
Uniform Delay, d1	64.4	59.5		71.3	62.3	47.0		49.6	65.3	59.1	47.8	61.7
Progression Factor	1.00	1.00		1.24	0.70	1.28		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	0.2		9.7	6.5	0.2		0.3	178.8	6.7	0.0	85.4
Delay (s)	66.5	59.7		98.2	50.3	60.3		49.9	244.2	65.7	47.8	147.1
Level of Service	E	E		F	D	E		D	F	E	D	F
Approach Delay (s)	68.6				61.5				204.3			
Approach LOS	E				E				F			

Intersection Summary

Movement	NWT	NWR	NWR2
Lane Configurations			
Traffic Volume (vph)	238	160	21
Future Volume (vph)	238	160	21
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.6	7.6	
Lane Util. Factor	0.91	0.91	
Frpb, ped/bikes	0.99	0.96	
Flpb, ped/bikes	1.00	1.00	
Frt	0.97	0.85	
Flt Protected	1.00	1.00	
Satd. Flow (prot)	3062	1295	
Flt Permitted	1.00	1.00	
Satd. Flow (perm)	3062	1295	
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	259	174	23
RTOR Reduction (vph)	0	102	0
Lane Group Flow (vph)	316	38	0
Confl. Peds. (#/hr)		17	6
Turn Type	NA	Perm	
Protected Phases	14		
Permitted Phases		14	
Actuated Green, G (s)	49.3	49.3	
Effective Green, g (s)	49.3	49.3	
Actuated g/C Ratio	0.27	0.27	
Clearance Time (s)	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	
Lane Grp Cap (vph)	838	354	
v/s Ratio Prot	0.10		
v/s Ratio Perm		0.03	
v/c Ratio	0.38	0.11	
Uniform Delay, d1	52.9	48.9	
Progression Factor	1.00	1.00	
Incremental Delay, d2	0.3	0.1	
Delay (s)	53.2	49.0	
Level of Service	D	D	
Approach Delay (s)	58.2		
Approach LOS	E		

Intersection Summary

Future without Project Conditions – Year 2037

Afternoon Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/10/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1719	8	0	1627	0	1	0	19	439	9	205
Future Volume (veh/h)	0	1719	8	0	1627	0	1	0	19	439	9	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1868	9	0	1768	0	1	0	21	355	181	223
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2637	13	0	1787	0	3	0	64	488	209	257
Arrive On Green	0.00	0.50	0.50	0.00	0.50	0.00	0.04	0.00	0.04	0.27	0.27	0.27
Sat Flow, veh/h	0	5413	25	0	3741	0	72	0	1516	1781	762	938
Grp Volume(v), veh/h	0	1212	665	0	1768	0	22	0	0	355	0	404
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1588	0	0	1781	0	1700
Q Serve(g_s), s	0.0	24.8	24.8	0.0	44.3	0.0	1.2	0.0	0.0	16.3	0.0	20.4
Cycle Q Clear(g_c), s	0.0	24.8	24.8	0.0	44.3	0.0	1.2	0.0	0.0	16.3	0.0	20.4
Prop In Lane	0.00		0.01	0.00		0.00	0.05		0.95	1.00		0.55
Lane Grp Cap(c), veh/h	0	1712	938	0	1787	0	67	0	0	488	0	465
V/C Ratio(X)	0.00	0.71	0.71	0.00	0.99	0.00	0.33	0.00	0.00	0.73	0.00	0.87
Avail Cap(c_a), veh/h	0	1712	938	0	1787	0	159	0	0	590	0	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.3	17.3	0.0	22.1	0.0	41.9	0.0	0.0	29.6	0.0	31.1
Incr Delay (d2), s/veh	0.0	2.5	4.5	0.0	18.9	0.0	2.8	0.0	0.0	3.6	0.0	11.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	14.1	15.9	0.0	28.1	0.0	0.9	0.0	0.0	11.4	0.0	14.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.8	21.8	0.0	41.1	0.0	44.6	0.0	0.0	33.2	0.0	42.9
LnGrp LOS	A	B	C	A	D	A	D	A	A	C	A	D
Approach Vol, veh/h		1877			1768			22			759	
Approach Delay, s/veh		20.5			41.1			44.6			38.4	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.4	29.8	50.4	9.8
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	26.8	22.4	46.3	3.2
Green Ext Time (p_c), s	6.3	2.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1719	8	0	1627	0	1	0	19	439	9	205
Future Volume (veh/h)	0	1719	8	0	1627	0	1	0	19	439	9	205
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1868	9	0	1768	0	1	0	21	355	181	223
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2637	13	0	1787	0	3	0	64	488	209	257
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.50	0.50	0.00	0.50	0.00	0.04	0.00	0.04	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	19.8	21.8	0.0	41.1	0.0	44.6	0.0	0.0	33.2	0.0	42.9
Ln Grp LOS	A	B	C	A	D	A	D	A	A	C	A	D
Approach Vol, veh/h		1877			1768			22			759	
Approach Delay, s/veh		20.5			41.1			44.6			38.4	
Approach LOS		C			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		50.4	9.8	29.8		50.4		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		26.8	3.2	22.4		46.3		
Green Ext Time (g_e), s		6.3	0.0	2.2		0.0		
Prob of Phs Call (p_c)		1.00	0.43	1.00		1.00		
Prob of Max Out (p_x)		0.89	0.93	0.53		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	72	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5413	0	762		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		25	1516	938		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	22	355	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1588	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	1.2	16.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	1.2	16.3	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	45.3	0.0	0.0	0.0	45.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.05	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	67	488	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.33	0.73	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	159	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	41.9	29.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.8	3.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	44.6	33.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.5	6.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.62	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.9	11.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.09	1.22	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1212	0	0	0	1768	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	24.8	0.0	0.0	0.0	44.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.8	0.0	0.0	0.0	44.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1712	0	0	0	1787	0	0
V/C Ratio (X)	0.00	0.71	0.00	0.00	0.00	0.99	0.00	0.00
Avail Cap (c_a), veh/h	0	1712	0	0	0	1787	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.3	0.0	0.0	0.0	22.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.5	0.0	0.0	0.0	18.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.8	0.0	0.0	0.0	41.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	0.0	0.0	16.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	4.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.54	1.00	1.00	0.00	1.36	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	14.1	0.0	0.0	0.0	28.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.60	0.00	0.00	0.00	4.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	665	0	404	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1700	0	0	0	0
Q Serve Time (g_s), s	0.0	24.8	0.0	20.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	24.8	0.0	20.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.95	0.55	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	938	0	465	0	0	0	0
V/C Ratio (X)	0.00	0.71	0.00	0.87	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	938	0	563	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.3	0.0	31.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.5	0.0	11.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.8	0.0	42.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.4	0.0	7.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	1.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.50	1.00	1.54	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	15.9	0.0	14.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.68	0.00	1.54	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1277	79	96	1835	75	218	365	149	37	310	291
Future Volume (veh/h)	104	1277	79	96	1835	75	218	365	149	37	310	291
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	1388	86	104	1995	82	237	397	162	40	337	316
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	1955	859	174	1955	859	217	607	509	201	607	509
Arrive On Green	0.55	0.55	0.55	1.00	1.00	1.00	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	199	3554	1562	359	3554	1562	777	1870	1569	848	1870	1569
Grp Volume(v), veh/h	113	1388	86	104	1995	82	237	397	162	40	337	316
Grp Sat Flow(s),veh/h/ln	199	1777	1562	359	1777	1562	777	1870	1569	848	1870	1569
Q Serve(g_s), s	49.5	26.0	2.4	23.5	0.0	0.0	15.8	16.4	7.0	3.8	13.4	15.3
Cycle Q Clear(g_c), s	49.5	26.0	2.4	49.5	0.0	0.0	29.2	16.4	7.0	20.2	13.4	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	1955	859	174	1955	859	217	607	509	201	607	509
V/C Ratio(X)	0.60	0.71	0.10	0.60	1.02	0.10	1.09	0.65	0.32	0.20	0.56	0.62
Avail Cap(c_a), veh/h	190	1955	859	174	1955	859	217	607	509	201	607	509
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.10	0.10	0.10	0.51	0.51	0.51	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	15.0	9.6	14.1	0.0	0.0	40.0	26.1	22.9	34.7	25.1	25.7
Incr Delay (d2), s/veh	13.0	2.2	0.2	1.5	12.7	0.0	71.3	1.3	0.2	0.5	1.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	14.7	1.4	2.3	4.5	0.0	13.2	10.1	4.3	1.4	9.7	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	17.2	9.9	15.7	12.7	0.0	111.3	27.4	23.1	35.2	26.2	28.0
LnGrp LOS	C	B	A	B	F	A	F	C	C	D	C	C
Approach Vol, veh/h		1587			2181			796			693	
Approach Delay, s/veh		18.0			12.3			51.5			27.5	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.0	35.0	55.0	35.0
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 50	29.2	* 50	29.2
Max Q Clear Time (g_c+I1), s	51.5	31.2	51.5	22.2
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1277	79	96	1835	75	218	365	149	37	310	291
Future Volume (veh/h)	104	1277	79	96	1835	75	218	365	149	37	310	291
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	1388	86	104	1995	82	237	397	162	40	337	316
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	190	1955	859	174	1955	859	217	607	509	201	607	509
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.55	0.55	0.55	1.00	1.00	1.00	0.32	0.32	0.32	0.32	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.0	17.2	9.9	15.7	12.7	0.0	111.3	27.4	23.1	35.2	26.2	28.0
Ln Grp LOS	C	B	A	B	F	A	F	C	C	D	C	C
Approach Vol, veh/h		1587			2181			796			693	
Approach Delay, s/veh		18.0			12.3			51.5			27.5	
Approach LOS		B			B			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		55.0		35.0		55.0		35.0
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 50		29.2		* 50		29.2
Max Allow Headway (MAH), s		5.9		5.0		5.2		4.6
Max Q Clear (g_c+l1), s		51.5		31.2		51.5		22.2
Green Ext Time (g_e), s		0.0		0.0		0.0		1.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.56
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		199		777		359		848
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1562		1569		1562		1569
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	113	0	237	0	104	0	40
Grp Sat Flow (s), veh/h/ln	0	199	0	777	0	359	0	848
Q Serve Time (g_s), s	0.0	49.5	0.0	15.8	0.0	23.5	0.0	3.8
Cycle Q Clear Time (g_c), s	0.0	49.5	0.0	29.2	0.0	49.5	0.0	20.2
Perm LT Sat Flow (s_l), veh/h/ln	0	199	0	777	0	359	0	848
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	49.5	0.0	29.2	0.0	49.5	0.0	29.2
Perm LT Serve Time (g_u), s	0.0	49.5	0.0	15.8	0.0	23.5	0.0	12.8
Perm LT Q Serve Time (g_ps), s	0.0	49.5	0.0	15.8	0.0	23.5	0.0	3.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	190	0	217	0	174	0	201
V/C Ratio (X)	0.00	0.60	0.00	1.09	0.00	0.60	0.00	0.20
Avail Cap (c_a), veh/h	0	190	0	217	0	174	0	201
Upstream Filter (I)	0.00	1.00	0.00	0.51	0.00	0.10	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.0	0.0	40.0	0.0	14.1	0.0	34.7
Incr Delay (d2), s/veh	0.0	13.0	0.0	71.3	0.0	1.5	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.0	0.0	111.3	0.0	15.7	0.0	35.2
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	4.7	0.0	1.6	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	4.3	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.47	0.00	1.41	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	4.9	0.0	13.2	0.0	2.3	0.0	1.4
%ile Storage Ratio (RQ%)	0.00	1.00	0.00	5.16	0.00	0.42	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1388	0	397	0	1995	0	337
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	26.0	0.0	16.4	0.0	0.0	0.0	13.4
Cycle Q Clear Time (g_c), s	0.0	26.0	0.0	16.4	0.0	0.0	0.0	13.4
Lane Grp Cap (c), veh/h	0	1955	0	607	0	1955	0	607
V/C Ratio (X)	0.00	0.71	0.00	0.65	0.00	1.02	0.00	0.56
Avail Cap (c_a), veh/h	0	1955	0	607	0	1955	0	607
Upstream Filter (I)	0.00	1.00	0.00	0.51	0.00	0.10	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.0	0.0	26.1	0.0	0.0	0.0	25.1
Incr Delay (d2), s/veh	0.0	2.2	0.0	1.3	0.0	12.7	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.2	0.0	27.4	0.0	12.7	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	9.0	0.0	6.8	0.0	0.0	0.0	5.6
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.2	0.0	3.4	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	0.00	1.44	0.00	1.30	0.00	1.68
%ile Back of Q (95%), veh/ln	0.0	14.7	0.0	10.1	0.0	4.5	0.0	9.7
%ile Storage Ratio (RQ%)	0.00	3.16	0.00	0.21	0.00	0.39	0.00	0.65
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	10.1	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	86	0	162	0	82	0	316
Grp Sat Flow (s), veh/h/ln	0	1562	0	1569	0	1562	0	1569
Q Serve Time (g_s), s	0.0	2.4	0.0	7.0	0.0	0.0	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	7.0	0.0	0.0	0.0	15.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	859	0	509	0	859	0	509
V/C Ratio (X)	0.00	0.10	0.00	0.32	0.00	0.10	0.00	0.62
Avail Cap (c_a), veh/h	0	859	0	509	0	859	0	509
Upstream Filter (I)	0.00	1.00	0.00	0.51	0.00	0.10	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.6	0.0	22.9	0.0	0.0	0.0	25.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.0	0.0	2.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.9	0.0	23.1	0.0	0.0	0.0	28.0
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	2.4	0.0	0.0	0.0	5.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.75	0.00	1.80	0.00	1.69
%ile Back of Q (95%), veh/ln	0.0	1.4	0.0	4.3	0.0	0.0	0.0	9.6
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	1.15	0.00	0.00	0.00	2.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1327	0	0	1291	10	685	74	264	6	0	23
Future Volume (veh/h)	25	1327	0	0	1291	10	685	74	264	6	0	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1442	0	0	1403	11	556	345	287	7	0	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	143	1757	0	0	1757	779	477	252	209	21	0	76
Arrive On Green	0.99	0.99	0.00	0.00	0.49	0.49	0.27	0.27	0.27	0.06	0.00	0.06
Sat Flow, veh/h	380	3647	0	0	3647	1575	1781	940	782	350	0	1250
Grp Volume(v), veh/h	27	1442	0	0	1403	11	556	0	632	32	0	0
Grp Sat Flow(s),veh/h/ln	380	1777	0	0	1777	1575	1781	0	1722	1600	0	0
Q Serve(g_s), s	5.0	2.2	0.0	0.0	29.7	0.3	24.1	0.0	24.1	1.7	0.0	0.0
Cycle Q Clear(g_c), s	34.7	2.2	0.0	0.0	29.7	0.3	24.1	0.0	24.1	1.7	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.45	0.22		0.78
Lane Grp Cap(c), veh/h	143	1757	0	0	1757	779	477	0	461	98	0	0
V/C Ratio(X)	0.19	0.82	0.00	0.00	0.80	0.01	1.17	0.00	1.37	0.33	0.00	0.00
Avail Cap(c_a), veh/h	143	1757	0	0	1757	779	477	0	461	178	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.00	0.00	0.09	0.09	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.1	0.3	0.0	0.0	19.0	11.6	33.0	0.0	33.0	40.5	0.0	0.0
Incr Delay (d2), s/veh	1.9	2.9	0.0	0.0	0.4	0.0	95.3	0.0	180.0	1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	1.5	0.0	0.0	12.5	0.2	32.9	0.0	49.3	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	3.2	0.0	0.0	19.4	11.6	128.3	0.0	213.0	42.4	0.0	0.0
LnGrp LOS	B	A	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1469			1414			1188			32	
Approach Delay, s/veh		3.4			19.3			173.3			42.4	
Approach LOS		A			B			F			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	49.6	10.9	49.6	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	36.7	3.7	31.7	26.1
Green Ext Time (p_c), s	3.0	0.0	6.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1327	0	0	1291	10	685	74	264	6	0	23
Future Volume (veh/h)	25	1327	0	0	1291	10	685	74	264	6	0	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1442	0	0	1403	11	556	345	287	7	0	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	143	1757	0	0	1757	779	477	252	209	21	0	76
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.99	0.99	0.00	0.00	0.49	0.49	0.27	0.27	0.27	0.06	0.00	0.06
Unsig. Movement Delay												
Ln Grp Delay, s/veh	13.9	3.2	0.0	0.0	19.4	11.6	128.3	0.0	213.0	42.4	0.0	0.0
Ln Grp LOS	B	A	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1469			1414			1188			32	
Approach Delay, s/veh		3.4			19.3			173.3			42.4	
Approach LOS		A			B			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		49.6	29.5	10.9		49.6		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.9	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		36.7	26.1	3.7		31.7		
Green Ext Time (g_e), s		3.0	0.0	0.0		6.9		
Prob of Phs Call (p_c)		1.00	1.00	0.59		1.00		
Prob of Max Out (p_x)		0.00	1.00	0.57		0.00		

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		380	1781	350		0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	940	0		3647		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	782	1250		1575		

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	27	556	32	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	380	1781	1600	0	0	0	0
Q Serve Time (g_s), s	0.0	5.0	24.1	1.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	34.7	24.1	1.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	380	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	44.5	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	44.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.22	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	143	477	98	0	0	0	0
V/C Ratio (X)	0.00	0.19	1.17	0.33	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	143	477	178	0	0	0	0
Upstream Filter (I)	0.00	0.64	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.1	33.0	40.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	95.3	1.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.9	128.3	42.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.3	9.7	0.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	12.6	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.47	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.7	32.9	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	2.53	0.08	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	19.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1442	0	0	0	1403	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	2.2	0.0	0.0	0.0	29.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.2	0.0	0.0	0.0	29.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1757	0	0	0	1757	0	0
V/C Ratio (X)	0.00	0.82	0.00	0.00	0.00	0.80	0.00	0.00
Avail Cap (c_a), veh/h	0	1757	0	0	0	1757	0	0
Upstream Filter (I)	0.00	0.64	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.3	0.0	0.0	0.0	19.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.9	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.2	0.0	0.0	0.0	19.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	10.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.00	0.00	1.15	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.5	0.0	0.0	0.0	12.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.00	0.00	0.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	632	0	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1722	0	0	1575	0	0
Q Serve Time (g_s), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.45	0.78	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	461	0	0	779	0	0
V/C Ratio (X)	0.00	0.00	1.37	0.00	0.00	0.01	0.00	0.00
Avail Cap (c_a), veh/h	0	0	461	0	0	779	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.0	0.0	0.0	11.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	180.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	213.0	0.0	0.0	11.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.4	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	23.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.52	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	49.3	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.79	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	42.7	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	298	766	358	219	768	128	333	971	131	77	650	77
Future Volume (veh/h)	298	766	358	219	768	128	333	971	131	77	650	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.90	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	833	389	238	835	139	362	1055	142	84	707	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	550	640	231	868	144	337	667	507	172	959	114
Arrive On Green	0.10	0.29	0.29	0.10	0.29	0.29	0.12	0.36	0.36	0.06	0.30	0.30
Sat Flow, veh/h	1781	1870	1548	1781	3036	505	1781	1870	1423	1781	3169	376
Grp Volume(v), veh/h	324	833	389	238	489	485	362	1055	142	84	396	395
Grp Sat Flow(s),veh/h/ln	1781	1870	1548	1781	1777	1765	1781	1870	1423	1781	1777	1768
Q Serve(g_s), s	12.5	35.3	23.7	11.5	32.5	32.5	14.0	42.8	8.6	3.8	24.0	24.1
Cycle Q Clear(g_c), s	12.5	35.3	23.7	11.5	32.5	32.5	14.0	42.8	8.6	3.8	24.0	24.1
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	254	550	640	231	508	504	337	667	507	172	537	535
V/C Ratio(X)	1.27	1.51	0.61	1.03	0.96	0.96	1.07	1.58	0.28	0.49	0.74	0.74
Avail Cap(c_a), veh/h	254	550	640	231	508	504	337	667	507	208	537	535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.13	0.13	0.13	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	42.4	27.8	33.5	42.2	42.2	30.8	38.6	27.6	30.9	37.6	37.6
Incr Delay (d2), s/veh	127.8	232.5	0.6	26.5	6.0	6.0	69.9	269.0	1.4	2.2	8.7	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.4	70.4	10.4	7.9	16.5	16.4	19.6	105.2	5.6	3.0	17.1	17.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	160.1	274.9	28.4	60.0	48.2	48.2	100.7	307.6	29.0	33.0	46.3	46.4
LnGrp LOS	F	F	C	F	D	D	F	F	C	C	D	D
Approach Vol, veh/h		1546			1212			1559			875	
Approach Delay, s/veh		188.8			50.5			234.2			45.1	
Approach LOS		F			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	41.0	20.0	42.0	18.0	40.0	13.5	48.5
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 13	* 35	14.0	* 36	* 13	* 34	10.0	* 40
Max Q Clear Time (g_c+I1), s	13.5	37.3	16.0	26.1	14.5	34.5	5.8	44.8
Green Ext Time (p_c), s	0.0	0.0	0.0	3.5	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	145.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	298	766	358	219	768	128	333	971	131	77	650	77
Future Volume (veh/h)	298	766	358	219	768	128	333	971	131	77	650	77
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	0.99		0.90	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	324	833	389	238	835	139	362	1055	142	84	707	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	254	550	640	231	868	144	337	667	507	172	959	114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.29	0.29	0.10	0.29	0.29	0.12	0.36	0.36	0.06	0.30	0.30
Unsig. Movement Delay												
Ln Grp Delay, s/veh	160.1	274.9	28.4	60.0	48.2	48.2	100.7	307.6	29.0	33.0	46.3	46.4
Ln Grp LOS	F	F	C	F	D	D	F	F	C	C	D	D
Approach Vol, veh/h		1546			1212			1559			875	
Approach Delay, s/veh		188.8			50.5			234.2			45.1	
Approach LOS		F			D			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	17.0	41.0	20.0	42.0	18.0	40.0	13.5	48.5
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 12	* 35	14.0	* 36	* 13	* 34	10.0	* 40
Max Allow Headway (MAH), s	3.7	4.7	3.8	5.2	3.7	5.1	3.8	5.0
Max Q Clear (g_c+I1), s	13.5	37.3	16.0	26.1	14.5	34.5	5.8	44.8
Green Ext Time (g_e), s	0.0	0.0	0.0	3.5	0.0	0.0	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.59	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1870	3169	3036	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1548	376	505	1423

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	238	0	362	0	324	0	84	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	11.5	0.0	14.0	0.0	12.5	0.0	3.8	0.0
Cycle Q Clear Time (g_c), s	11.5	0.0	14.0	0.0	12.5	0.0	3.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	457	0	682	0	577	0	468	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	34.3	0.0	38.3	0.0	34.3	0.0	36.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	12.2	0.0	1.8	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	12.2	0.0	1.8	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	231	0	337	0	254	0	172	0
V/C Ratio (X)	1.03	0.00	1.07	0.00	1.27	0.00	0.49	0.00
Avail Cap (c_a), veh/h	231	0	337	0	254	0	208	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.13	0.00	1.00	0.00
Uniform Delay (d1), s/veh	33.5	0.0	30.8	0.0	32.3	0.0	30.9	0.0
Incr Delay (d2), s/veh	26.5	0.0	69.9	0.0	127.8	0.0	2.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	60.0	0.0	100.7	0.0	160.1	0.0	33.0	0.0
1st-Term Q (Q1), veh/ln	4.8	0.0	6.5	0.0	5.2	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	1.7	0.0	6.5	0.0	9.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.21	0.00	1.50	0.00	1.29	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.9	0.0	19.6	0.0	18.4	0.0	3.0	0.0
%ile Storage Ratio (RQ%)	1.25	0.00	6.91	0.00	1.67	0.00	0.60	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	1.8	0.0	6.2	0.0	17.5	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.3	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	833	0	396	0	489	0	1055
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	35.3	0.0	24.0	0.0	32.5	0.0	42.8
Cycle Q Clear Time (g_c), s	0.0	35.3	0.0	24.0	0.0	32.5	0.0	42.8
Lane Grp Cap (c), veh/h	0	550	0	537	0	508	0	667
V/C Ratio (X)	0.00	1.51	0.00	0.74	0.00	0.96	0.00	1.58
Avail Cap (c_a), veh/h	0	550	0	537	0	508	0	667
Upstream Filter (I)	0.00	0.13	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	42.4	0.0	37.6	0.0	42.2	0.0	38.6
Incr Delay (d2), s/veh	0.0	232.5	0.0	8.7	0.0	6.0	0.0	269.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	274.9	0.0	46.3	0.0	48.2	0.0	307.6
1st-Term Q (Q1), veh/ln	0.0	15.7	0.0	10.3	0.0	13.8	0.0	19.0
2nd-Term Q (Q2), veh/ln	0.0	35.5	0.0	1.3	0.0	0.8	0.0	49.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.37	0.00	1.48	0.00	1.13	0.00	1.53
%ile Back of Q (95%), veh/ln	0.0	70.4	0.0	17.1	0.0	16.5	0.0	105.2
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	3.40	0.00	0.17	0.00	37.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	70.7	0.0	0.0	0.0	0.0	0.0	97.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	389	0	395	0	485	0	142
Grp Sat Flow (s), veh/h/ln	0	1548	0	1768	0	1765	0	1423
Q Serve Time (g_s), s	0.0	23.7	0.0	24.1	0.0	32.5	0.0	8.6
Cycle Q Clear Time (g_c), s	0.0	23.7	0.0	24.1	0.0	32.5	0.0	8.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.21	0.00	0.29	0.00	1.00
Lane Grp Cap (c), veh/h	0	640	0	535	0	504	0	507
V/C Ratio (X)	0.00	0.61	0.00	0.74	0.00	0.96	0.00	0.28
Avail Cap (c_a), veh/h	0	640	0	535	0	504	0	507
Upstream Filter (I)	0.00	0.13	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.8	0.0	37.6	0.0	42.2	0.0	27.6
Incr Delay (d2), s/veh	0.0	0.6	0.0	8.8	0.0	6.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.4	0.0	46.4	0.0	48.2	0.0	29.0
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	10.2	0.0	13.7	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.3	0.0	0.8	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.20	0.00	1.48	0.00	1.13	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.4	0.0	17.1	0.0	16.4	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	3.40	0.00	0.16	0.00	1.96
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	145.9
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	664	82	98	734	92	152	995	178	101	779	141
Future Volume (veh/h)	123	664	82	98	734	92	152	995	178	101	779	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	722	89	107	798	100	165	1082	193	110	847	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	860	708	161	860	708	184	1481	636	150	1244	225
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	620	1870	1540	673	1870	1540	562	3554	1526	434	2986	539
Grp Volume(v), veh/h	134	722	89	107	798	100	165	1082	193	110	504	496
Grp Sat Flow(s),veh/h/ln	620	1870	1540	673	1870	1540	562	1777	1526	434	1777	1749
Q Serve(g_s), s	5.2	30.6	3.0	10.8	36.2	3.4	16.7	23.0	7.6	14.5	20.8	20.8
Cycle Q Clear(g_c), s	41.4	30.6	3.0	41.4	36.2	3.4	37.5	23.0	7.6	37.5	20.8	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	116	860	708	161	860	708	184	1481	636	150	740	729
V/C Ratio(X)	1.15	0.84	0.13	0.66	0.93	0.14	0.90	0.73	0.30	0.73	0.68	0.68
Avail Cap(c_a), veh/h	116	860	708	161	860	708	184	1481	636	150	740	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.47	0.47	0.47	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	21.4	13.9	40.9	22.9	14.0	39.7	22.0	17.5	40.4	21.4	21.4
Incr Delay (d2), s/veh	78.8	1.0	0.0	19.6	17.4	0.4	22.2	0.9	0.1	16.9	2.5	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	13.9	1.4	5.7	25.3	2.1	7.1	12.3	4.3	5.5	13.2	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	122.9	22.3	14.0	60.5	40.3	14.5	62.0	22.9	17.7	57.3	23.9	24.0
LnGrp LOS	F	C	B	E	D	B	E	C	B	E	C	C
Approach Vol, veh/h		945			1005			1440			1110	
Approach Delay, s/veh		35.8			39.9			26.7			27.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	47.0	43.0	47.0	43.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	43.4	39.5	43.4	39.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	664	82	98	734	92	152	995	178	101	779	141
Future Volume (veh/h)	123	664	82	98	734	92	152	995	178	101	779	141
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	722	89	107	798	100	165	1082	193	110	847	153
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	116	860	708	161	860	708	184	1481	636	150	1244	225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.42	0.42	0.42	0.42	0.42	0.42
Unsig. Movement Delay												
Ln Grp Delay, s/veh	122.9	22.3	14.0	60.5	40.3	14.5	62.0	22.9	17.7	57.3	23.9	24.0
Ln Grp LOS	F	C	B	E	D	B	E	C	B	E	C	C
Approach Vol, veh/h		945			1005			1440			1110	
Approach Delay, s/veh		35.8			39.9			26.7			27.2	
Approach LOS		D			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		47.0		43.0		47.0		43.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.2		5.2		5.1		5.5
Max Q Clear (g_c+l1), s		43.4		39.5		43.4		39.5
Green Ext Time (g_e), s		0.0		0.0		0.0		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		620		562		673		434
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		2986
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1540		1526		1540		539
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	134	0	165	0	107	0	110
Grp Sat Flow (s), veh/h/ln	0	620	0	562	0	673	0	434
Q Serve Time (g_s), s	0.0	5.2	0.0	16.7	0.0	10.8	0.0	14.5
Cycle Q Clear Time (g_c), s	0.0	41.4	0.0	37.5	0.0	41.4	0.0	37.5
Perm LT Sat Flow (s_l), veh/h/ln	0	620	0	562	0	673	0	434
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.4	0.0	37.5	0.0	41.4	0.0	37.5
Perm LT Serve Time (g_u), s	0.0	5.2	0.0	16.7	0.0	10.8	0.0	14.5
Perm LT Q Serve Time (g_ps), s	0.0	5.2	0.0	16.7	0.0	10.8	0.0	14.5
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	116	0	184	0	161	0	150
V/C Ratio (X)	0.00	1.15	0.00	0.90	0.00	0.66	0.00	0.73
Avail Cap (c_a), veh/h	0	116	0	184	0	161	0	150
Upstream Filter (I)	0.00	0.09	0.00	0.47	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.2	0.0	39.7	0.0	40.9	0.0	40.4
Incr Delay (d2), s/veh	0.0	78.8	0.0	22.2	0.0	19.6	0.0	16.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	122.9	0.0	62.0	0.0	60.5	0.0	57.3
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	3.6	0.0	2.3	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	1.1	0.0	0.9	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.36	0.00	1.52	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	6.9	0.0	7.1	0.0	5.7	0.0	5.5
%ile Storage Ratio (RQ%)	0.00	1.09	0.00	2.59	0.00	1.08	0.00	1.76
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	722	0	1082	0	798	0	504
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	30.6	0.0	23.0	0.0	36.2	0.0	20.8
Cycle Q Clear Time (g_c), s	0.0	30.6	0.0	23.0	0.0	36.2	0.0	20.8
Lane Grp Cap (c), veh/h	0	860	0	1481	0	860	0	740
V/C Ratio (X)	0.00	0.84	0.00	0.73	0.00	0.93	0.00	0.68
Avail Cap (c_a), veh/h	0	860	0	1481	0	860	0	740
Upstream Filter (I)	0.00	0.09	0.00	0.47	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.4	0.0	22.0	0.0	22.9	0.0	21.4
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.9	0.0	17.4	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.3	0.0	22.9	0.0	40.3	0.0	23.9
1st-Term Q (Q1), veh/ln	0.0	12.0	0.0	8.7	0.0	14.1	0.0	7.9
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.2	0.0	4.2	0.0	0.5

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.14	0.00	1.38	0.00	1.38	0.00	1.56
%ile Back of Q (95%), veh/ln	0.0	13.9	0.0	12.3	0.0	25.3	0.0	13.2
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.25	0.00	1.79	0.00	0.72
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	89	0	193	0	100	0	496
Grp Sat Flow (s), veh/h/ln	0	1540	0	1526	0	1540	0	1749
Q Serve Time (g_s), s	0.0	3.0	0.0	7.6	0.0	3.4	0.0	20.8
Cycle Q Clear Time (g_c), s	0.0	3.0	0.0	7.6	0.0	3.4	0.0	20.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.31
Lane Grp Cap (c), veh/h	0	708	0	636	0	708	0	729
V/C Ratio (X)	0.00	0.13	0.00	0.30	0.00	0.14	0.00	0.68
Avail Cap (c_a), veh/h	0	708	0	636	0	708	0	729
Upstream Filter (I)	0.00	0.09	0.00	0.47	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.9	0.0	17.5	0.0	14.0	0.0	21.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.4	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.0	0.0	17.7	0.0	14.5	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	2.5	0.0	1.1	0.0	7.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.50	0.00	1.71	0.00	1.80	0.00	1.57
%ile Back of Q (95%), veh/ln	0.0	1.4	0.0	4.3	0.0	2.1	0.0	13.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.99	0.00	0.53	0.00	0.71
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.7
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	38	78	293	327	55
Future Vol, veh/h	13	38	78	293	327	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	41	85	318	355	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	714	385	415	0	-	0
Stage 1	385	-	-	-	-	-
Stage 2	329	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	382	662	1142	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	702	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	354	662	1142	-	-	-
Mov Cap-2 Maneuver	465	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	702	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	1.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1142	-	597	-	-
HCM Lane V/C Ratio	0.074	-	0.093	-	-
HCM Control Delay (s)	8.4	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	42	15	118	190	21	339
Future Vol, veh/h	42	15	118	190	21	339
Conflicting Peds, #/hr	12	5	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	16	128	207	23	368

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	574	153	0	0	355	0
Stage 1	148	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	480	893	-	-	1204	-
Stage 1	880	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	459	875	-	-	1185	-
Mov Cap-2 Maneuver	534	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	641	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	595	1185	-
HCM Lane V/C Ratio	-	-	0.104	0.019	-
HCM Control Delay (s)	-	-	11.8	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	54	46	63	106	343	30	880	47	180	657	21
Future Volume (veh/h)	139	54	46	63	106	343	30	880	47	180	657	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		0.97	1.00		0.90	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	151	59	50	68	115	373	33	957	51	196	714	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	391	332	564	161	521	307	1619	647	194	1594	51
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.15	0.15	0.15	0.46	0.46	0.46
Sat Flow, veh/h	908	922	781	1256	379	1228	719	3554	1420	559	3499	113
Grp Volume(v), veh/h	151	0	109	68	0	488	33	957	51	196	362	375
Grp Sat Flow(s),veh/h/ln	908	0	1703	1256	0	1607	719	1777	1420	559	1777	1835
Q Serve(g_s), s	14.8	0.0	3.5	3.2	0.0	22.6	3.8	22.6	2.8	18.4	12.6	12.6
Cycle Q Clear(g_c), s	37.4	0.0	3.5	6.7	0.0	22.6	16.3	22.6	2.8	41.0	12.6	12.6
Prop In Lane	1.00		0.46	1.00		0.76	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	238	0	723	564	0	682	307	1619	647	194	809	836
V/C Ratio(X)	0.64	0.00	0.15	0.12	0.00	0.72	0.11	0.59	0.08	1.01	0.45	0.45
Avail Cap(c_a), veh/h	238	0	723	564	0	682	307	1619	647	194	809	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	0.0	15.9	18.0	0.0	21.4	33.5	30.4	22.0	39.6	16.8	16.8
Incr Delay (d2), s/veh	5.5	0.0	0.1	0.1	0.0	3.6	0.7	1.5	0.2	66.9	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.5	0.0	2.5	1.7	0.0	13.8	1.4	16.2	1.7	12.5	8.9	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.4	0.0	16.0	18.1	0.0	25.0	34.1	31.9	22.2	106.4	18.5	18.5
LnGrp LOS	D	A	B	B	A	C	C	C	C	F	B	B
Approach Vol, veh/h		260			556			1041			933	
Approach Delay, s/veh		31.3			24.1			31.5			37.0	
Approach LOS		C			C			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		44.0		46.0		44.0				
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8				
Max Green Setting (Gmax), s		* 41		* 38		* 41		* 38				
Max Q Clear Time (g_c+I1), s		43.0		39.4		24.6		24.6				
Green Ext Time (p_c), s		0.0		0.0		6.5		3.2				

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	54	46	63	106	343	30	880	47	180	657	21
Future Volume (veh/h)	139	54	46	63	106	343	30	880	47	180	657	21
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	0.98		0.97	1.00		0.90	1.00		0.90
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	151	59	50	68	115	373	33	957	51	196	714	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	238	391	332	564	161	521	307	1619	647	194	1594	51
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.15	0.15	0.15	0.46	0.46	0.46
Unsig. Movement Delay												
Ln Grp Delay, s/veh	42.4	0.0	16.0	18.1	0.0	25.0	34.1	31.9	22.2	106.4	18.5	18.5
Ln Grp LOS	D	A	B	B	A	C	C	C	C	F	B	B
Approach Vol, veh/h		260			556			1041			933	
Approach Delay, s/veh		31.3			24.1			31.5			37.0	
Approach LOS		C			C			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		46.0		44.0		46.0		44.0
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.6		5.4		5.1		5.5
Max Q Clear (g_c+I1), s		43.0		39.4		24.6		24.6
Green Ext Time (g_e), s		0.0		0.0		6.5		3.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.19
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		559		908		719		1256
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3499		922		3554		379
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		113		781		1420		1228
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	196	0	151	0	33	0	68
Grp Sat Flow (s), veh/h/ln	0	559	0	908	0	719	0	1256
Q Serve Time (g_s), s	0.0	18.4	0.0	14.8	0.0	3.8	0.0	3.2
Cycle Q Clear Time (g_c), s	0.0	41.0	0.0	37.4	0.0	16.3	0.0	6.7
Perm LT Sat Flow (s_l), veh/h/ln	0	559	0	908	0	719	0	1256
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.0	0.0	38.2	0.0	41.0	0.0	38.2
Perm LT Serve Time (g_u), s	0.0	18.4	0.0	15.6	0.0	28.4	0.0	34.7
Perm LT Q Serve Time (g_ps), s	0.0	18.4	0.0	14.8	0.0	3.8	0.0	3.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	194	0	238	0	307	0	564
V/C Ratio (X)	0.00	1.01	0.00	0.64	0.00	0.11	0.00	0.12
Avail Cap (c_a), veh/h	0	194	0	238	0	307	0	564
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.95	0.00	1.00
Uniform Delay (d1), s/veh	0.0	39.6	0.0	36.9	0.0	33.5	0.0	18.0
Incr Delay (d2), s/veh	0.0	66.9	0.0	5.5	0.0	0.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	106.4	0.0	42.4	0.0	34.1	0.0	18.1
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	3.3	0.0	0.7	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	3.6	0.0	0.4	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.59	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	12.5	0.0	6.5	0.0	1.4	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	2.12	0.00	4.14	0.00	0.35	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	362	0	0	0	957	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	12.6	0.0	0.0	0.0	22.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.6	0.0	0.0	0.0	22.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	809	0	0	0	1619	0	0
V/C Ratio (X)	0.00	0.45	0.00	0.00	0.00	0.59	0.00	0.00
Avail Cap (c_a), veh/h	0	809	0	0	0	1619	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.95	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.8	0.0	0.0	0.0	30.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.0	0.0	1.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.5	0.0	0.0	0.0	31.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.8	0.0	0.0	0.0	10.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.72	0.00	1.00	0.00	1.48	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	0.0	0.0	16.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.00	0.00	1.34	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	375	0	109	0	51	0	488
Grp Sat Flow (s), veh/h/ln	0	1835	0	1703	0	1420	0	1607
Q Serve Time (g_s), s	0.0	12.6	0.0	3.5	0.0	2.8	0.0	22.6
Cycle Q Clear Time (g_c), s	0.0	12.6	0.0	3.5	0.0	2.8	0.0	22.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.06	0.00	0.46	0.00	1.00	0.00	0.76
Lane Grp Cap (c), veh/h	0	836	0	723	0	647	0	682
V/C Ratio (X)	0.00	0.45	0.00	0.15	0.00	0.08	0.00	0.72
Avail Cap (c_a), veh/h	0	836	0	723	0	647	0	682
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.95	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.8	0.0	15.9	0.0	22.0	0.0	21.4
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.1	0.0	0.2	0.0	3.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.5	0.0	16.0	0.0	22.2	0.0	25.0
1st-Term Q (Q1), veh/ln	0.0	4.9	0.0	1.4	0.0	0.9	0.0	8.2
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.80	0.00	1.80	0.00	1.55
%ile Back of Q (95%), veh/ln	0.0	9.1	0.0	2.5	0.0	1.7	0.0	13.8
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.23	0.00	0.42	0.00	1.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	59	209	447	4	10	53
Future Vol, veh/h	59	209	447	4	10	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	227	486	4	11	58
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	9.9	14.6	8.8
HCM LOS	A	B	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	16%
Vol Thru, %	0%	100%	99%	0%
Vol Right, %	0%	0%	1%	84%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	209	451	63
LT Vol	59	0	0	10
Through Vol	0	209	447	0
RT Vol	0	0	4	53
Lane Flow Rate	64	227	490	68
Geometry Grp	7	7	5	2
Degree of Util (X)	0.099	0.32	0.617	0.099
Departure Headway (Hd)	5.575	5.071	4.531	5.185
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	643	709	799	688
Service Time	3.311	2.807	2.56	3.241
HCM Lane V/C Ratio	0.1	0.32	0.613	0.099
HCM Control Delay	8.9	10.2	14.6	8.8
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.3	1.4	4.3	0.3

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	60	95	178	57	8	28
Future Vol, veh/h	60	95	178	57	8	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	103	193	62	9	30
Number of Lanes	1	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	2
HCM Control Delay	8.4	8.9	7.7
HCM LOS	A	A	A

Lane	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	100%	0%	0%	22%
Vol Thru, %	0%	100%	76%	0%
Vol Right, %	0%	0%	24%	78%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	60	95	235	36
LT Vol	60	0	0	8
Through Vol	0	95	178	0
RT Vol	0	0	57	28
Lane Flow Rate	65	103	255	39
Geometry Grp	7	7	5	2
Degree of Util (X)	0.095	0.136	0.289	0.048
Departure Headway (Hd)	5.233	4.731	4.079	4.447
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	681	753	868	810
Service Time	2.997	2.495	2.167	2.447
HCM Lane V/C Ratio	0.095	0.137	0.294	0.048
HCM Control Delay	8.6	8.2	8.9	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.5	1.2	0.2

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	20	79	59	69	1	149	9	18	3	21	39
Future Vol, veh/h	2	20	79	59	69	1	149	9	18	3	21	39
Conflicting Peds, #/hr	23	0	35	35	0	23	12	0	26	26	0	12
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	22	86	64	75	1	162	10	20	3	23	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	143	0	0	309	288	83	337	374	111
Stage 1	-	-	-	-	-	-	61	61	-	227	227	-
Stage 2	-	-	-	-	-	-	248	227	-	110	147	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1494	-	-	1440	-	-	643	622	976	617	557	942
Stage 1	-	-	-	-	-	-	950	844	-	776	716	-
Stage 2	-	-	-	-	-	-	756	716	-	895	775	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1467	-	-	1400	-	-	550	566	929	553	507	916
Mov Cap-2 Maneuver	-	-	-	-	-	-	550	566	-	553	507	-
Stage 1	-	-	-	-	-	-	922	820	-	761	671	-
Stage 2	-	-	-	-	-	-	658	671	-	847	753	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	3.5	13.7	10.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	550	929	1467	-	-	1400	-	-	714
HCM Lane V/C Ratio	0.294	0.021	0.001	-	-	0.046	-	-	0.091
HCM Control Delay (s)	14.3	9	7.5	-	-	7.7	-	-	10.5
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.2	0.1	0	-	-	0.1	-	-	0.3

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	39	20	158	64	31	160
Future Vol, veh/h	39	20	158	64	31	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	50	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	22	172	70	34	174

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	449	207	0	0	242	0
Stage 1	207	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	568	833	-	-	1324	-
Stage 1	828	-	-	-	-	-
Stage 2	798	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	553	833	-	-	1324	-
Mov Cap-2 Maneuver	617	-	-	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	777	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	1.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	676	1324	-
HCM Lane V/C Ratio	-	-	0.095	0.025	-
HCM Control Delay (s)	-	-	10.9	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	506	120	34	381	57	162	556	61	47	356	58
Future Volume (veh/h)	127	506	120	34	381	57	162	556	61	47	356	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	550	130	37	414	62	176	604	66	51	387	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	1437	627	53	1212	526	205	662	555	66	516	431
Arrive On Green	0.09	0.40	0.40	0.03	0.34	0.34	0.12	0.35	0.35	0.04	0.28	0.28
Sat Flow, veh/h	1781	3554	1550	1781	3554	1543	1781	1870	1566	1781	1870	1561
Grp Volume(v), veh/h	138	550	130	37	414	62	176	604	66	51	387	63
Grp Sat Flow(s),veh/h/ln	1781	1777	1550	1781	1777	1543	1781	1870	1566	1781	1870	1561
Q Serve(g_s), s	9.1	13.1	6.5	2.5	10.4	3.3	11.6	37.0	3.4	3.4	22.7	3.7
Cycle Q Clear(g_c), s	9.1	13.1	6.5	2.5	10.4	3.3	11.6	37.0	3.4	3.4	22.7	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	1437	627	53	1212	526	205	662	555	66	516	431
V/C Ratio(X)	0.83	0.38	0.21	0.70	0.34	0.12	0.86	0.91	0.12	0.78	0.75	0.15
Avail Cap(c_a), veh/h	238	1437	627	80	1212	526	282	826	692	104	639	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	53.5	25.2	23.2	57.7	29.5	27.1	52.1	37.0	26.1	57.3	39.7	32.8
Incr Delay (d2), s/veh	15.5	0.8	0.7	15.7	0.8	0.5	17.2	12.4	0.1	13.9	3.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	9.4	4.5	2.4	8.0	2.3	10.2	25.8	2.3	3.2	15.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	26.0	24.0	73.4	30.3	27.6	69.4	49.4	26.2	71.2	42.6	32.9
LnGrp LOS	E	C	C	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		818			513			846			501	
Approach Delay, s/veh		32.9			33.1			51.7			44.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	45.9	18.8	38.1	9.5	53.5	9.4	47.5
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	16.0	* 23	19.0	* 41	5.4	* 34	7.0	* 53
Max Q Clear Time (g_c+I1), s	11.1	12.4	13.6	24.7	4.5	15.1	5.4	39.0
Green Ext Time (p_c), s	0.1	2.0	0.2	2.2	0.0	3.7	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	506	120	34	381	57	162	556	61	47	356	58
Future Volume (veh/h)	127	506	120	34	381	57	162	556	61	47	356	58
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	550	130	37	414	62	176	604	66	51	387	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	166	1437	627	53	1212	526	205	662	555	66	516	431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.40	0.40	0.03	0.34	0.34	0.12	0.35	0.35	0.04	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	69.0	26.0	24.0	73.4	30.3	27.6	69.4	49.4	26.2	71.2	42.6	32.9
Ln Grp LOS	E	C	C	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		818			513			846			501	
Approach Delay, s/veh		32.9			33.1			51.7			44.3	
Approach LOS		C			C			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.2	45.9	18.8	38.1	9.5	53.5	9.4	47.5
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	16.0	* 23	19.0	* 41	5.4	* 34	7.0	* 53
Max Allow Headway (MAH), s	3.7	4.9	3.8	5.0	3.7	4.8	3.8	5.0
Max Q Clear (g_c+l1), s	11.1	12.4	13.6	24.7	4.5	15.1	5.4	39.0
Green Ext Time (g_e), s	0.1	2.0	0.2	2.2	0.0	3.7	0.0	3.5
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	0.71	1.00	0.82	1.00
Prob of Max Out (p_x)	0.34	0.00	0.26	0.03	1.00	0.00	1.00	0.17

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	1870	3554	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1543	1561	1550	1566

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	138	0	176	0	37	0	51	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.1	0.0	11.6	0.0	2.5	0.0	3.4	0.0
Cycle Q Clear Time (g_c), s	9.1	0.0	11.6	0.0	2.5	0.0	3.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	166	0	205	0	53	0	66	0
V/C Ratio (X)	0.83	0.00	0.86	0.00	0.70	0.00	0.78	0.00
Avail Cap (c_a), veh/h	238	0	282	0	80	0	104	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.77	0.00
Uniform Delay (d1), s/veh	53.5	0.0	52.1	0.0	57.7	0.0	57.3	0.0
Incr Delay (d2), s/veh	15.5	0.0	17.2	0.0	15.7	0.0	13.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.0	0.0	69.4	0.0	73.4	0.0	71.2	0.0
1st-Term Q (Q1), veh/ln	4.0	0.0	5.2	0.0	1.1	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	1.0	0.0	0.2	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.75	0.00	1.66	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	8.3	0.0	10.2	0.0	2.4	0.0	3.2	0.0
%ile Storage Ratio (RQ%)	0.98	0.00	2.07	0.00	0.30	0.00	0.90	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	414	0	387	0	550	0	604
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	10.4	0.0	22.7	0.0	13.1	0.0	37.0
Cycle Q Clear Time (g_c), s	0.0	10.4	0.0	22.7	0.0	13.1	0.0	37.0
Lane Grp Cap (c), veh/h	0	1212	0	516	0	1437	0	662
V/C Ratio (X)	0.00	0.34	0.00	0.75	0.00	0.38	0.00	0.91
Avail Cap (c_a), veh/h	0	1212	0	639	0	1437	0	826
Upstream Filter (I)	0.00	1.00	0.00	0.77	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.5	0.0	39.7	0.0	25.2	0.0	37.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	3.0	0.0	0.8	0.0	12.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.3	0.0	42.6	0.0	26.0	0.0	49.4
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	10.3	0.0	5.4	0.0	16.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.2	0.0	2.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.44	0.00	1.70	0.00	1.38
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	15.4	0.0	9.4	0.0	25.8
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.32	0.00	0.29	0.00	1.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	62	0	63	0	130	0	66
Grp Sat Flow (s), veh/h/ln	0	1543	0	1561	0	1550	0	1566
Q Serve Time (g_s), s	0.0	3.3	0.0	3.7	0.0	6.5	0.0	3.4
Cycle Q Clear Time (g_c), s	0.0	3.3	0.0	3.7	0.0	6.5	0.0	3.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	526	0	431	0	627	0	555
V/C Ratio (X)	0.00	0.12	0.00	0.15	0.00	0.21	0.00	0.12
Avail Cap (c_a), veh/h	0	526	0	533	0	627	0	692
Upstream Filter (I)	0.00	1.00	0.00	0.77	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.1	0.0	32.8	0.0	23.2	0.0	26.1
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.1	0.0	0.7	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.6	0.0	32.9	0.0	24.0	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	1.2	0.0	1.4	0.0	2.4	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.3	0.0	2.5	0.0	4.5	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.58	0.00	1.14	0.00	0.34
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	36	232	59	0	310	0	0	283	79
Future Volume (veh/h)	0	0	0	36	232	59	0	310	0	0	283	79
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.91	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	0	0	1870	1870
Adj Flow Rate, veh/h				39	252	64	0	337	0	0	308	86
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	0	0	2	2
Cap, veh/h				60	410	187	0	2797	0	0	1105	309
Arrive On Green				0.13	0.13	0.13	0.00	1.00	0.00	0.00	0.79	0.79
Sat Flow, veh/h				463	3161	1442	0	3741	0	0	1404	392
Grp Volume(v), veh/h				156	135	64	0	337	0	0	0	394
Grp Sat Flow(s),veh/h/ln				1847	1777	1442	0	1777	0	0	0	1796
Q Serve(g_s), s				9.6	8.6	4.9	0.0	0.0	0.0	0.0	0.0	7.2
Cycle Q Clear(g_c), s				9.6	8.6	4.9	0.0	0.0	0.0	0.0	0.0	7.2
Prop In Lane				0.25		1.00	0.00		0.00	0.00		0.22
Lane Grp Cap(c), veh/h				240	230	187	0	2797	0	0	0	1414
V/C Ratio(X)				0.65	0.59	0.34	0.00	0.12	0.00	0.00	0.00	0.28
Avail Cap(c_a), veh/h				493	474	385	0	2797	0	0	0	1414
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.55	0.55	0.55	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				49.6	49.2	47.6	0.0	0.0	0.0	0.0	0.0	3.5
Incr Delay (d2), s/veh				1.6	1.3	0.6	0.0	0.1	0.0	0.0	0.0	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				7.0	6.2	3.1	0.0	0.1	0.0	0.0	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.3	50.5	48.2	0.0	0.1	0.0	0.0	0.0	4.0
LnGrp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					355			337			394	
Approach Delay, s/veh					50.4			0.1			4.0	
Approach LOS					D			A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	99.4	20.6	99.4
Change Period (Y+Rc), s	* 5	* 5	* 5
Max Green Setting (Gmax), s	* 78	* 32	* 78
Max Q Clear Time (g_c+I1), s	9.2	11.6	2.0
Green Ext Time (p_c), s	4.1	1.7	3.5

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	36	232	59	0	310	0	0	283	79
Future Volume (veh/h)	0	0	0	36	232	59	0	310	0	0	283	79
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.91	1.00		1.00	1.00		0.99
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	0	0	1870	1870
Adj Flow Rate, veh/h				39	252	64	0	337	0	0	308	86
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	0	0	2	2
Opposing Right Turn Influence				Yes			No			No		
Cap, veh/h				60	410	187	0	2797	0	0	1105	309
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00
Prop Arrive On Green				0.13	0.13	0.13	0.00	1.00	0.00	0.00	0.79	0.79
Unsig. Movement Delay												
Ln Grp Delay, s/veh				51.3	50.5	48.2	0.0	0.1	0.0	0.0	0.0	4.0
Ln Grp LOS				D	D	D	A	A	A	A	A	A
Approach Vol, veh/h					355			337			394	
Approach Delay, s/veh					50.4			0.1			4.0	
Approach LOS					D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		8.0		11.0		8.0		
Phs Duration (G+Y+Rc), s		99.4		20.6		99.4		
Change Period (Y+Rc), s		* 5		* 5		* 5		
Max Green (Gmax), s		* 78		* 32		* 78		
Max Allow Headway (MAH), s		6.2		4.9		6.1		
Max Q Clear (g_c+l1), s		9.2		11.6		2.0		
Green Ext Time (g_e), s		4.1		1.7		3.5		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		0.00		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		0		463		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1404		3161		3741		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		392		1442		0		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment				L+T				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	156	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1847	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	94.4	0.0	0.0	0.0	94.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	240	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	493	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	51.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.58	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment				T		T		
Lanes in Grp	0	0	0	1	0	2	0	0
Grp Vol (v), veh/h	0	0	0	135	0	337	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	230	0	2797	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.59	0.00	0.12	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	474	0	2797	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.55	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	49.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.5	0.0	0.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.62	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	6.2	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.34	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	394	0	64	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1796	0	1442	0	0	0	0
Q Serve Time (g_s), s	0.0	7.2	0.0	4.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.2	0.0	4.9	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.22	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1414	0	187	0	0	0	0
V/C Ratio (X)	0.00	0.28	0.00	0.34	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1414	0	385	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.55	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.5	0.0	47.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.0	0.0	48.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	1.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.0	0.0	3.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.44	0.00	0.17	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	322	1036	683	75
Future Volume (veh/h)	0	0	322	1036	683	75
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.91
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			350	1126	742	82
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Cap, veh/h			398	3352	2113	233
Arrive On Green			0.22	0.94	0.22	0.22
Sat Flow, veh/h			1781	3647	3285	352
Grp Volume(v), veh/h			350	1126	413	411
Grp Sat Flow(s),veh/h/ln			1781	1777	1777	1767
Q Serve(g_s), s			17.1	2.4	17.7	17.7
Cycle Q Clear(g_c), s			17.1	2.4	17.7	17.7
Prop In Lane			1.00			0.20
Lane Grp Cap(c), veh/h			398	3352	1177	1170
V/C Ratio(X)			0.88	0.34	0.35	0.35
Avail Cap(c_a), veh/h			748	3352	1177	1170
HCM Platoon Ratio			1.00	1.00	0.33	0.33
Upstream Filter(I)			0.68	0.68	0.91	0.91
Uniform Delay (d), s/veh			33.8	0.2	18.8	18.8
Incr Delay (d2), s/veh			4.5	0.2	0.8	0.8
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln			11.5	0.2	13.1	13.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			38.3	0.4	19.5	19.6
LnGrp LOS			D	A	B	B
Approach Vol, veh/h				1476	824	
Approach Delay, s/veh				9.4	19.6	
Approach LOS				A	B	

Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		90.0			25.3	64.7
Change Period (Y+Rc), s		5.1			* 5.2	5.1
Max Green Setting (Gmax), s		84.9			* 38	41.9
Max Q Clear Time (g_c+I1), s		4.4			19.1	19.7
Green Ext Time (p_c), s		11.7			1.0	5.5

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	322	1036	683	75
Future Volume (veh/h)	0	0	322	1036	683	75
Number			5	2	6	16
Initial Q, veh			0	0	0	0
Ped-Bike Adj (A_pbT)			1.00			0.91
Parking Bus Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln			1870	1870	1870	1870
Adj Flow Rate, veh/h			350	1126	742	82
Peak Hour Factor			0.92	0.92	0.92	0.92
Percent Heavy Veh, %			2	2	2	2
Opposing Right Turn Influence			Yes			
Cap, veh/h			398	3352	2113	233
HCM Platoon Ratio			1.00	1.00	0.33	0.33
Prop Arrive On Green			0.22	0.94	0.22	0.22
Unsig. Movement Delay						
Ln Grp Delay, s/veh			38.3	0.4	19.5	19.6
Ln Grp LOS			D	A	B	B
Approach Vol, veh/h				1476	824	
Approach Delay, s/veh				9.4	19.6	
Approach LOS				A	B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		
Case No		4.0			2.0	8.0		
Phs Duration (G+Y+Rc), s		90.0			25.3	64.7		
Change Period (Y+Rc), s		5.1			* 5.2	5.1		
Max Green (Gmax), s		84.9			* 38	41.9		
Max Allow Headway (MAH), s		5.2			3.8	5.3		
Max Q Clear (g_c+l1), s		4.4			19.1	19.7		
Green Ext Time (g_e), s		11.7			1.0	5.5		
Prob of Phs Call (p_c)		1.00			1.00	1.00		
Prob of Max Out (p_x)		0.00			0.00	0.09		
Left-Turn Movement Data								
Assigned Mvmt					5	1		
Mvmt Sat Flow, veh/h					1781	0		
Through Movement Data								
Assigned Mvmt		2				6		
Mvmt Sat Flow, veh/h		3647				3285		
Right-Turn Movement Data								
Assigned Mvmt		12				16		
Mvmt Sat Flow, veh/h		0				352		
Left Lane Group Data								
Assigned Mvmt	0	0	0	0	5	1	0	0
Lane Assignment					L (Prot)			

Lanes in Grp	0	0	0	0	1	0	0	0
Grp Vol (v), veh/h	0	0	0	0	350	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	17.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	17.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	59.6	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	398	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	748	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	33.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	38.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	0.00	1.49	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	11.5	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	5.82	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	0	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1126	0	0	0	413	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	2.4	0.0	0.0	0.0	17.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	0.0	0.0	17.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	3352	0	0	0	1177	0	0
V/C Ratio (X)	0.00	0.34	0.00	0.00	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	3352	0	0	0	1177	0	0
Upstream Filter (I)	0.00	0.68	0.00	0.00	0.00	0.91	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.2	0.0	0.0	0.0	18.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.4	0.0	0.0	0.0	19.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	0.00	0.00	1.53	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.2	0.0	0.0	0.0	13.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	1.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	0	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	411	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1767	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	17.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	17.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1170	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1170	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	19.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	0.00	0.00	1.54	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	1	0	342	1	0	286	0
Future Volume (veh/h)	0	13	1	0	13	1	0	342	1	0	286	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	1	0	372	1	0	311	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Cap, veh/h	0	40	3	0	40	3	0	3189	9	0	1640	0
Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.88	0.88	0.00	1.00	0.00
Sat Flow, veh/h	0	1725	123	0	1725	123	0	3729	10	0	1870	0
Grp Volume(v), veh/h	0	0	15	0	0	15	0	182	191	0	311	0
Grp Sat Flow(s),veh/h/ln	0	0	1848	0	0	1848	0	1777	1869	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.7	1.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.0	0.0	0.0	1.0	0.0	1.7	1.7	0.0	0.0	0.0
Prop In Lane	0.00		0.07	0.00		0.07	0.00		0.01	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	42	0	0	42	0	1558	1639	0	1640	0
V/C Ratio(X)	0.00	0.00	0.35	0.00	0.00	0.35	0.00	0.12	0.12	0.00	0.19	0.00
Avail Cap(c_a), veh/h	0	0	108	0	0	108	0	1558	1639	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.98	0.98	0.00	0.96	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.7	0.0	0.0	57.7	0.0	1.0	1.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	21.6	0.0	0.0	21.6	0.0	0.1	0.1	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.3	0.0	0.0	1.3	0.0	0.5	0.5	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	79.4	0.0	0.0	79.4	0.0	1.2	1.2	0.0	0.2	0.0
LnGrp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		15			15			373			311	
Approach Delay, s/veh		79.4			79.4			1.2			0.2	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.2	9.8	110.2	9.8
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	3.7	3.0	2.0	3.0
Green Ext Time (p_c), s	3.4	0.0	3.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	1	0	342	1	0	286	0
Future Volume (veh/h)	0	13	1	0	13	1	0	342	1	0	286	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	1	0	372	1	0	311	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	40	3	0	40	3	0	3189	9	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.88	0.88	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	79.4	0.0	0.0	79.4	0.0	1.2	1.2	0.0	0.2	0.0
Ln Grp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		15			15			373			311	
Approach Delay, s/veh		79.4			79.4			1.2			0.2	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.2		9.8		110.2		9.8
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+I1), s		3.7		3.0		2.0		3.0
Green Ext Time (g_e), s		3.4		0.0		3.0		0.0
Prob of Phs Call (p_c)		1.00		0.39		1.00		0.39
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3729		1725		1870		1725
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		10		123		0		123
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.2	0.0	2.8	0.0	105.2	0.0	2.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	182	0	0	0	311	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1558	0	0	0	1640	0	0
V/C Ratio (X)	0.00	0.12	0.00	0.00	0.00	0.19	0.00	0.00
Avail Cap (c_a), veh/h	0	1558	0	0	0	1640	0	0
Upstream Filter (I)	0.00	0.98	0.00	0.00	0.00	0.96	0.00	0.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.2	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.00	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	191	0	15	0	0	0	15
Grp Sat Flow (s), veh/h/ln	0	1869	0	1848	0	0	0	1848
Q Serve Time (g_s), s	0.0	1.7	0.0	1.0	0.0	0.0	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	1.7	0.0	1.0	0.0	0.0	0.0	1.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.00	0.07	0.00	0.00	0.00	0.07
Lane Grp Cap (c), veh/h	0	1639	0	42	0	0	0	42
V/C Ratio (X)	0.00	0.12	0.00	0.35	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	1639	0	108	0	0	0	108
Upstream Filter (I)	0.00	0.98	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	1.0	0.0	57.7	0.0	0.0	0.0	57.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	21.6	0.0	0.0	0.0	21.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.2	0.0	79.4	0.0	0.0	0.0	79.4
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.5	0.0	1.3	0.0	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.04	0.00	0.00	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	490	102	131	0	49	0	190	129	39	275	0
Future Volume (veh/h)	72	490	102	131	0	49	0	190	129	39	275	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.79	1.00		0.97	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	78	533	111	142	0	53	0	207	140	42	299	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	628	646	256	171	0	120	0	1109	708	643	1174	0
Arrive On Green	0.18	0.18	0.18	0.10	0.00	0.10	0.00	0.54	0.54	0.05	0.63	0.00
Sat Flow, veh/h	3456	3554	1407	1781	0	1249	0	2143	1309	1781	1870	0
Grp Volume(v), veh/h	78	533	111	142	0	53	0	178	169	42	299	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1407	1781	0	1249	0	1777	1582	1781	1870	0
Q Serve(g_s), s	2.9	22.2	10.8	12.1	0.0	6.2	0.0	7.9	8.5	1.5	10.9	0.0
Cycle Q Clear(g_c), s	2.9	22.2	10.8	12.1	0.0	6.2	0.0	7.9	8.5	1.5	10.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.83	1.00		0.00
Lane Grp Cap(c), veh/h	628	646	256	171	0	120	0	962	856	643	1174	0
V/C Ratio(X)	0.12	0.82	0.43	0.83	0.00	0.44	0.00	0.18	0.20	0.07	0.25	0.00
Avail Cap(c_a), veh/h	763	785	311	642	0	450	0	962	856	662	1174	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	52.7	60.6	56.0	68.3	0.0	65.7	0.0	18.0	18.2	12.5	12.7	0.0
Incr Delay (d2), s/veh	0.1	6.7	1.6	9.7	0.0	2.5	0.0	0.4	0.5	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	15.8	7.1	9.9	0.0	3.7	0.0	6.1	5.9	1.1	8.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.9	67.4	57.6	78.1	0.0	68.2	0.0	18.4	18.7	12.5	13.2	0.0
LnGrp LOS	D	E	E	E	A	E	A	B	B	B	B	A
Approach Vol, veh/h		722			195			347			341	
Approach Delay, s/veh		64.3			75.4			18.6			13.1	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	2	4	5	6	8
Phs Duration (G+Y+Rc), s	101.7	33.0	13.3	88.3	19.3
Change Period (Y+Rc), s	* 5	* 5	* 5	* 5	4.5
Max Green Setting (Gmax), s	* 50	* 34	* 10	* 35	55.5
Max Q Clear Time (g_c+I1), s	12.9	24.2	3.5	10.5	14.1
Green Ext Time (p_c), s	3.7	3.8	0.0	3.9	0.8

Intersection Summary	
HCM 6th Ctrl Delay	44.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	490	102	131	0	49	0	190	129	39	275	0
Future Volume (veh/h)	72	490	102	131	0	49	0	190	129	39	275	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.89	1.00		0.79	1.00		0.97	0.99		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	78	533	111	142	0	53	0	207	140	42	299	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			Yes			No			Yes		
Cap, veh/h	628	646	256	171	0	120	0	1109	708	643	1174	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.18	0.18	0.18	0.10	0.00	0.10	0.00	0.54	0.54	0.05	0.63	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	52.9	67.4	57.6	78.1	0.0	68.2	0.0	18.4	18.7	12.5	13.2	0.0
Ln Grp LOS	D	E	E	E	A	E	A	B	B	B	B	A
Approach Vol, veh/h		722			195			347			341	
Approach Delay, s/veh		64.3			75.4			18.6			13.1	
Approach LOS		E			E			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	10.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		101.7	19.3	33.0	13.3	88.3		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 50	55.5	* 34	* 10	* 35		
Max Allow Headway (MAH), s		7.1	4.3	5.8	3.8	7.3		
Max Q Clear (g_c+l1), s		12.9	14.1	24.2	3.5	10.5		
Green Ext Time (g_e), s		3.7	0.8	3.8	0.0	3.9		
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.83	1.00		
Prob of Max Out (p_x)		0.00	0.00	0.54	0.02	0.03		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		2143		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1249	1407		1309		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L	LL (Pr/Pm)				

Lanes in Grp	0	0	1	2	1	0	0	0
Grp Vol (v), veh/h	0	0	142	78	42	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	12.1	2.9	1.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	12.1	2.9	1.5	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1781	1728	1028	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	85.3	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	74.9	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	83.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	171	628	643	0	0	0
V/C Ratio (X)	0.00	0.00	0.83	0.12	0.07	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	642	763	662	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.99	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	68.3	52.7	12.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	9.7	0.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	78.1	52.9	12.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	5.4	1.3	0.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.67	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	9.9	2.3	1.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.62	1.16	0.45	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	299	0	533	0	178	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	10.9	0.0	22.2	0.0	7.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.9	0.0	22.2	0.0	7.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1174	0	646	0	962	0	0
V/C Ratio (X)	0.00	0.25	0.00	0.82	0.00	0.18	0.00	0.00
Avail Cap (c_a), veh/h	0	1174	0	785	0	962	0	0
Upstream Filter (I)	0.00	0.99	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	60.6	0.0	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	6.7	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.2	0.0	67.4	0.0	18.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	9.9	0.0	3.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	1.00	1.51	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.3	0.0	15.8	0.0	6.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.73	0.00	0.67	0.00	0.45	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	53	111	0	169	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1249	1407	0	1582	0	0
Q Serve Time (g_s), s	0.0	0.0	6.2	10.8	0.0	8.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	6.2	10.8	0.0	8.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	0.83	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	120	256	0	856	0	0
V/C Ratio (X)	0.00	0.00	0.44	0.43	0.00	0.20	0.00	0.00
Avail Cap (c_a), veh/h	0	0	450	311	0	856	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	65.7	56.0	0.0	18.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.5	1.6	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	68.2	57.6	0.0	18.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	2.0	3.8	0.0	3.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.80	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	3.7	7.1	0.0	5.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.23	2.40	0.00	0.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.9
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	734	34	46	157	15	76
Future Vol, veh/h	734	34	46	157	15	76
Conflicting Peds, #/hr	0	70	70	0	18	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	40	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	798	37	50	171	16	83

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	905	0	1157	476
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	289	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	749	-	203	536
Stage 1	-	-	-	-	372	-
Stage 2	-	-	-	-	759	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	707	-	176	503
Mov Cap-2 Maneuver	-	-	-	-	280	-
Stage 1	-	-	-	-	351	-
Stage 2	-	-	-	-	695	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	15.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	445	-	-	707	-
HCM Lane V/C Ratio	0.222	-	-	0.071	-
HCM Control Delay (s)	15.4	-	-	10.5	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	469	93	76	150	320	54	816	127	151	495	31
Future Volume (veh/h)	157	469	93	76	150	320	54	816	127	151	495	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.84	0.94		0.83	0.85		0.78	0.99		0.76
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	510	101	83	163	348	59	887	138	164	538	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	383	1005	374	323	516	495	320	1295	574	291	1641	103
Arrive On Green	0.09	0.28	0.28	0.08	0.28	0.28	0.36	0.36	0.36	0.08	0.49	0.49
Sat Flow, veh/h	1781	3554	1324	1781	1870	1318	714	3554	1235	1781	3321	209
Grp Volume(v), veh/h	171	510	101	83	163	348	59	887	138	164	286	286
Grp Sat Flow(s),veh/h/ln	1781	1777	1324	1781	1870	1318	714	1777	1235	1781	1777	1753
Q Serve(g_s), s	8.1	14.4	7.1	3.8	8.3	27.6	6.9	25.4	8.4	6.5	11.7	11.8
Cycle Q Clear(g_c), s	8.1	14.4	7.1	3.8	8.3	27.6	6.9	25.4	8.4	6.5	11.7	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	383	1005	374	323	516	495	320	1295	574	291	878	866
V/C Ratio(X)	0.45	0.51	0.27	0.26	0.32	0.70	0.18	0.68	0.24	0.56	0.33	0.33
Avail Cap(c_a), veh/h	420	1007	375	333	516	495	320	1295	574	348	878	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86	0.91	0.91	0.91
Uniform Delay (d), s/veh	27.5	36.0	33.4	27.1	34.5	33.5	26.4	32.3	21.0	23.4	18.3	18.3
Incr Delay (d2), s/veh	0.8	0.4	0.4	0.4	0.3	4.5	1.1	2.5	0.9	1.6	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	10.4	4.2	3.0	6.9	14.4	2.3	16.4	4.6	5.1	8.5	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.3	36.5	33.8	27.6	34.8	38.0	27.5	34.8	21.8	25.0	19.2	19.3
LnGrp LOS	C	D	C	C	C	D	C	C	C	C	B	B
Approach Vol, veh/h		782			594			1084			736	
Approach Delay, s/veh		34.3			35.7			32.8			20.5	
Approach LOS		C			D			C			C	

Timer - Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		65.1	15.8	39.1	15.6	49.5	15.0	39.9
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s		* 59	12.7	* 32	13.8	* 39	10.0	* 34
Max Q Clear Time (g_c+I1), s		13.8	10.1	29.6	8.5	27.4	5.8	16.4
Green Ext Time (p_c), s		4.0	0.1	0.6	0.2	5.6	0.1	3.6

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	469	93	76	150	320	54	816	127	151	495	31
Future Volume (veh/h)	157	469	93	76	150	320	54	816	127	151	495	31
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.93		0.84	0.94		0.83	0.85		0.78	0.99		0.76
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	510	101	83	163	348	59	887	138	164	538	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	383	1005	374	323	516	495	320	1295	574	291	1641	103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.28	0.28	0.08	0.28	0.28	0.36	0.36	0.36	0.08	0.49	0.49
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.3	36.5	33.8	27.6	34.8	38.0	27.5	34.8	21.8	25.0	19.2	19.3
Ln Grp LOS	C	D	C	C	C	D	C	C	C	C	B	B
Approach Vol, veh/h		782			594			1084			736	
Approach Delay, s/veh		34.3			35.7			32.8			20.5	
Approach LOS		C			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		4.0	1.1	3.0	1.2	5.3	1.1	3.0
Phs Duration (G+Y+Rc), s		65.1	15.8	39.1	15.6	49.5	15.0	39.9
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s		* 59	12.7	* 32	13.8	* 39	10.0	* 34
Max Allow Headway (MAH), s		5.3	3.8	4.7	3.8	5.2	3.8	5.1
Max Q Clear (g_c+l1), s		13.8	10.1	29.6	8.5	27.4	5.8	16.4
Green Ext Time (g_e), s		4.0	0.1	0.6	0.2	5.6	0.1	3.6
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	0.94	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	0.28	0.00	0.63	0.05

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			1781		1781	714	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3321		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		209		1318		1235		1324

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		LL (Pr/Pm)		

Lanes in Grp	0	0	1	0	1	1	1	0
Grp Vol (v), veh/h	0	0	171	0	164	59	83	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	1781	714	1781	0
Q Serve Time (g_s), s	0.0	0.0	8.1	0.0	6.5	6.9	3.8	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	8.1	0.0	6.5	6.9	3.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	829	0	544	714	764	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	33.1	0.0	45.7	43.7	33.1	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	24.8	0.0	18.4	43.7	19.5	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.2	0.0	11.8	6.9	1.7	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	383	0	291	320	323	0
V/C Ratio (X)	0.00	0.00	0.45	0.00	0.56	0.18	0.26	0.00
Avail Cap (c_a), veh/h	0	0	420	0	348	320	333	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.91	0.86	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	27.5	0.0	23.4	26.4	27.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.8	0.0	1.6	1.1	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	28.3	0.0	25.0	27.5	27.6	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.5	0.0	2.7	1.2	1.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.80	0.00	1.80	1.80	1.80	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	6.4	0.0	5.1	2.3	3.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	2.72	0.00	1.17	0.39	0.56	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	2	0	2
Grp Vol (v), veh/h	0	286	0	163	0	887	0	510
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	11.7	0.0	8.3	0.0	25.4	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	11.7	0.0	8.3	0.0	25.4	0.0	14.4
Lane Grp Cap (c), veh/h	0	878	0	516	0	1295	0	1005
V/C Ratio (X)	0.00	0.33	0.00	0.32	0.00	0.68	0.00	0.51
Avail Cap (c_a), veh/h	0	878	0	516	0	1295	0	1007
Upstream Filter (I)	0.00	0.91	0.00	1.00	0.00	0.86	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.3	0.0	34.5	0.0	32.3	0.0	36.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.3	0.0	2.5	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.2	0.0	34.8	0.0	34.8	0.0	36.5
1st-Term Q (Q1), veh/ln	0.0	4.8	0.0	3.8	0.0	10.8	0.0	6.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.5	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	0.00	1.80	0.00	1.45	0.00	1.65
%ile Back of Q (95%), veh/ln	0.0	8.5	0.0	6.9	0.0	16.4	0.0	10.4
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.51	0.00	1.18	0.00	1.78
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	286	0	348	0	138	0	101
Grp Sat Flow (s), veh/h/ln	0	1753	0	1318	0	1235	0	1324
Q Serve Time (g_s), s	0.0	11.8	0.0	27.6	0.0	8.4	0.0	7.1
Cycle Q Clear Time (g_c), s	0.0	11.8	0.0	27.6	0.0	8.4	0.0	7.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	10.0	0.0	9.4	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.12	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	866	0	495	0	574	0	374
V/C Ratio (X)	0.00	0.33	0.00	0.70	0.00	0.24	0.00	0.27
Avail Cap (c_a), veh/h	0	866	0	495	0	574	0	375
Upstream Filter (I)	0.00	0.91	0.00	1.00	0.00	0.86	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.3	0.0	33.5	0.0	21.0	0.0	33.4
Incr Delay (d2), s/veh	0.0	0.9	0.0	4.5	0.0	0.9	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.3	0.0	38.0	0.0	21.8	0.0	33.8
1st-Term Q (Q1), veh/ln	0.0	4.8	0.0	8.7	0.0	2.4	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	0.00	1.54	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.5	0.0	14.4	0.0	4.6	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	2.70	0.00	0.33	0.00	0.72
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	674	50	15	432	7	29
Future Vol, veh/h	674	50	15	432	7	29
Conflicting Peds, #/hr	0	87	87	0	0	11
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	733	54	16	470	8	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	874	0	1349	492
Stage 1	-	-	-	-	847	-
Stage 2	-	-	-	-	502	-
Critical Hdwy	-	-	4.13	-	6.63	6.93
Critical Hdwy Stg 1	-	-	-	-	5.83	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	770	-	154	523
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	607	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	717	-	139	483
Mov Cap-2 Maneuver	-	-	-	-	261	-
Stage 1	-	-	-	-	356	-
Stage 2	-	-	-	-	589	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	14.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	414	-	-	717	-
HCM Lane V/C Ratio	0.095	-	-	0.023	-
HCM Control Delay (s)	14.6	-	-	10.1	0
HCM Lane LOS	B	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	601	8	4	385	97	2	0	6	101	0	108
Future Volume (veh/h)	79	601	8	4	385	97	2	0	6	101	0	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.99		0.95	0.97		0.93	0.94		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	653	9	4	418	105	2	0	7	110	0	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	473	2187	30	480	870	218	112	26	310	442	0	416
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	876	3586	49	765	1426	358	230	94	1133	1318	0	1522
Grp Volume(v), veh/h	86	323	339	4	0	523	9	0	0	110	0	117
Grp Sat Flow(s),veh/h/ln	876	1777	1858	765	0	1784	1456	0	0	1318	0	1522
Q Serve(g_s), s	5.4	7.8	7.8	0.2	0.0	14.6	0.0	0.0	0.0	5.5	0.0	5.4
Cycle Q Clear(g_c), s	20.0	7.8	7.8	8.0	0.0	14.6	0.4	0.0	0.0	5.8	0.0	5.4
Prop In Lane	1.00		0.03	1.00		0.20	0.22		0.78	1.00		1.00
Lane Grp Cap(c), veh/h	473	1084	1134	480	0	1088	447	0	0	442	0	416
V/C Ratio(X)	0.18	0.30	0.30	0.01	0.00	0.48	0.02	0.00	0.00	0.25	0.00	0.28
Avail Cap(c_a), veh/h	473	1084	1134	480	0	1088	447	0	0	442	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.00	0.80	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	8.4	8.4	10.3	0.0	9.7	23.9	0.0	0.0	25.8	0.0	25.7
Incr Delay (d2), s/veh	0.8	0.7	0.7	0.0	0.0	1.2	0.1	0.0	0.0	0.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	4.9	5.1	0.1	0.0	8.4	0.3	0.0	0.0	3.4	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	9.1	9.0	10.3	0.0	10.9	24.0	0.0	0.0	26.1	0.0	26.1
LnGrp LOS	B	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		748			527			9			227	
Approach Delay, s/veh		9.9			10.9			24.0			26.1	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	16.6	7.8	22.0	2.4
Green Ext Time (p_c), s	6.2	1.0	7.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	601	8	4	385	97	2	0	6	101	0	108
Future Volume (veh/h)	79	601	8	4	385	97	2	0	6	101	0	108
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.95	0.99		0.95	0.97		0.93	0.94		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	653	9	4	418	105	2	0	7	110	0	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	473	2187	30	480	870	218	112	26	310	442	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	16.0	9.1	9.0	10.3	0.0	10.9	24.0	0.0	0.0	26.1	0.0	26.1
Ln Grp LOS	B	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		748			527			9			227	
Approach Delay, s/veh		9.9			10.9			24.0			26.1	
Approach LOS		A			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		4.9		6.3		5.8
Max Q Clear (g_c+l1), s		16.6		7.8		22.0		2.4
Green Ext Time (g_e), s		6.2		1.0		7.7		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.01		0.00		0.05		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		765		1318		876		230
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1426		0		3586		94
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		358		1522		49		1133
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	110	0	86	0	9
Grp Sat Flow (s), veh/h/ln	0	765	0	1318	0	876	0	1456
Q Serve Time (g_s), s	0.0	0.2	0.0	5.5	0.0	5.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.0	0.0	5.8	0.0	20.0	0.0	0.4
Perm LT Sat Flow (s_l), veh/h/ln	0	765	0	1318	0	876	0	1262
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1667	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	47.1	0.0	24.2	0.0	40.3	0.0	19.2
Perm LT Q Serve Time (g_ps), s	0.0	0.2	0.0	5.5	0.0	5.4	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	480	0	442	0	473	0	447
V/C Ratio (X)	0.00	0.01	0.00	0.25	0.00	0.18	0.00	0.02
Avail Cap (c_a), veh/h	0	480	0	442	0	473	0	447
Upstream Filter (I)	0.00	0.80	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.3	0.0	25.8	0.0	15.2	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.8	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.3	0.0	26.1	0.0	16.0	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.9	0.0	1.0	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	3.4	0.0	2.0	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	2.27	0.00	0.34	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	323	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	523	0	117	0	339	0	0
Grp Sat Flow (s), veh/h/ln	0	1784	0	1522	0	1858	0	0
Q Serve Time (g_s), s	0.0	14.6	0.0	5.4	0.0	7.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.6	0.0	5.4	0.0	7.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.20	0.00	1.00	0.00	0.03	0.00	0.78
Lane Grp Cap (c), veh/h	0	1088	0	416	0	1134	0	0
V/C Ratio (X)	0.00	0.48	0.00	0.28	0.00	0.30	0.00	0.00
Avail Cap (c_a), veh/h	0	1088	0	416	0	1134	0	0
Upstream Filter (I)	0.00	0.80	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.7	0.0	25.7	0.0	8.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.4	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.9	0.0	26.1	0.0	9.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	2.0	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.65	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.4	0.0	3.6	0.0	5.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	2.41	0.00	0.59	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	467	219	135	1015	841	302
Future Volume (veh/h)	467	219	135	1015	841	302
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	508	238	147	1103	914	328
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	627	288	174	2586	2120	912
Arrive On Green	0.18	0.18	0.10	0.73	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1529
Grp Volume(v), veh/h	508	238	147	1103	914	328
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1529
Q Serve(g_s), s	16.9	17.4	9.7	14.7	0.0	0.0
Cycle Q Clear(g_c), s	16.9	17.4	9.7	14.7	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	627	288	174	2586	2120	912
V/C Ratio(X)	0.81	0.83	0.84	0.43	0.43	0.36
Avail Cap(c_a), veh/h	950	436	223	2586	2120	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.90	0.90	0.09	0.09	0.83	0.83
Uniform Delay (d), s/veh	47.1	47.3	53.2	6.4	0.0	0.0
Incr Delay (d2), s/veh	2.9	7.1	2.3	0.0	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.8	11.6	5.4	5.7	0.3	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.0	54.5	55.5	6.5	0.5	0.9
LnGrp LOS	D	D	E	A	A	A
Approach Vol, veh/h	746			1250	1242	
Approach Delay, s/veh	51.4			12.3	0.6	
Approach LOS	D			B	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.8	76.5		27.8		92.2
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	11.7	2.0		19.4		16.7
Green Ext Time (p_c), s	0.1	13.8		2.4		4.5

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	467	219	135	1015	841	302
Future Volume (veh/h)	467	219	135	1015	841	302
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	508	238	147	1103	914	328
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	627	288	174	2586	2120	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.18	0.18	0.10	0.73	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	50.0	54.5	55.5	6.5	0.5	0.9
Ln Grp LOS	D	D	E	A	A	A
Approach Vol, veh/h	746			1250	1242	
Approach Delay, s/veh	51.4			12.3	0.6	
Approach LOS	D			B	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	15.8	76.5		27.8		92.2		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.8		3.9		5.0		
Max Q Clear (g_c+I1), s	11.7	2.0		19.4		16.7		
Green Ext Time (g_e), s	0.1	13.8		2.4		4.5		
Prob of Phs Call (p_c)	0.99	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.52		0.04		0.68		

Left-Turn Movement Data				
Assigned Mvmt	1	5		7
Mvmt Sat Flow, veh/h	1781	0		3456

Through Movement Data				
Assigned Mvmt		2		4		6
Mvmt Sat Flow, veh/h		3647		0		3647

Right-Turn Movement Data				
Assigned Mvmt		12		14		16
Mvmt Sat Flow, veh/h		1529		1585		0

Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	147	0	0	508	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	9.7	0.0	0.0	16.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	9.7	0.0	0.0	16.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	71.6	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	174	0	0	627	0	0	0	0
V/C Ratio (X)	0.84	0.00	0.00	0.81	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.09	0.00	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	53.2	0.0	0.0	47.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.0	2.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	55.5	0.0	0.0	50.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	4.3	0.0	0.0	7.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.23	1.00	0.00	1.57	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	5.4	0.0	0.0	11.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.66	0.00	0.00	2.72	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	914	0	0	0	1103	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	14.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	14.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2120	0	0	0	2586	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.00	0.00	0.43	0.00	0.00
Avail Cap (c_a), veh/h	0	2120	0	0	0	2586	0	0
Upstream Filter (I)	0.00	0.83	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.5	0.0	0.0	0.0	6.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.23	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	5.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	328	0	238	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1529	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	912	0	288	0	0	0	0
V/C Ratio (X)	0.00	0.36	0.00	0.83	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	912	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.83	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	47.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	7.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.9	0.0	54.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.57	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	11.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.27	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		16.8						
HCM 6th LOS		B						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	224	46	1274	228	41	920
Future Volume (veh/h)	224	46	1274	228	41	920
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	243	50	1385	248	45	1000
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	268	55	1946	343	58	2528
Arrive On Green	0.19	0.19	1.00	1.00	0.03	0.71
Sat Flow, veh/h	1415	291	3108	532	1781	3647
Grp Volume(v), veh/h	294	0	808	825	45	1000
Grp Sat Flow(s),veh/h/ln	1712	0	1777	1770	1781	1777
Q Serve(g_s), s	20.2	0.0	0.0	0.0	3.0	13.6
Cycle Q Clear(g_c), s	20.2	0.0	0.0	0.0	3.0	13.6
Prop In Lane	0.83	0.17		0.30	1.00	
Lane Grp Cap(c), veh/h	324	0	1147	1142	58	2528
V/C Ratio(X)	0.91	0.00	0.70	0.72	0.77	0.40
Avail Cap(c_a), veh/h	328	0	1147	1142	223	2528
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.66	0.66	0.62	0.62
Uniform Delay (d), s/veh	47.6	0.0	0.0	0.0	57.6	7.0
Incr Delay (d2), s/veh	27.4	0.0	2.4	2.7	12.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.5	0.0	1.4	1.5	2.8	7.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	75.0	0.0	2.4	2.7	70.1	7.2
LnGrp LOS	E	A	A	A	E	A
Approach Vol, veh/h	294		1633			1045
Approach Delay, s/veh	75.0		2.5			9.9
Approach LOS	E		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.3		27.7	7.9	84.3
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		15.6		22.2	5.0	2.0
Green Ext Time (p_c), s		6.4		0.1	0.0	40.9

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	224	46	1274	228	41	920
Future Volume (veh/h)	224	46	1274	228	41	920
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	243	50	1385	248	45	1000
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	268	55	1946	343	58	2528
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.19	0.19	1.00	1.00	0.03	0.71
Unsig. Movement Delay						
Ln Grp Delay, s/veh	75.0	0.0	2.4	2.7	70.1	7.2
Ln Grp LOS	E	A	A	A	E	A
Approach Vol, veh/h	294		1633			1045
Approach Delay, s/veh	75.0		2.5			9.9
Approach LOS	E		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		92.3		27.7	7.9	84.3		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+l1), s		15.6		22.2	5.0	2.0		
Green Ext Time (g_e), s		6.4		0.1	0.0	40.9		
Prob of Phs Call (p_c)		1.00		1.00	0.78	1.00		
Prob of Max Out (p_x)		0.87		1.00	0.00	0.51		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1415	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		6		3108		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		291		532		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	294	45	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1712	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	20.2	3.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.2	3.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	77.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.83	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	324	58	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.91	0.77	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	328	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.62	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	47.6	57.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	27.4	12.5	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	75.0	70.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.6	1.3	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.5	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.49	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	16.5	2.8	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.33	0.52	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1000	0	0	0	808	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2528	0	0	0	1147	0	0
V/C Ratio (X)	0.00	0.40	0.00	0.00	0.00	0.70	0.00	0.00
Avail Cap (c_a), veh/h	0	2528	0	0	0	1147	0	0
Upstream Filter (I)	0.00	0.62	0.00	0.00	0.00	0.66	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	2.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.2	0.0	0.0	0.0	2.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.8	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.61	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.2	0.0	0.0	0.0	1.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	0.36	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	825	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.17	0.00	0.30	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1142	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1142	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	50	12	47	51	21	11	75	30	2	57	10
Future Vol, veh/h	19	50	12	47	51	21	11	75	30	2	57	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	54	13	51	55	23	12	82	33	2	62	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	8.3	8.2	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	23%	39%	3%
Vol Thru, %	65%	62%	43%	83%
Vol Right, %	26%	15%	18%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	116	81	119	69
LT Vol	11	19	47	2
Through Vol	75	50	51	57
RT Vol	30	12	21	10
Lane Flow Rate	126	88	129	75
Geometry Grp	1	1	1	1
Degree of Util (X)	0.154	0.11	0.16	0.094
Departure Headway (Hd)	4.384	4.496	4.465	4.495
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	820	798	805	798
Service Time	2.405	2.521	2.488	2.519
HCM Lane V/C Ratio	0.154	0.11	0.16	0.094
HCM Control Delay	8.2	8.1	8.3	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.4	0.6	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	27	16	86	60	114	47	855	114	54	598	27
Future Volume (veh/h)	12	27	16	86	60	114	47	855	114	54	598	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	0.98		0.85	0.99		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	29	17	93	65	124	51	929	124	59	650	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	163	80	215	135	333	513	2036	272	354	2275	101
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	151	748	364	694	618	1526	743	3078	411	531	3439	153
Grp Volume(v), veh/h	59	0	0	158	0	124	51	536	517	59	335	344
Grp Sat Flow(s),veh/h/ln	1264	0	0	1311	0	1526	743	1777	1712	531	1777	1816
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	6.2	2.8	13.2	13.2	5.5	7.1	7.1
Cycle Q Clear(g_c), s	11.2	0.0	0.0	11.0	0.0	6.2	9.9	13.2	13.2	18.6	7.1	7.1
Prop In Lane	0.22		0.29	0.59		1.00	1.00		0.24	1.00		0.08
Lane Grp Cap(c), veh/h	325	0	0	350	0	333	513	1176	1132	354	1176	1201
V/C Ratio(X)	0.18	0.00	0.00	0.45	0.00	0.37	0.10	0.46	0.46	0.17	0.29	0.29
Avail Cap(c_a), veh/h	473	0	0	493	0	478	513	1176	1132	354	1176	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.44	0.44	0.44	0.96	0.96	0.96
Uniform Delay (d), s/veh	28.6	0.0	0.0	31.4	0.0	29.9	8.4	7.4	7.4	11.9	6.4	6.4
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.9	0.0	0.7	0.2	0.6	0.6	1.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.0	0.0	5.7	0.0	4.2	0.8	6.5	6.4	1.2	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	0.0	32.3	0.0	30.6	8.6	7.9	8.0	12.9	6.9	6.9
LnGrp LOS	C	A	A	C	A	C	A	A	A	B	A	A
Approach Vol, veh/h		59			282			1104			738	
Approach Delay, s/veh		28.8			31.6			8.0			7.4	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	64.5	25.5	64.5	25.5
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	20.6	13.0	15.2	13.2
Green Ext Time (p_c), s	5.3	1.2	8.9	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	27	16	86	60	114	47	855	114	54	598	27
Future Volume (veh/h)	12	27	16	86	60	114	47	855	114	54	598	27
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.96	0.98		0.96	0.98		0.85	0.99		0.87
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	29	17	93	65	124	51	929	124	59	650	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	82	163	80	215	135	333	513	2036	272	354	2275	101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.66	0.66	0.66	0.66	0.66	0.66
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.8	0.0	0.0	32.3	0.0	30.6	8.6	7.9	8.0	12.9	6.9	6.9
Ln Grp LOS	C	A	A	C	A	C	A	A	A	B	A	A
Approach Vol, veh/h		59			282			1104			738	
Approach Delay, s/veh		28.8			31.6			8.0			7.4	
Approach LOS		C			C			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		64.5		25.5		64.5		25.5
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.4		4.9		5.2		5.6
Max Q Clear (g_c+l1), s		20.6		13.0		15.2		13.2
Green Ext Time (g_e), s		5.3		1.2		8.9		0.2
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.01		0.00		0.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		531		694		743		151

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3439		618		3078		748

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		153		1526		411		364

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	59	0	158	0	51	0	59
Grp Sat Flow (s), veh/h/ln	0	531	0	1311	0	743	0	1264
Q Serve Time (g_s), s	0.0	5.5	0.0	0.0	0.0	2.8	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	18.6	0.0	11.0	0.0	9.9	0.0	11.2
Perm LT Sat Flow (s_l), veh/h/ln	0	531	0	1347	0	743	0	1188
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1063	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	59.5	0.0	19.7	0.0	59.5	0.0	19.7
Perm LT Serve Time (g_u), s	0.0	46.4	0.0	8.5	0.0	52.4	0.0	8.6
Perm LT Q Serve Time (g_ps), s	0.0	5.5	0.0	0.0	0.0	2.8	0.0	0.2
Time to First Blk (g_f), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	6.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	2.4
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.59	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	354	0	350	0	513	0	325
V/C Ratio (X)	0.00	0.17	0.00	0.45	0.00	0.10	0.00	0.18
Avail Cap (c_a), veh/h	0	354	0	493	0	513	0	473
Upstream Filter (I)	0.00	0.96	0.00	1.00	0.00	0.44	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.9	0.0	31.4	0.0	8.4	0.0	28.6
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.9	0.0	0.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.9	0.0	32.3	0.0	8.6	0.0	28.8
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	3.1	0.0	0.4	0.0	1.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.2	0.0	5.7	0.0	0.8	0.0	1.9
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.31	0.00	0.16	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	335	0	0	0	536	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	7.1	0.0	0.0	0.0	13.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.1	0.0	0.0	0.0	13.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1176	0	0	0	1176	0	0
V/C Ratio (X)	0.00	0.29	0.00	0.00	0.00	0.46	0.00	0.00
Avail Cap (c_a), veh/h	0	1176	0	0	0	1176	0	0
Upstream Filter (I)	0.00	0.96	0.00	0.00	0.00	0.44	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	0.0	0.0	7.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.9	0.0	0.0	0.0	7.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	0.0	0.0	4.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.52	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	4.3	0.0	0.0	0.0	6.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.00	0.00	0.23	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	344	0	124	0	517	0	0
Grp Sat Flow (s), veh/h/ln	0	1816	0	1526	0	1712	0	0
Q Serve Time (g_s), s	0.0	7.1	0.0	6.2	0.0	13.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.1	0.0	6.2	0.0	13.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	1.00	0.00	0.24	0.00	0.29
Lane Grp Cap (c), veh/h	0	1201	0	333	0	1132	0	0
V/C Ratio (X)	0.00	0.29	0.00	0.37	0.00	0.46	0.00	0.00
Avail Cap (c_a), veh/h	0	1201	0	478	0	1132	0	0
Upstream Filter (I)	0.00	0.96	0.00	1.00	0.00	0.44	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	29.9	0.0	7.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.7	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.9	0.0	30.6	0.0	8.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.3	0.0	2.3	0.0	4.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.53	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	4.4	0.0	4.2	0.0	6.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.23	0.00	0.22	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	822	557	330	1407	0	0	0	0	438	2	147
Future Volume (veh/h)	0	822	557	330	1407	0	0	0	0	438	2	147
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	893	605	359	1529	0				319	222	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1285	837	193	2244	0				464	263	189
Arrive On Green	0.00	0.63	0.63	0.63	0.63	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	2129	1325	351	3647	0				1781	1008	726
Grp Volume(v), veh/h	0	775	723	359	1529	0				319	0	382
Grp Sat Flow(s),veh/h/ln	0	1777	1583	351	1777	0				1781	0	1734
Q Serve(g_s), s	0.0	25.7	27.9	29.0	25.0	0.0				14.5	0.0	18.8
Cycle Q Clear(g_c), s	0.0	25.7	27.9	56.8	25.0	0.0				14.5	0.0	18.8
Prop In Lane	0.00		0.84	1.00		0.00				1.00		0.42
Lane Grp Cap(c), veh/h	0	1122	1000	193	2244	0				464	0	452
V/C Ratio(X)	0.00	0.69	0.72	1.86	0.68	0.00				0.69	0.00	0.85
Avail Cap(c_a), veh/h	0	1122	1000	193	2244	0				653	0	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.48	0.48	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.8	11.2	36.5	10.7	0.0				30.0	0.0	31.6
Incr Delay (d2), s/veh	0.0	3.5	4.5	396.9	0.8	0.0				1.8	0.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	14.5	14.4	43.4	11.8	0.0				10.2	0.0	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.3	15.8	433.4	11.5	0.0				31.8	0.0	38.9
LnGrp LOS	A	B	B	F	B	A				C	A	D
Approach Vol, veh/h		1498			1888						701	
Approach Delay, s/veh		15.0			91.8						35.7	
Approach LOS		B			F						D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	61.5	28.5	61.5
Change Period (Y+Rc), s	* 4.7	5.0	* 4.7
Max Green Setting (Gmax), s	* 47	33.0	* 47
Max Q Clear Time (g_c+I1), s	58.8	20.8	29.9
Green Ext Time (p_c), s	0.0	2.7	10.2

Intersection Summary	
HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	822	557	330	1407	0	0	0	0	438	2	147
Future Volume (veh/h)	0	822	557	330	1407	0	0	0	0	438	2	147
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	893	605	359	1529	0				319	222	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	1285	837	193	2244	0				464	263	189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.63	0.63	0.63	0.63	0.00				0.26	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	14.3	15.8	433.4	11.5	0.0				31.8	0.0	38.9
Ln Grp LOS	A	B	B	F	B	A				C	A	D
Approach Vol, veh/h		1498			1888						701	
Approach Delay, s/veh		15.0			91.8						35.7	
Approach LOS		B			F						D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		61.5		28.5		61.5		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		6.3		4.5		5.3		
Max Q Clear (g_c+I1), s		58.8		20.8		29.9		
Green Ext Time (g_e), s		0.0		2.7		10.2		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		0.16		0.57		

Left-Turn Movement Data			
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		351		1781		0		

Through Movement Data			
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1008		2129		

Right-Turn Movement Data			
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		726		1325		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	359	0	319	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	351	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	29.0	0.0	14.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	56.8	0.0	14.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	351	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	56.8	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	29.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	29.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	56.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	193	0	464	0	0	0	0
V/C Ratio (X)	0.00	1.86	0.00	0.69	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	193	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.48	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	36.5	0.0	30.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	396.9	0.0	1.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	433.4	0.0	31.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	5.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	21.3	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	0.00	1.66	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	43.4	0.0	10.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	3.36	0.00	0.54	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	41.5	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1529	0	0	0	775	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	25.0	0.0	0.0	0.0	25.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	25.0	0.0	0.0	0.0	25.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2244	0	0	0	1122	0	0
V/C Ratio (X)	0.00	0.68	0.00	0.00	0.00	0.69	0.00	0.00
Avail Cap (c_a), veh/h	0	2244	0	0	0	1122	0	0
Upstream Filter (I)	0.00	0.48	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.7	0.0	0.0	0.0	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	3.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.5	0.0	0.0	0.0	14.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.2	0.0	0.0	0.0	8.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	1.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.39	0.00	1.00	0.00	1.53	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	11.8	0.0	0.0	0.0	14.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.00	0.00	0.78	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	382	0	723	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1734	0	1583	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	18.8	0.0	27.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.8	0.0	27.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.42	0.00	0.84	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	452	0	1000	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.85	0.00	0.72	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	636	0	1000	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.6	0.0	11.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.4	0.0	4.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	38.9	0.0	15.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.4	0.0	8.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.9	0.0	1.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.57	0.00	1.54	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	13.1	0.0	14.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.69	0.00	0.78	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	1090	0	0	1226	592	510	4	417	0	0	0
Future Volume (veh/h)	159	1090	0	0	1226	592	510	4	417	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	173	1185	0	0	1333	643	506	72	453			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	123	2065	0	0	1978	908	523	65	408			
Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Sat Flow, veh/h	220	3647	0	0	3572	1563	1781	221	1392			
Grp Volume(v), veh/h	173	1185	0	0	1333	643	506	0	525			
Grp Sat Flow(s),veh/h/ln	220	1777	0	0	1702	1563	1781	0	1613			
Q Serve(g_s), s	17.7	0.0	0.0	0.0	32.7	34.6	25.2	0.0	26.4			
Cycle Q Clear(g_c), s	52.3	0.0	0.0	0.0	32.7	34.6	25.2	0.0	26.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.86			
Lane Grp Cap(c), veh/h	123	2065	0	0	1978	908	523	0	473			
V/C Ratio(X)	1.40	0.57	0.00	0.00	0.67	0.71	0.97	0.00	1.11			
Avail Cap(c_a), veh/h	123	2065	0	0	1978	908	523	0	473			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.54	0.54	0.00	0.00	0.38	0.38	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.0	0.0	0.0	0.0	28.5	29.2	31.4	0.0	31.8			
Incr Delay (d2), s/veh	205.6	0.6	0.0	0.0	0.3	1.0	31.3	0.0	74.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	16.1	0.3	0.0	0.0	18.7	18.4	20.9	0.0	28.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	228.6	0.6	0.0	0.0	28.8	30.2	62.7	0.0	106.5			
LnGrp LOS	F	A	A	A	C	C	E	A	F			
Approach Vol, veh/h		1358			1976			1031				
Approach Delay, s/veh		29.7			29.3			85.0				
Approach LOS		C			C			F				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	58.0	32.0	58.0
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	54.3	28.4	36.6
Green Ext Time (p_c), s	0.0	0.0	11.7

Intersection Summary	
HCM 6th Ctrl Delay	42.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	1090	0	0	1226	592	510	4	417	0	0	0
Future Volume (veh/h)	159	1090	0	0	1226	592	510	4	417	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	173	1185	0	0	1333	643	506	72	453			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	123	2065	0	0	1978	908	523	65	408			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	228.6	0.6	0.0	0.0	28.8	30.2	62.7	0.0	106.5			
Ln Grp LOS	F	A	A	A	C	C	E	A	F			
Approach Vol, veh/h		1358			1976			1031				
Approach Delay, s/veh		29.7			29.3			85.0				
Approach LOS		C			C			F				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		6.6		4.5		5.2		
Max Q Clear (g_c+I1), s		54.3		28.4		36.6		
Green Ext Time (g_e), s		0.0		0.0		11.7		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		1.00		0.75		

Left-Turn Movement Data			
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		220		1781		0		

Through Movement Data			
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		221		3572		

Right-Turn Movement Data			
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1392		1563		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	173	0	506	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	220	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	17.7	0.0	25.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	52.3	0.0	25.2	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	220	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	52.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	17.7	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	17.7	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	52.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	123	0	523	0	0	0	0
V/C Ratio (X)	0.00	1.40	0.00	0.97	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	123	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.54	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.0	0.0	31.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	205.6	0.0	31.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	228.6	0.0	62.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	10.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	7.0	0.0	4.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.70	0.00	1.43	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	16.1	0.0	20.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.48	0.00	1.17	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	12.4	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1185	0	0	0	1333	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	32.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	32.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2065	0	0	0	1978	0	0
V/C Ratio (X)	0.00	0.57	0.00	0.00	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	2065	0	0	0	1978	0	0
Upstream Filter (I)	0.00	0.54	0.00	0.00	0.00	0.38	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	28.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	0.0	0.0	28.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	14.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.26	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	18.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	525	0	643	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1613	0	1563	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	26.4	0.0	34.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	26.4	0.0	34.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.86	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	473	0	908	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.11	0.00	0.71	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	473	0	908	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.38	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.8	0.0	29.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	74.7	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	106.5	0.0	30.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.6	0.0	14.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	9.8	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.46	0.00	1.27	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	28.3	0.0	18.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.58	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	1136	200	178	1410	10	161	222	143	48	254	236
Future Volume (veh/h)	172	1136	200	178	1410	10	161	222	143	48	254	236
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	187	1235	217	193	1533	11	175	241	155	52	276	257
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	375	1508	262	260	1800	774	211	520	542	246	520	421
Arrive On Green	0.05	0.34	0.34	0.15	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1781	3006	523	1781	3554	1528	859	1870	1515	971	1870	1515
Grp Volume(v), veh/h	187	725	727	193	1533	11	175	241	155	52	276	257
Grp Sat Flow(s),veh/h/ln	1781	1777	1753	1781	1777	1528	859	1870	1515	971	1870	1515
Q Serve(g_s), s	4.5	33.6	34.3	4.8	0.0	0.0	13.7	9.6	6.6	4.2	11.3	13.3
Cycle Q Clear(g_c), s	4.5	33.6	34.3	4.8	0.0	0.0	25.0	9.6	6.6	13.8	11.3	13.3
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	375	891	879	260	1800	774	211	520	542	246	520	421
V/C Ratio(X)	0.50	0.81	0.83	0.74	0.85	0.01	0.83	0.46	0.29	0.21	0.53	0.61
Avail Cap(c_a), veh/h	386	891	879	298	1800	774	211	520	542	246	520	421
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.4	26.0	26.3	17.4	0.0	0.0	39.8	26.9	20.9	32.7	27.5	28.3
Incr Delay (d2), s/veh	0.8	6.2	6.7	8.3	5.3	0.0	29.7	3.0	1.3	2.0	3.9	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.0	21.7	22.0	4.1	2.4	0.0	9.5	8.1	4.5	2.0	9.3	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.2	32.2	33.0	25.7	5.3	0.0	69.6	29.9	22.2	34.6	31.4	34.7
LnGrp LOS	B	C	C	C	A	A	E	C	C	C	C	C
Approach Vol, veh/h		1639			1737			571			585	
Approach Delay, s/veh		30.1			7.6			40.0			33.2	
Approach LOS		C			A			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	50.6		30.0	9.9	50.1		30.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	7.0	* 45		* 25	8.8	* 43		* 25
Max Q Clear Time (g_c+I1), s	6.5	2.0		15.8	6.8	36.3		27.0
Green Ext Time (p_c), s	0.0	17.0		2.0	0.1	4.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	1136	200	178	1410	10	161	222	143	48	254	236
Future Volume (veh/h)	172	1136	200	178	1410	10	161	222	143	48	254	236
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	1.00		0.96	0.99		0.96	0.98		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	187	1235	217	193	1533	11	175	241	155	52	276	257
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	375	1508	262	260	1800	774	211	520	542	246	520	421
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.34	0.34	0.15	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	10.2	32.2	33.0	25.7	5.3	0.0	69.6	29.9	22.2	34.6	31.4	34.7
Ln Grp LOS	B	C	C	C	A	A	E	C	C	C	C	C
Approach Vol, veh/h		1639			1737			571			585	
Approach Delay, s/veh		30.1			7.6			40.0			33.2	
Approach LOS		C			A			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	9.4	50.6		30.0	9.9	50.1		30.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	7.0	* 45		* 25	8.8	* 43		* 25
Max Allow Headway (MAH), s	3.8	5.1		4.7	3.8	5.2		5.0
Max Q Clear (g_c+I1), s	6.5	2.0		15.8	6.8	36.3		27.0
Green Ext Time (g_e), s	0.0	17.0		2.0	0.1	4.8		0.0
Prob of Phs Call (p_c)	0.99	1.00		1.00	0.99	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			971	1781			859

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3006		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1528		1515		523		1515

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	187	0	0	52	193	0	0	175
Grp Sat Flow (s), veh/h/ln	1781	0	0	971	1781	0	0	859
Q Serve Time (g_s), s	4.5	0.0	0.0	4.2	4.8	0.0	0.0	13.7
Cycle Q Clear Time (g_c), s	4.5	0.0	0.0	13.8	4.8	0.0	0.0	25.0
Perm LT Sat Flow (s_l), veh/h/ln	334	0	0	971	366	0	0	859
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	45.1	0.0	0.0	25.0	45.1	0.0	0.0	25.0
Perm LT Serve Time (g_u), s	45.1	0.0	0.0	15.4	10.8	0.0	0.0	13.7
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	4.2	10.8	0.0	0.0	13.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	375	0	0	246	260	0	0	211
V/C Ratio (X)	0.50	0.00	0.00	0.21	0.74	0.00	0.00	0.83
Avail Cap (c_a), veh/h	386	0	0	246	298	0	0	211
Upstream Filter (I)	0.75	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	9.4	0.0	0.0	32.7	17.4	0.0	0.0	39.8
Incr Delay (d2), s/veh	0.8	0.0	0.0	2.0	8.3	0.0	0.0	29.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	10.2	0.0	0.0	34.6	25.7	0.0	0.0	69.6
1st-Term Q (Q1), veh/ln	1.6	0.0	0.0	1.0	1.7	0.0	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.1	0.6	0.0	0.0	1.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	0.00	1.80	1.80	0.00	0.00	1.69
%ile Back of Q (95%), veh/ln	3.0	0.0	0.0	2.0	4.1	0.0	0.0	9.5
%ile Storage Ratio (RQ%)	0.52	0.00	0.00	0.29	0.74	0.00	0.00	1.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1533	0	276	0	725	0	241
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	11.3	0.0	33.6	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.3	0.0	33.6	0.0	9.6
Lane Grp Cap (c), veh/h	0	1800	0	520	0	891	0	520
V/C Ratio (X)	0.00	0.85	0.00	0.53	0.00	0.81	0.00	0.46
Avail Cap (c_a), veh/h	0	1800	0	520	0	891	0	520
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.75	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	27.5	0.0	26.0	0.0	26.9
Incr Delay (d2), s/veh	0.0	5.3	0.0	3.9	0.0	6.2	0.0	3.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.3	0.0	31.4	0.0	32.2	0.0	29.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.9	0.0	14.5	0.0	4.2
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.6	0.0	1.5	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.70	0.00	1.35	0.00	1.76
%ile Back of Q (95%), veh/ln	0.0	2.4	0.0	9.3	0.0	21.7	0.0	8.1
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.35	0.00	0.61	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	11	0	257	0	727	0	155
Grp Sat Flow (s), veh/h/ln	0	1528	0	1515	0	1753	0	1515
Q Serve Time (g_s), s	0.0	0.0	0.0	13.3	0.0	34.3	0.0	6.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.3	0.0	34.3	0.0	6.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.30	0.00	1.00
Lane Grp Cap (c), veh/h	0	774	0	421	0	879	0	542
V/C Ratio (X)	0.00	0.01	0.00	0.61	0.00	0.83	0.00	0.29
Avail Cap (c_a), veh/h	0	774	0	421	0	879	0	542
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.75	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.3	0.0	26.3	0.0	20.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	6.5	0.0	6.7	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	34.7	0.0	33.0	0.0	22.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.7	0.0	14.6	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	1.6	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.70	0.00	1.35	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	9.3	0.0	22.0	0.0	4.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.36	0.00	0.62	0.00	1.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	699	241	75	1227	145	180	629	85	105	471	161
Future Volume (veh/h)	224	699	241	75	1227	145	180	629	85	105	471	161
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.91	0.94		0.73	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	243	760	262	82	1334	158	196	684	92	114	512	175
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	924	732	141	1282	521	246	901	121	241	1035	351
Arrive On Green	0.09	0.49	0.49	0.36	0.36	0.36	0.30	0.30	0.30	0.07	0.41	0.41
Sat Flow, veh/h	1781	1870	1481	550	3554	1443	714	2997	402	1781	2510	850
Grp Volume(v), veh/h	243	760	262	82	1334	158	196	405	371	114	361	326
Grp Sat Flow(s),veh/h/ln	1781	1870	1481	550	1777	1443	714	1777	1622	1781	1777	1583
Q Serve(g_s), s	10.6	41.5	13.0	17.8	43.3	9.4	31.2	24.7	24.9	5.1	18.0	18.3
Cycle Q Clear(g_c), s	10.6	41.5	13.0	43.3	43.3	9.4	36.1	24.7	24.9	5.1	18.0	18.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.54
Lane Grp Cap(c), veh/h	217	924	732	141	1282	521	246	534	488	241	733	653
V/C Ratio(X)	1.12	0.82	0.36	0.58	1.04	0.30	0.80	0.76	0.76	0.47	0.49	0.50
Avail Cap(c_a), veh/h	217	924	732	141	1282	521	246	534	488	243	733	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.32	0.32	0.32	0.57	0.57	0.57	0.96	0.96	0.96
Uniform Delay (d), s/veh	35.5	25.9	18.7	51.2	38.3	27.5	45.2	38.0	38.1	28.1	26.0	26.1
Incr Delay (d2), s/veh	96.4	6.0	0.3	1.9	26.2	0.1	14.3	5.7	6.3	1.4	2.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.9	26.7	8.0	4.0	28.5	5.0	10.0	15.6	14.6	4.0	12.4	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	131.9	31.9	18.9	53.1	64.5	27.6	59.5	43.7	44.4	29.4	28.3	28.7
LnGrp LOS	F	C	B	D	F	C	E	D	D	C	C	C
Approach Vol, veh/h		1265			1574			972			801	
Approach Delay, s/veh		48.4			60.2			47.2			28.6	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	55.0	16.0	49.0	13.4	41.6	65.0
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 50	* 11	* 43	8.0	* 36	* 59
Max Q Clear Time (g_c+I1), s	20.3	12.6	45.3	7.1	38.1	43.5
Green Ext Time (p_c), s	4.7	0.0	0.0	0.0	0.0	5.9

Intersection Summary	
HCM 6th Ctrl Delay	48.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	699	241	75	1227	145	180	629	85	105	471	161
Future Volume (veh/h)	224	699	241	75	1227	145	180	629	85	105	471	161
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.93	1.00		0.91	0.94		0.73	1.00		0.88
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	243	760	262	82	1334	158	196	684	92	114	512	175
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	217	924	732	141	1282	521	246	901	121	241	1035	351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.49	0.49	0.36	0.36	0.36	0.30	0.30	0.30	0.07	0.41	0.41
Unsig. Movement Delay												
Ln Grp Delay, s/veh	131.9	31.9	18.9	53.1	64.5	27.6	59.5	43.7	44.4	29.4	28.3	28.7
Ln Grp LOS	F	C	B	D	F	C	E	D	D	C	C	C
Approach Vol, veh/h		1265			1574			972			801	
Approach Delay, s/veh		48.4			60.2			47.2			28.6	
Approach LOS		D			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		55.0	16.0	49.0	13.4	41.6		65.0
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 50	* 11	* 43	8.0	* 36		* 59
Max Allow Headway (MAH), s		5.3	3.8	5.3	3.8	5.4		5.0
Max Q Clear (g_c+I1), s		20.3	12.6	45.3	7.1	38.1		43.5
Green Ext Time (g_e), s		4.7	0.0	0.0	0.0	0.0		5.9
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.98	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		0.30

Left-Turn Movement Data						
Assigned Mvmt			3	7	5	1
Mvmt Sat Flow, veh/h			1781	550	1781	714

Through Movement Data						
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2510		3554		2997		1870

Right-Turn Movement Data						
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		850		1443		402		1481

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment		L (Pr/Pm)		LL (Pr/Pm)		L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	243	82	114	196	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	550	1781	714	0	0
Q Serve Time (g_s), s	0.0	0.0	10.6	17.8	5.1	31.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	10.6	43.3	5.1	36.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	353	550	695	714	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	45.3	43.3	38.1	36.1	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	17.8	11.2	31.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	17.8	5.3	31.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	217	141	241	246	0	0
V/C Ratio (X)	0.00	0.00	1.12	0.58	0.47	0.80	0.00	0.00
Avail Cap (c_a), veh/h	0	0	217	141	243	246	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.32	0.96	0.57	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	35.5	51.2	28.1	45.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	96.4	1.9	1.4	14.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	131.9	53.1	29.4	59.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.5	2.5	2.1	5.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	5.8	0.1	0.1	1.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.53	1.58	1.80	1.48	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	18.9	4.0	4.0	10.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.20	0.51	1.12	1.21	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	361	0	1334	0	405	0	760
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	18.0	0.0	43.3	0.0	24.7	0.0	41.5
Cycle Q Clear Time (g_c), s	0.0	18.0	0.0	43.3	0.0	24.7	0.0	41.5
Lane Grp Cap (c), veh/h	0	733	0	1282	0	534	0	924
V/C Ratio (X)	0.00	0.49	0.00	1.04	0.00	0.76	0.00	0.82
Avail Cap (c_a), veh/h	0	733	0	1282	0	534	0	924
Upstream Filter (I)	0.00	0.96	0.00	0.32	0.00	0.57	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.0	0.0	38.3	0.0	38.0	0.0	25.9
Incr Delay (d2), s/veh	0.0	2.3	0.0	26.2	0.0	5.7	0.0	6.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.3	0.0	64.5	0.0	43.7	0.0	31.9
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	18.5	0.0	10.6	0.0	17.9
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	4.7	0.0	0.8	0.0	1.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	0.00	1.23	0.00	1.37	0.00	1.37
%ile Back of Q (95%), veh/ln	0.0	12.4	0.0	28.5	0.0	15.6	0.0	26.7
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.61	0.00	0.15	0.00	0.90
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	326	0	158	0	371	0	262
Grp Sat Flow (s), veh/h/ln	0	1583	0	1443	0	1622	0	1481
Q Serve Time (g_s), s	0.0	18.3	0.0	9.4	0.0	24.9	0.0	13.0
Cycle Q Clear Time (g_c), s	0.0	18.3	0.0	9.4	0.0	24.9	0.0	13.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.54	0.00	1.00	0.00	0.25	0.00	1.00
Lane Grp Cap (c), veh/h	0	653	0	521	0	488	0	732
V/C Ratio (X)	0.00	0.50	0.00	0.30	0.00	0.76	0.00	0.36
Avail Cap (c_a), veh/h	0	653	0	521	0	488	0	732
Upstream Filter (I)	0.00	0.96	0.00	0.32	0.00	0.57	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.1	0.0	27.5	0.0	38.1	0.0	18.7
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.1	0.0	6.3	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.7	0.0	27.6	0.0	44.4	0.0	18.9
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	3.3	0.0	9.7	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.9	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.60	0.00	1.51	0.00	1.38	0.00	1.77
%ile Back of Q (95%), veh/ln	0.0	11.5	0.0	5.0	0.0	14.6	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	1.05	0.00	0.14	0.00	1.35
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.7
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	704	37	119	1023	170	208	784	149	302	648	181
Future Volume (veh/h)	74	704	37	119	1023	170	208	784	149	302	648	181
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.90	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	765	40	129	1112	185	226	852	162	328	704	197
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	827	648	118	1331	220	206	869	348	220	908	340
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.12	0.24	0.24	0.12	0.26	0.26
Sat Flow, veh/h	424	1870	1465	677	3011	498	1781	3554	1426	1781	3554	1331
Grp Volume(v), veh/h	80	765	40	129	654	643	226	852	162	328	704	197
Grp Sat Flow(s),veh/h/ln	424	1870	1465	677	1777	1732	1781	1777	1426	1781	1777	1331
Q Serve(g_s), s	10.2	34.7	1.4	5.1	29.2	29.6	10.4	21.4	8.7	11.1	16.6	11.6
Cycle Q Clear(g_c), s	39.8	34.7	1.4	39.8	29.2	29.6	10.4	21.4	8.7	11.1	16.6	11.6
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	827	648	118	786	766	206	869	348	220	908	340
V/C Ratio(X)	0.63	0.92	0.06	1.09	0.83	0.84	1.10	0.98	0.46	1.49	0.78	0.58
Avail Cap(c_a), veh/h	128	827	648	118	786	766	206	869	348	220	908	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.42	0.42	0.42	1.00	1.00	1.00	0.57	0.57	0.57	0.59	0.59	0.59
Uniform Delay (d), s/veh	42.0	23.7	14.4	44.2	22.2	22.3	39.8	33.8	29.0	39.4	31.1	29.3
Incr Delay (d2), s/veh	9.4	8.9	0.1	110.1	10.0	10.7	76.3	18.6	0.6	235.6	2.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.6	20.3	0.8	10.8	19.4	19.3	12.9	15.0	5.0	28.6	10.3	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	32.6	14.5	154.2	32.2	33.0	116.1	52.4	29.5	275.1	33.6	30.7
LnGrp LOS	D	C	B	F	C	C	F	D	C	F	C	C
Approach Vol, veh/h		885			1426			1240			1229	
Approach Delay, s/veh		33.5			43.6			61.0			97.6	
Approach LOS		C			D			E			F	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	45.8	16.0	28.2	45.8	17.0	27.2
Change Period (Y+Rc), s	* 6	5.6	* 5.2	* 6	5.9	* 5.2
Max Green Setting (Gmax), s	* 40	10.4	* 23	* 40	11.1	* 22
Max Q Clear Time (g_c+I1), s	41.8	12.4	18.6	41.8	13.1	23.4
Green Ext Time (p_c), s	0.0	0.0	2.1	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	60.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	704	37	119	1023	170	208	784	149	302	648	181
Future Volume (veh/h)	74	704	37	119	1023	170	208	784	149	302	648	181
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.92	1.00		0.92	1.00		0.90	1.00		0.84
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	765	40	129	1112	185	226	852	162	328	704	197
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	128	827	648	118	1331	220	206	869	348	220	908	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.12	0.24	0.24	0.12	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	51.3	32.6	14.5	154.2	32.2	33.0	116.1	52.4	29.5	275.1	33.6	30.7
Ln Grp LOS	D	C	B	F	C	C	F	D	C	F	C	C
Approach Vol, veh/h		885			1426			1240			1229	
Approach Delay, s/veh		33.5			43.6			61.0			97.6	
Approach LOS		C			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		45.8	16.0	28.2		45.8	17.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 40	10.4	* 23		* 40	11.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.9		5.4	3.7	4.9
Max Q Clear (g_c+I1), s		41.8	12.4	18.6		41.8	13.1	23.4
Green Ext Time (g_e), s		0.0	0.0	2.1		0.0	0.0	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		677	1781			424	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3011		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		498		1331		1465		1426

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	129	226	0	0	80	328	0
Grp Sat Flow (s), veh/h/ln	0	677	1781	0	0	424	1781	0
Q Serve Time (g_s), s	0.0	5.1	10.4	0.0	0.0	10.2	11.1	0.0
Cycle Q Clear Time (g_c), s	0.0	39.8	10.4	0.0	0.0	39.8	11.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	677	0	0	0	424	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	39.8	0.0	0.0	0.0	39.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	5.1	0.0	0.0	0.0	10.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.1	0.0	0.0	0.0	10.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	118	206	0	0	128	220	0
V/C Ratio (X)	0.00	1.09	1.10	0.00	0.00	0.63	1.49	0.00
Avail Cap (c_a), veh/h	0	118	206	0	0	128	220	0
Upstream Filter (I)	0.00	1.00	0.57	0.00	0.00	0.42	0.59	0.00
Uniform Delay (d1), s/veh	0.0	44.2	39.8	0.0	0.0	42.0	39.4	0.0
Incr Delay (d2), s/veh	0.0	110.1	76.3	0.0	0.0	9.4	235.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	154.2	116.1	0.0	0.0	51.3	275.1	0.0
1st-Term Q (Q1), veh/ln	0.0	2.6	4.4	0.0	0.0	1.7	4.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.6	4.4	0.0	0.0	0.3	14.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	1.48	0.00	0.00	1.74	1.50	0.00
%ile Back of Q (95%), veh/ln	0.0	10.8	12.9	0.0	0.0	3.6	28.6	0.0
%ile Storage Ratio (RQ%)	0.00	1.57	3.28	0.00	0.00	0.52	4.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	2.7	5.0	0.0	0.0	0.0	27.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.3	0.0	0.0	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	654	0	704	0	765	0	852
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	29.2	0.0	16.6	0.0	34.7	0.0	21.4
Cycle Q Clear Time (g_c), s	0.0	29.2	0.0	16.6	0.0	34.7	0.0	21.4
Lane Grp Cap (c), veh/h	0	786	0	908	0	827	0	869
V/C Ratio (X)	0.00	0.83	0.00	0.78	0.00	0.92	0.00	0.98
Avail Cap (c_a), veh/h	0	786	0	908	0	827	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.59	0.00	0.42	0.00	0.57
Uniform Delay (d1), s/veh	0.0	22.2	0.0	31.1	0.0	23.7	0.0	33.8
Incr Delay (d2), s/veh	0.0	10.0	0.0	2.5	0.0	8.9	0.0	18.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.2	0.0	33.6	0.0	32.6	0.0	52.4
1st-Term Q (Q1), veh/ln	0.0	11.2	0.0	6.7	0.0	14.0	0.0	8.7
2nd-Term Q (Q2), veh/ln	0.0	2.2	0.0	0.3	0.0	2.0	0.0	2.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.48	0.00	1.27	0.00	1.37
%ile Back of Q (95%), veh/ln	0.0	19.4	0.0	10.3	0.0	20.3	0.0	15.0
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	0.24	0.00	0.44	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	643	0	197	0	40	0	162
Grp Sat Flow (s), veh/h/ln	0	1732	0	1331	0	1465	0	1426
Q Serve Time (g_s), s	0.0	29.6	0.0	11.6	0.0	1.4	0.0	8.7
Cycle Q Clear Time (g_c), s	0.0	29.6	0.0	11.6	0.0	1.4	0.0	8.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	766	0	340	0	648	0	348
V/C Ratio (X)	0.00	0.84	0.00	0.58	0.00	0.06	0.00	0.46
Avail Cap (c_a), veh/h	0	766	0	340	0	648	0	348
Upstream Filter (I)	0.00	1.00	0.00	0.59	0.00	0.42	0.00	0.57
Uniform Delay (d1), s/veh	0.0	22.3	0.0	29.3	0.0	14.4	0.0	29.0
Incr Delay (d2), s/veh	0.0	10.7	0.0	1.5	0.0	0.1	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.0	0.0	30.7	0.0	14.5	0.0	29.5
1st-Term Q (Q1), veh/ln	0.0	11.1	0.0	3.5	0.0	0.4	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	2.3	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.66	0.00	1.80	0.00	1.73
%ile Back of Q (95%), veh/ln	0.0	19.3	0.0	6.1	0.0	0.8	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.55	0.00	1.03	0.00	0.21	0.00	1.01
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	60.1
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	200	593	0	0	412
Future Vol, veh/h	74	200	593	0	0	412
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	217	645	0	0	448

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	869	645	0	-	-	-
Stage 1	645	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	306	471	-	0	0	-
Stage 1	521	-	-	0	0	-
Stage 2	793	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	306	471	-	-	-	-
Mov Cap-2 Maneuver	415	-	-	-	-	-
Stage 1	521	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	415	471	-
HCM Lane V/C Ratio	-	0.194	0.462	-
HCM Control Delay (s)	-	15.7	19	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.7	2.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	364	110	520	596	451	87	882	333	97	761	32
Future Volume (veh/h)	160	364	110	520	596	451	87	882	333	97	761	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	396	120	565	648	490	95	959	362	105	827	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	679	203	470	1214	539	257	1119	495	215	1122	497
Arrive On Green	0.08	0.25	0.25	0.17	0.34	0.34	0.07	0.31	0.31	0.07	0.32	0.32
Sat Flow, veh/h	1781	2691	806	1781	3554	1578	1781	3554	1573	1781	3554	1573
Grp Volume(v), veh/h	174	260	256	565	648	490	95	959	362	105	827	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1720	1781	1777	1578	1781	1777	1573	1781	1777	1573
Q Serve(g_s), s	8.7	15.4	15.7	20.4	17.6	35.6	4.1	30.4	24.6	4.6	24.9	1.9
Cycle Q Clear(g_c), s	8.7	15.4	15.7	20.4	17.6	35.6	4.1	30.4	24.6	4.6	24.9	1.9
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	449	434	470	1214	539	257	1119	495	215	1122	497
V/C Ratio(X)	0.58	0.58	0.59	1.20	0.53	0.91	0.37	0.86	0.73	0.49	0.74	0.07
Avail Cap(c_a), veh/h	300	503	487	470	1324	588	263	1119	495	219	1122	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	0.09	0.09	0.09	1.00	1.00	1.00	0.78	0.78	0.78
Uniform Delay (d), s/veh	29.9	39.3	39.4	31.0	31.8	37.7	26.9	38.6	36.6	29.0	36.6	28.7
Incr Delay (d2), s/veh	1.7	0.8	0.9	92.6	0.0	2.1	0.9	8.5	9.2	1.3	3.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	10.0	9.9	27.0	8.7	15.3	3.2	20.3	15.7	3.6	15.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	40.1	40.3	123.6	31.8	39.8	27.7	47.1	45.8	30.3	40.0	29.0
LnGrp LOS	C	D	D	F	C	D	C	D	D	C	D	C
Approach Vol, veh/h		690			1703			1416			967	
Approach Delay, s/veh		38.0			64.6			45.5			38.6	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	43.3	15.3	46.9	14.6	43.2	26.0	36.2
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	33.8	9.7	44.7	9.0	33.8	20.4	34.0
Max Q Clear Time (g_c+I1), s	6.1	26.9	10.7	37.6	6.6	32.4	22.4	17.7
Green Ext Time (p_c), s	0.0	3.0	0.0	3.4	0.0	1.0	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	364	110	520	596	451	87	882	333	97	761	32
Future Volume (veh/h)	160	364	110	520	596	451	87	882	333	97	761	32
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	396	120	565	648	490	95	959	362	105	827	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	300	679	203	470	1214	539	257	1119	495	215	1122	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.25	0.25	0.17	0.34	0.34	0.07	0.31	0.31	0.07	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.6	40.1	40.3	123.6	31.8	39.8	27.7	47.1	45.8	30.3	40.0	29.0
Ln Grp LOS	C	D	D	F	C	D	C	D	D	C	D	C
Approach Vol, veh/h		690			1703			1416			967	
Approach Delay, s/veh		38.0			64.6			45.5			38.6	
Approach LOS		D			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	14.5	43.3	15.3	46.9	14.6	43.2	26.0	36.2
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	33.8	9.7	44.7	9.0	33.8	20.4	34.0
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.7	3.7	5.1
Max Q Clear (g_c+l1), s	6.1	26.9	10.7	37.6	6.6	32.4	22.4	17.7
Green Ext Time (g_e), s	0.0	3.0	0.0	3.4	0.0	1.0	0.0	2.6
Prob of Phs Call (p_c)	0.96	1.00	1.00	1.00	0.97	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.70	1.00	0.00	1.00	0.05

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		2691

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1573		1578		1573		806

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	95	0	174	0	105	0	565	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	4.1	0.0	8.7	0.0	4.6	0.0	20.4	0.0
Cycle Q Clear Time (g_c), s	4.1	0.0	8.7	0.0	4.6	0.0	20.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	641	0	494	0	415	0	883	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	37.8	0.0	30.3	0.0	37.8	0.0	32.3	0.0
Perm LT Serve Time (g_u), s	13.0	0.0	23.4	0.0	7.4	0.0	14.6	0.0
Perm LT Q Serve Time (g_ps), s	4.3	0.0	3.8	0.0	7.4	0.0	14.6	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	257	0	300	0	215	0	470	0
V/C Ratio (X)	0.37	0.00	0.58	0.00	0.49	0.00	1.20	0.00
Avail Cap (c_a), veh/h	263	0	300	0	219	0	470	0
Upstream Filter (I)	1.00	0.00	0.61	0.00	0.78	0.00	0.09	0.00
Uniform Delay (d1), s/veh	26.9	0.0	29.9	0.0	29.0	0.0	31.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.7	0.0	1.3	0.0	92.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	27.7	0.0	31.6	0.0	30.3	0.0	123.6	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	3.6	0.0	1.9	0.0	9.8	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.1	0.0	12.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.66	0.00	1.80	0.00	1.23	0.00
%ile Back of Q (95%), veh/ln	3.2	0.0	6.3	0.0	3.6	0.0	27.0	0.0
%ile Storage Ratio (RQ%)	0.39	0.00	1.99	0.00	0.40	0.00	5.70	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	23.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	827	0	648	0	959	0	260
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	24.9	0.0	17.6	0.0	30.4	0.0	15.4
Cycle Q Clear Time (g_c), s	0.0	24.9	0.0	17.6	0.0	30.4	0.0	15.4
Lane Grp Cap (c), veh/h	0	1122	0	1214	0	1119	0	449
V/C Ratio (X)	0.00	0.74	0.00	0.53	0.00	0.86	0.00	0.58
Avail Cap (c_a), veh/h	0	1122	0	1324	0	1119	0	503
Upstream Filter (I)	0.00	0.78	0.00	0.09	0.00	1.00	0.00	0.61
Uniform Delay (d1), s/veh	0.0	36.6	0.0	31.8	0.0	38.6	0.0	39.3
Incr Delay (d2), s/veh	0.0	3.4	0.0	0.0	0.0	8.5	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.0	0.0	31.8	0.0	47.1	0.0	40.1
1st-Term Q (Q1), veh/ln	0.0	10.5	0.0	7.4	0.0	12.8	0.0	6.6
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	1.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.44	0.00	1.18	0.00	1.44	0.00	1.50
%ile Back of Q (95%), veh/ln	0.0	15.8	0.0	8.7	0.0	20.3	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.26	0.00	1.62	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	35	0	490	0	362	0	256
Grp Sat Flow (s), veh/h/ln	0	1573	0	1578	0	1573	0	1720
Q Serve Time (g_s), s	0.0	1.9	0.0	35.6	0.0	24.6	0.0	15.7
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	35.6	0.0	24.6	0.0	15.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.47
Lane Grp Cap (c), veh/h	0	497	0	539	0	495	0	434
V/C Ratio (X)	0.00	0.07	0.00	0.91	0.00	0.73	0.00	0.59
Avail Cap (c_a), veh/h	0	497	0	588	0	495	0	487
Upstream Filter (I)	0.00	0.78	0.00	0.09	0.00	1.00	0.00	0.61
Uniform Delay (d1), s/veh	0.0	28.7	0.0	37.7	0.0	36.6	0.0	39.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.1	0.0	9.2	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.0	0.0	39.8	0.0	45.8	0.0	40.3
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	13.2	0.0	9.2	0.0	6.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	1.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.13	0.00	1.51	0.00	1.50
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	15.3	0.0	15.7	0.0	9.9
%ile Storage Ratio (RQ%)	0.00	0.27	0.00	3.25	0.00	2.50	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	457	0	370	1	919	0	0	791	0
Future Volume (veh/h)	0	0	0	457	0	370	1	919	0	0	791	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	497	0	402	1	999	0	0	860	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Cap, veh/h	0	636	0	726	0	537	60	1755	0	0	1788	0
Arrive On Green	0.00	0.00	0.00	0.34	0.00	0.34	0.50	0.50	0.00	0.00	0.50	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1578	0	3571	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	497	0	402	536	464	0	0	860	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1578	1870	1617	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	15.3	0.0	13.5	0.0	12.0	0.0	0.0	9.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	15.3	0.0	13.5	12.0	12.0	0.0	0.0	9.5	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	636	0	726	0	537	1001	814	0	0	1788	0
V/C Ratio(X)	0.00	0.00	0.00	0.68	0.00	0.75	0.54	0.57	0.00	0.00	0.48	0.00
Avail Cap(c_a), veh/h	0	826	0	907	0	697	1001	814	0	0	1788	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.61	0.61	0.00	0.00	0.79	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.1	0.0	17.5	10.4	10.4	0.0	0.0	9.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.6	0.0	3.3	1.3	1.8	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	9.9	0.0	8.5	6.9	6.3	0.0	0.0	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	19.7	0.0	20.8	11.6	12.1	0.0	0.0	10.5	0.0
LnGrp LOS	A	A	A	B	A	C	B	B	A	A	B	A
Approach Vol, veh/h		0			899			1000			860	
Approach Delay, s/veh		0.0			20.2			11.9			10.5	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.1	24.9	35.1	24.9
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	24.1	26.5	24.1	26.5
Max Q Clear Time (g_c+I1), s	14.0	17.3	11.5	0.0
Green Ext Time (p_c), s	4.4	3.1	4.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	457	0	370	1	919	0	0	791	0
Future Volume (veh/h)	0	0	0	457	0	370	1	919	0	0	791	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	497	0	402	1	999	0	0	860	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			Yes			No		
Cap, veh/h	0	636	0	726	0	537	60	1755	0	0	1788	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.34	0.00	0.34	0.50	0.50	0.00	0.00	0.50	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	19.7	0.0	20.8	11.6	12.1	0.0	0.0	10.5	0.0
Ln Grp LOS	A	A	A	B	A	C	B	B	A	A	B	A
Approach Vol, veh/h		0			899			1000			860	
Approach Delay, s/veh		0.0			20.2			11.9			10.5	
Approach LOS					C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		35.1		24.9		35.1		24.9
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		24.1		26.5		24.1		26.5
Max Allow Headway (MAH), s		5.1		4.5		5.1		0.0
Max Q Clear (g_c+I1), s		14.0		17.3		11.5		0.0
Green Ext Time (g_e), s		4.4		3.1		4.7		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		0.44		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3571		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1578		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L+T		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	536	0	497	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.0	0.0	15.3	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	653	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	30.2	0.0	20.4	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	20.7	0.0	20.4	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	26.8	0.0	0.0	0.0	30.2	0.0	20.4
Serve Time pre Blk (g_fs), s	0.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1001	0	726	0	0	0	0
V/C Ratio (X)	0.00	0.54	0.00	0.68	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1001	0	907	0	0	0	0
Upstream Filter (I)	0.00	0.61	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.4	0.0	18.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	1.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.6	0.0	19.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	5.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.62	0.00	1.67	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.9	0.0	9.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.52	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	2	0	1
Grp Vol (v), veh/h	0	464	0	0	0	860	0	0
Grp Sat Flow (s), veh/h/ln	0	1617	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	12.0	0.0	0.0	0.0	9.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.0	0.0	0.0	0.0	9.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	814	0	0	0	1788	0	636
V/C Ratio (X)	0.00	0.57	0.00	0.00	0.00	0.48	0.00	0.00
Avail Cap (c_a), veh/h	0	814	0	0	0	1788	0	826
Upstream Filter (I)	0.00	0.61	0.00	0.00	0.00	0.79	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.4	0.0	0.0	0.0	9.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.1	0.0	0.0	0.0	10.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.4	0.0	0.0	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.66	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.3	0.0	0.0	0.0	5.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.00	0.00	0.10	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	402	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1578	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	537	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	697	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.74	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	8.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	364	88	101	998	154	260	726	115	162	615	476
Future Volume (veh/h)	55	364	88	101	998	154	260	726	115	162	615	476
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	396	96	110	1085	167	283	789	125	176	668	517
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	892	214	391	1009	155	301	1171	514	303	1171	514
Arrive On Green	0.06	0.32	0.32	0.07	0.33	0.33	0.08	0.33	0.33	0.08	0.33	0.33
Sat Flow, veh/h	1781	2829	678	1781	3077	472	1781	3554	1561	1781	3554	1561
Grp Volume(v), veh/h	60	247	245	110	625	627	283	789	125	176	668	517
Grp Sat Flow(s),veh/h/ln	1781	1777	1730	1781	1777	1773	1781	1777	1561	1781	1777	1561
Q Serve(g_s), s	2.0	9.9	10.2	3.6	29.5	29.5	7.0	17.2	5.3	5.8	14.0	29.7
Cycle Q Clear(g_c), s	2.0	9.9	10.2	3.6	29.5	29.5	7.0	17.2	5.3	5.8	14.0	29.7
Prop In Lane	1.00		0.39	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	560	546	391	582	581	301	1171	514	303	1171	514
V/C Ratio(X)	0.32	0.44	0.45	0.28	1.07	1.08	0.94	0.67	0.24	0.58	0.57	1.01
Avail Cap(c_a), veh/h	219	582	567	400	582	581	301	1171	514	303	1171	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	1.00	1.00	1.00	0.60	0.60	0.60	0.62	0.62	0.62
Uniform Delay (d), s/veh	22.6	24.5	24.6	18.6	30.3	30.3	26.5	26.0	22.0	19.9	24.9	30.2
Incr Delay (d2), s/veh	0.8	0.4	0.5	0.4	58.7	60.2	26.1	1.9	0.7	1.7	1.3	32.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	6.9	6.9	2.6	30.1	30.4	7.7	10.6	3.5	4.4	8.9	20.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	24.9	25.0	19.0	88.9	90.5	52.6	27.9	22.7	21.6	26.2	62.7
LnGrp LOS	C	C	C	B	F	F	D	C	C	C	C	F
Approach Vol, veh/h		552			1362			1197			1361	
Approach Delay, s/veh		24.8			84.0			33.2			39.5	
Approach LOS		C			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	35.1	9.4	34.5	11.0	35.1	10.6	33.4
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	9.0	31.7	4.0	31.5	7.8	19.2	5.6	12.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	49.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	364	88	101	998	154	260	726	115	162	615	476
Future Volume (veh/h)	55	364	88	101	998	154	260	726	115	162	615	476
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	396	96	110	1085	167	283	789	125	176	668	517
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	188	892	214	391	1009	155	301	1171	514	303	1171	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.32	0.32	0.07	0.33	0.33	0.08	0.33	0.33	0.08	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.4	24.9	25.0	19.0	88.9	90.5	52.6	27.9	22.7	21.6	26.2	62.7
Ln Grp LOS	C	C	C	B	F	F	D	C	C	C	C	F
Approach Vol, veh/h		552			1362			1197			1361	
Approach Delay, s/veh		24.8			84.0			33.2			39.5	
Approach LOS		C			F			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	11.0	35.1	9.4	34.5	11.0	35.1	10.6	33.4
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.6	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+l1), s	9.0	31.7	4.0	31.5	7.8	19.2	5.6	12.2
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	2.5
Prob of Phs Call (p_c)	1.00	1.00	0.78	1.00	0.99	1.00	0.94	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.03

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	3077	3554	2829

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1561	472	1561	678

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	283	0	60	0	176	0	110	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	2.0	0.0	5.8	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	2.0	0.0	5.8	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	472	0	444	0	610	0	898	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	29.7	0.0	28.4	0.0	29.7	0.0	28.4	0.0
Perm LT Serve Time (g_u), s	15.7	0.0	0.0	0.0	12.4	0.0	18.2	0.0
Perm LT Q Serve Time (g_ps), s	15.7	0.0	0.0	0.0	7.0	0.0	1.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	301	0	188	0	303	0	391	0
V/C Ratio (X)	0.94	0.00	0.32	0.00	0.58	0.00	0.28	0.00
Avail Cap (c_a), veh/h	301	0	219	0	303	0	400	0
Upstream Filter (I)	0.60	0.00	0.78	0.00	0.62	0.00	1.00	0.00
Uniform Delay (d1), s/veh	26.5	0.0	22.6	0.0	19.9	0.0	18.6	0.0
Incr Delay (d2), s/veh	26.1	0.0	0.8	0.0	1.7	0.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	52.6	0.0	23.4	0.0	21.6	0.0	19.0	0.0
1st-Term Q (Q1), veh/ln	2.7	0.0	0.8	0.0	2.3	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	2.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.57	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.7	0.0	1.4	0.0	4.4	0.0	2.6	0.0
%ile Storage Ratio (RQ%)	1.12	0.00	0.30	0.00	0.63	0.00	0.66	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	668	0	625	0	789	0	247
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	14.0	0.0	29.5	0.0	17.2	0.0	9.9
Cycle Q Clear Time (g_c), s	0.0	14.0	0.0	29.5	0.0	17.2	0.0	9.9
Lane Grp Cap (c), veh/h	0	1171	0	582	0	1171	0	560
V/C Ratio (X)	0.00	0.57	0.00	1.07	0.00	0.67	0.00	0.44
Avail Cap (c_a), veh/h	0	1171	0	582	0	1171	0	582
Upstream Filter (I)	0.00	0.62	0.00	1.00	0.00	0.60	0.00	0.78
Uniform Delay (d1), s/veh	0.0	24.9	0.0	30.3	0.0	26.0	0.0	24.5
Incr Delay (d2), s/veh	0.0	1.3	0.0	58.7	0.0	1.9	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.2	0.0	88.9	0.0	27.9	0.0	24.9
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	11.7	0.0	6.9	0.0	4.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	9.5	0.0	0.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.54	0.00	1.42	0.00	1.47	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	30.1	0.0	10.6	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.64	0.00	0.61	0.00	0.41	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	517	0	627	0	125	0	245
Grp Sat Flow (s), veh/h/ln	0	1561	0	1773	0	1561	0	1730
Q Serve Time (g_s), s	0.0	29.7	0.0	29.5	0.0	5.3	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	29.7	0.0	29.5	0.0	5.3	0.0	10.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.27	0.00	1.00	0.00	0.39
Lane Grp Cap (c), veh/h	0	514	0	581	0	514	0	546
V/C Ratio (X)	0.00	1.01	0.00	1.08	0.00	0.24	0.00	0.45
Avail Cap (c_a), veh/h	0	514	0	581	0	514	0	567
Upstream Filter (I)	0.00	0.62	0.00	1.00	0.00	0.60	0.00	0.78
Uniform Delay (d1), s/veh	0.0	30.2	0.0	30.3	0.0	22.0	0.0	24.6
Incr Delay (d2), s/veh	0.0	32.5	0.0	60.2	0.0	0.7	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.7	0.0	90.5	0.0	22.7	0.0	25.0
1st-Term Q (Q1), veh/ln	0.0	10.3	0.0	11.6	0.0	1.8	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	4.6	0.0	9.7	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.34	0.00	1.42	0.00	1.80	0.00	1.72
%ile Back of Q (95%), veh/ln	0.0	20.0	0.0	30.4	0.0	3.5	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	3.91	0.00	0.61	0.00	0.67	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.7	0.0	11.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.5
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	366	98	63	508	67	188	957	41	23	641	149
Future Volume (veh/h)	78	366	98	63	508	67	188	957	41	23	641	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	398	107	68	552	73	204	1040	45	25	697	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	566	152	267	748	627	274	1479	64	214	1214	282
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	797	1416	381	890	1870	1567	640	3465	150	519	2846	661
Grp Volume(v), veh/h	85	0	505	68	552	73	204	533	552	25	435	424
Grp Sat Flow(s),veh/h/ln	797	0	1797	890	1870	1567	640	1777	1838	519	1777	1730
Q Serve(g_s), s	6.1	0.0	14.1	4.1	15.1	1.8	14.4	14.7	14.8	2.5	11.2	11.2
Cycle Q Clear(g_c), s	21.2	0.0	14.1	18.2	15.1	1.8	25.6	14.7	14.8	17.2	11.2	11.2
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.08	1.00		0.38
Lane Grp Cap(c), veh/h	239	0	719	267	748	627	274	758	784	214	758	738
V/C Ratio(X)	0.36	0.00	0.70	0.25	0.74	0.12	0.74	0.70	0.70	0.12	0.57	0.57
Avail Cap(c_a), veh/h	252	0	749	282	779	653	274	758	784	214	758	738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	24.3	0.0	15.0	22.6	15.3	11.3	24.6	14.1	14.1	21.2	13.1	13.1
Incr Delay (d2), s/veh	0.9	0.0	2.8	0.5	3.6	0.1	16.7	5.4	5.2	0.9	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	0.0	9.2	1.5	10.2	1.0	7.3	10.1	10.3	0.6	7.2	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	0.0	17.9	23.1	18.9	11.4	41.3	19.5	19.3	22.0	15.5	15.6
LnGrp LOS	C	A	B	C	B	B	D	B	B	C	B	B
Approach Vol, veh/h		590			693			1289			884	
Approach Delay, s/veh		18.9			18.5			22.9			15.7	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	30.6	29.4	30.6	29.4
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	27.6	23.2	19.2	20.2
Green Ext Time (p_c), s	0.0	0.7	2.6	1.8

Intersection Summary	
HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	366	98	63	508	67	188	957	41	23	641	149
Future Volume (veh/h)	78	366	98	63	508	67	188	957	41	23	641	149
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	398	107	68	552	73	204	1040	45	25	697	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	239	566	152	267	748	627	274	1479	64	214	1214	282
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.43	0.43	0.43	0.43
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.2	0.0	17.9	23.1	18.9	11.4	41.3	19.5	19.3	22.0	15.5	15.6
Ln Grp LOS	C	A	B	C	B	B	D	B	B	C	B	B
Approach Vol, veh/h		590			693			1289			884	
Approach Delay, s/veh		18.9			18.5			22.9			15.7	
Approach LOS		B			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		30.6		29.4		30.6		29.4
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		5.4		5.3		5.3		5.0
Max Q Clear (g_c+I1), s		27.6		23.2		19.2		20.2
Green Ext Time (g_e), s		0.0		0.7		2.6		1.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		640		797		519		890

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3465		1416		2846		1870

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		150		381		661		1567

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	204	0	85	0	25	0	68
Grp Sat Flow (s), veh/h/ln	0	640	0	797	0	519	0	890
Q Serve Time (g_s), s	0.0	14.4	0.0	6.1	0.0	2.5	0.0	4.1
Cycle Q Clear Time (g_c), s	0.0	25.6	0.0	21.2	0.0	17.2	0.0	18.2
Perm LT Sat Flow (s_l), veh/h/ln	0	640	0	797	0	519	0	890
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	25.6	0.0	24.0	0.0	25.6	0.0	24.0
Perm LT Serve Time (g_u), s	0.0	14.4	0.0	8.9	0.0	10.8	0.0	9.9
Perm LT Q Serve Time (g_ps), s	0.0	14.4	0.0	6.1	0.0	2.5	0.0	4.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	274	0	239	0	214	0	267
V/C Ratio (X)	0.00	0.74	0.00	0.36	0.00	0.12	0.00	0.25
Avail Cap (c_a), veh/h	0	274	0	252	0	214	0	282
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.77	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.6	0.0	24.3	0.0	21.2	0.0	22.6
Incr Delay (d2), s/veh	0.0	16.7	0.0	0.9	0.0	0.9	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.3	0.0	25.2	0.0	22.0	0.0	23.1
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	1.1	0.0	0.3	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.3	0.0	2.0	0.0	0.6	0.0	1.5
%ile Storage Ratio (RQ%)	0.00	1.84	0.00	0.51	0.00	0.15	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	533	0	0	0	435	0	552
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	14.7	0.0	0.0	0.0	11.2	0.0	15.1
Cycle Q Clear Time (g_c), s	0.0	14.7	0.0	0.0	0.0	11.2	0.0	15.1
Lane Grp Cap (c), veh/h	0	758	0	0	0	758	0	748
V/C Ratio (X)	0.00	0.70	0.00	0.00	0.00	0.57	0.00	0.74
Avail Cap (c_a), veh/h	0	758	0	0	0	758	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.77	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.1	0.0	0.0	0.0	13.1	0.0	15.3
Incr Delay (d2), s/veh	0.0	5.4	0.0	0.0	0.0	2.4	0.0	3.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.5	0.0	0.0	0.0	15.5	0.0	18.9
1st-Term Q (Q1), veh/ln	0.0	4.9	0.0	0.0	0.0	3.7	0.0	5.4
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.0	0.0	0.5	0.0	0.7

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.67	0.00	1.00	0.00	1.70	0.00	1.66
%ile Back of Q (95%), veh/ln	0.0	10.1	0.0	0.0	0.0	7.2	0.0	10.2
%ile Storage Ratio (RQ%)	0.00	0.39	0.00	0.00	0.00	0.28	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	552	0	505	0	424	0	73
Grp Sat Flow (s), veh/h/ln	0	1838	0	1797	0	1730	0	1567
Q Serve Time (g_s), s	0.0	14.8	0.0	14.1	0.0	11.2	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	14.8	0.0	14.1	0.0	11.2	0.0	1.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	0.21	0.00	0.38	0.00	1.00
Lane Grp Cap (c), veh/h	0	784	0	719	0	738	0	627
V/C Ratio (X)	0.00	0.70	0.00	0.70	0.00	0.57	0.00	0.12
Avail Cap (c_a), veh/h	0	784	0	749	0	738	0	653
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.77	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.1	0.0	15.0	0.0	13.1	0.0	11.3
Incr Delay (d2), s/veh	0.0	5.2	0.0	2.8	0.0	2.5	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.3	0.0	17.9	0.0	15.6	0.0	11.4
1st-Term Q (Q1), veh/ln	0.0	5.1	0.0	4.8	0.0	3.6	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	1.1	0.0	0.6	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.66	0.00	1.71	0.00	1.71	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	10.3	0.0	9.2	0.0	7.1	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.40	0.00	0.27	0.00	0.27	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/10/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	174	238	454	149	12	144	404	133	23	491	21	104
Future Volume (vph)	174	238	454	149	12	144	404	133	23	491	21	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.98	0.96			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		0.99	1.00		
Frt	1.00	0.92	0.85			1.00	0.96		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1651	2851	1287			1650	3160		1641	3176		
Flt Permitted	0.17	1.00	1.00			0.17	1.00		0.45	1.00		
Satd. Flow (perm)	299	2851	1287			301	3160		774	3176		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	259	493	162	13	157	439	145	25	534	23	113
RTOR Reduction (vph)	0	0	148	0	0	0	23	0	0	12	0	0
Lane Group Flow (vph)	189	584	182	0	0	170	561	0	25	658	0	0
Confl. Peds. (#/hr)	9		11	8	11	8		9	9		7	11
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	41.5	28.9	28.9			38.4	27.9		28.3	28.3		
Effective Green, g (s)	41.5	28.9	28.9			38.4	27.9		28.3	28.3		
Actuated g/C Ratio	0.30	0.21	0.21			0.27	0.20		0.20	0.20		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	210	588	265			183	629		156	642		
v/s Ratio Prot	c0.08	c0.20				0.07	0.18			c0.21		
v/s Ratio Perm	0.19		0.14			0.18			0.03			
v/c Ratio	0.90	1.14dr	0.69			0.93	0.89		0.16	1.02		
Uniform Delay, d1	40.7	55.5	51.4			44.0	54.6		46.1	55.9		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	36.0	35.5	13.7			46.0	17.4		2.2	42.0		
Delay (s)	76.7	90.9	65.1			90.0	71.9		48.2	97.9		
Level of Service	E	F	E			F	E		D	F		
Approach Delay (s)		80.8					76.0			96.1		
Approach LOS		F					E			F		

Intersection Summary			
HCM 2000 Control Delay	72.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	107.4%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	22	62	397	105	46	437	174	16
Future Volume (vph)	22	62	397	105	46	437	174	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	0.99			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.97			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1652	3183			3196	1345	
Flt Permitted		0.12	1.00			0.95	1.00	
Satd. Flow (perm)		202	3183			3196	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	67	432	114	50	475	189	17
RTOR Reduction (vph)	0	0	17	0	0	0	151	0
Lane Group Flow (vph)	0	91	529	0	0	544	36	0
Confl. Peds. (#/hr)	7	11		9	8	9	9	7
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		46.5	46.5			27.3	27.3	
Effective Green, g (s)		46.5	46.5			27.3	27.3	
Actuated g/C Ratio		0.33	0.33			0.20	0.20	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		191	1057			623	262	
v/s Ratio Prot		0.04	c0.17			c0.17	0.03	
v/s Ratio Perm		0.12						
v/c Ratio		0.48	0.50			0.87	0.14	
Uniform Delay, d1		36.1	37.5			54.7	46.6	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	1.7			13.6	0.4	
Delay (s)		37.9	39.1			68.3	47.1	
Level of Service		D	D			E	D	
Approach Delay (s)			39.0			62.9		
Approach LOS			D			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	21	60	251	75	68	21	49	330	59	42	74	137
Future Volume (vph)	21	60	251	75	68	21	49	330	59	42	74	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.98				1.00	0.99			1.00	1.00
Flpb, ped/bikes		0.98	1.00				0.98	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.96			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1616	3065				1622	3140			1652	1652
Flt Permitted		0.27	1.00				0.31	1.00			0.95	0.95
Satd. Flow (perm)		452	3065				525	3140			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	65	273	82	74	23	53	359	64	46	80	149
RTOR Reduction (vph)	0	0	10	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	88	419	0	0	0	76	464	0	0	80	149
Confl. Peds. (#/hr)	12	27		17	13	17	13		12	27	24	12
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		35.8	35.8				35.8	35.8			20.0	20.0
Effective Green, g (s)		35.8	35.8				35.8	35.8			20.0	20.0
Actuated g/C Ratio		0.20	0.20				0.20	0.20			0.11	0.11
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		89	609				104	624			183	183
v/s Ratio Prot			0.14					0.15			0.05	0.09
v/s Ratio Perm		c0.19					0.14					
v/c Ratio		0.99	0.69				0.73	0.74			0.44	0.81
Uniform Delay, d1		71.9	66.9				67.6	67.8			74.7	78.2
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		90.8	3.2				23.0	4.8			1.7	23.4
Delay (s)		162.7	70.1				90.6	72.6			76.4	101.6
Level of Service		F	E				F	E			E	F
Approach Delay (s)			85.9					75.1				
Approach LOS			F					E				

Intersection Summary			
HCM 2000 Control Delay	69.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	158.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SEL2	SEL	SET	SER
Lane Configurations												
Traffic Volume (vph)	519	47	23	29	129	448	68	7	7	63	400	178
Future Volume (vph)	519	47	23	29	129	448	68	7	7	63	400	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Lane Util. Factor	0.95	1.00			1.00	0.95	1.00			1.00	0.91	0.91
Frpb, ped/bikes	1.00	0.88			1.00	1.00	0.95			1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00			0.99	1.00	1.00
Frt	1.00	0.85			1.00	1.00	0.85			1.00	0.99	0.85
Flt Protected	1.00	1.00			0.95	1.00	1.00			0.95	1.00	1.00
Satd. Flow (prot)	3303	1300			1652	3303	1400			1627	3141	1312
Flt Permitted	1.00	1.00			0.95	1.00	1.00			0.19	1.00	1.00
Satd. Flow (perm)	3303	1300			1652	3303	1400			329	3141	1312
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	564	51	25	32	140	487	74	8	8	68	435	193
RTOR Reduction (vph)	0	59	0	0	0	0	63	0	0	0	0	0
Lane Group Flow (vph)	564	17	0	0	172	487	19	0	0	76	454	174
Confl. Peds. (#/hr)		24	17	24	17		24	12	27	24		13
Turn Type	NA	Perm		Prot	Prot	NA	Perm		Perm	Perm	NA	Perm
Protected Phases	6			5	5	2					10	
Permitted Phases		6					2		10	10		10
Actuated Green, G (s)	40.0	40.0			22.3	42.5	42.5			54.0	54.0	54.0
Effective Green, g (s)	40.0	40.0			22.3	42.5	42.5			54.0	54.0	54.0
Actuated g/C Ratio	0.22	0.22			0.12	0.24	0.24			0.30	0.30	0.30
Clearance Time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	734	288			204	779	330			98	942	393
v/s Ratio Prot	c0.17				c0.10	c0.15					0.14	
v/s Ratio Perm		0.01					0.01			c0.23		0.13
v/c Ratio	0.77	0.06			0.84	0.63	0.06			0.78	0.48	0.44
Uniform Delay, d1	65.7	55.2			77.1	61.6	53.3			57.5	51.6	50.9
Progression Factor	1.00	1.00			1.24	0.78	3.23			1.00	1.00	1.00
Incremental Delay, d2	7.6	0.4			11.3	1.4	0.1			31.0	0.4	0.8
Delay (s)	73.2	55.6			107.0	49.5	171.9			88.5	51.9	51.7
Level of Service	E	E			F	D	F			F	D	D
Approach Delay (s)	76.9					76.4					55.7	
Approach LOS	E					E					E	

Intersection Summary

Movement	SER2	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	7	72	597	272	45
Future Volume (vph)	7	72	597	272	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	7.6	7.6	7.6	7.6	
Lane Util. Factor	1.00	1.00	0.91	0.91	
Frpb, ped/bikes	0.94	1.00	1.00	0.94	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	
Frt	0.85	1.00	0.99	0.85	
Flt Protected	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1390	1649	3124	1261	
Flt Permitted	1.00	0.37	1.00	1.00	
Satd. Flow (perm)	1390	639	3124	1261	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	78	649	296	49
RTOR Reduction (vph)	6	0	0	73	0
Lane Group Flow (vph)	2	78	696	225	0
Confl. Peds. (#/hr)	24	2		27	24
Turn Type	Perm	Perm	NA	Perm	
Protected Phases			14		
Permitted Phases	10	14		14	
Actuated Green, G (s)	54.0	54.0	54.0	54.0	
Effective Green, g (s)	54.0	54.0	54.0	54.0	
Actuated g/C Ratio	0.30	0.30	0.30	0.30	
Clearance Time (s)	7.6	7.6	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	417	191	937	378	
v/s Ratio Prot			0.22		
v/s Ratio Perm	0.00	0.12		0.18	
v/c Ratio	0.01	0.41	0.74	0.60	
Uniform Delay, d1	44.2	50.3	56.7	53.7	
Progression Factor	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.4	3.2	2.5	
Delay (s)	44.2	51.7	60.0	56.2	
Level of Service	D	D	E	E	
Approach Delay (s)			58.3		
Approach LOS			E		

Intersection Summary

Future with Full Buildout Conditions – Year 2037

Morning Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1719	7	0	1380	0	1	0	67	875	29	252
Future Volume (veh/h)	0	1719	7	0	1380	0	1	0	67	875	29	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1868	8	0	1500	0	1	0	73	628	483	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2117	9	0	1434	0	2	0	130	590	370	210
Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Sat Flow, veh/h	0	5416	22	0	3741	0	21	0	1547	1781	1119	635
Grp Volume(v), veh/h	0	1212	664	0	1500	0	74	0	0	628	0	757
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1569	0	0	1781	0	1753
Q Serve(g_s), s	0.0	29.7	29.7	0.0	36.3	0.0	4.1	0.0	0.0	29.8	0.0	29.8
Cycle Q Clear(g_c), s	0.0	29.7	29.7	0.0	36.3	0.0	4.1	0.0	0.0	29.8	0.0	29.8
Prop In Lane	0.00		0.01	0.00		0.00	0.01		0.99	1.00		0.36
Lane Grp Cap(c), veh/h	0	1374	753	0	1434	0	132	0	0	590	0	581
V/C Ratio(X)	0.00	0.88	0.88	0.00	1.05	0.00	0.56	0.00	0.00	1.06	0.00	1.30
Avail Cap(c_a), veh/h	0	1374	753	0	1434	0	157	0	0	590	0	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.9	24.9	0.0	26.8	0.0	39.6	0.0	0.0	30.1	0.0	30.1
Incr Delay (d2), s/veh	0.0	8.5	14.1	0.0	36.8	0.0	3.7	0.0	0.0	55.5	0.0	149.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	18.3	21.2	0.0	29.7	0.0	3.1	0.0	0.0	29.6	0.0	53.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	33.3	39.0	0.0	63.6	0.0	43.3	0.0	0.0	85.6	0.0	179.1
LnGrp LOS	A	C	D	A	F	A	D	A	A	F	A	F
Approach Vol, veh/h		1876			1500			74			1385	
Approach Delay, s/veh		35.3			63.6			43.3			136.7	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	41.4	35.0	41.4	13.6
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	31.7	31.8	38.3	6.1
Green Ext Time (p_c), s	2.7	0.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	73.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1719	7	0	1380	0	1	0	67	875	29	252
Future Volume (veh/h)	0	1719	7	0	1380	0	1	0	67	875	29	252
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1868	8	0	1500	0	1	0	73	628	483	274
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2117	9	0	1434	0	2	0	130	590	370	210
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.40	0.40	0.00	0.40	0.00	0.08	0.00	0.08	0.33	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	33.3	39.0	0.0	63.6	0.0	43.3	0.0	0.0	85.6	0.0	179.1
Ln Grp LOS	A	C	D	A	F	A	D	A	A	F	A	F
Approach Vol, veh/h		1876			1500			74			1385	
Approach Delay, s/veh		35.3			63.6			43.3			136.7	
Approach LOS		D			E			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		41.4	13.6	35.0		41.4		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		31.7	6.1	31.8		38.3		
Green Ext Time (g_e), s		2.7	0.1	0.0		0.0		
Prob of Phs Call (p_c)		1.00	0.85	1.00		1.00		
Prob of Max Out (p_x)		1.00	1.00	1.00		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	21	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5416	0	1119		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		22	1547	635		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	74	628	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1569	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	4.1	29.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	4.1	29.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	36.3	0.0	0.0	0.0	36.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.01	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	132	590	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.56	1.06	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	157	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	39.6	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.7	55.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	43.3	85.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.6	11.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	9.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.42	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	3.1	29.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.28	3.17	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	9.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1212	0	0	0	1500	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	29.7	0.0	0.0	0.0	36.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.7	0.0	0.0	0.0	36.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1374	0	0	0	1434	0	0
V/C Ratio (X)	0.00	0.88	0.00	0.00	0.00	1.05	0.00	0.00
Avail Cap (c_a), veh/h	0	1374	0	0	0	1434	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.9	0.0	0.0	0.0	26.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	8.5	0.0	0.0	0.0	36.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.3	0.0	0.0	0.0	63.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.9	0.0	0.0	0.0	13.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	0.0	0.0	7.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.46	1.00	1.00	0.00	1.40	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	18.3	0.0	0.0	0.0	29.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	0.00	0.00	4.24	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	16.5	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	664	0	757	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1753	0	0	0	0
Q Serve Time (g_s), s	0.0	29.7	0.0	29.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.7	0.0	29.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.99	0.36	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	753	0	581	0	0	0	0
V/C Ratio (X)	0.00	0.88	0.00	1.30	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	753	0	581	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.9	0.0	30.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	14.1	0.0	149.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.0	0.0	179.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.9	0.0	11.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.0	0.0	24.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.43	1.00	1.49	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	21.2	0.0	53.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.90	0.00	5.68	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	44.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	73.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Future Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.95	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	1876	822	160	1876	822	201	648	521	230	648	521
Arrive On Green	0.53	0.53	0.53	1.00	1.00	1.00	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	249	3554	1558	333	3554	1558	737	1870	1504	866	1870	1504
Grp Volume(v), veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Grp Sat Flow(s),veh/h/ln	249	1777	1558	333	1777	1558	737	1870	1504	866	1870	1504
Q Serve(g_s), s	18.6	25.8	6.7	21.7	0.0	0.0	14.8	15.6	5.6	8.7	16.4	14.2
Cycle Q Clear(g_c), s	18.6	25.8	6.7	47.5	0.0	0.0	31.2	15.6	5.6	24.3	16.4	14.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	1876	822	160	1876	822	201	648	521	230	648	521
V/C Ratio(X)	0.36	0.71	0.26	0.58	0.96	0.06	0.95	0.60	0.25	0.40	0.63	0.56
Avail Cap(c_a), veh/h	212	1876	822	160	1876	822	201	648	521	230	648	521
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.46	0.46	0.46	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	16.1	11.6	14.4	0.0	0.0	40.3	24.3	21.0	34.4	24.6	23.8
Incr Delay (d2), s/veh	4.7	2.4	0.8	6.9	7.4	0.1	36.3	1.0	0.2	1.1	2.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	14.8	4.0	3.1	3.5	0.0	9.3	9.9	3.4	3.3	11.5	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	18.5	12.4	21.2	7.4	0.1	76.6	25.3	21.2	35.5	26.5	25.2
LnGrp LOS	B	B	B	C	A	A	E	C	C	D	C	C
Approach Vol, veh/h		1628			1941			713			791	
Approach Delay, s/veh		17.7			7.9			38.3			27.1	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.0	37.0	53.0	37.0
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 48	31.2	* 48	31.2
Max Q Clear Time (g_c+I1), s	27.8	33.2	49.5	26.3
Green Ext Time (p_c), s	12.1	0.0	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Future Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	0.99		0.95	0.98		0.95
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	212	1876	822	160	1876	822	201	648	521	230	648	521
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.53	0.53	0.53	1.00	1.00	1.00	0.35	0.35	0.35	0.35	0.35	0.35
Unsig. Movement Delay												
Ln Grp Delay, s/veh	19.1	18.5	12.4	21.2	7.4	0.1	76.6	25.3	21.2	35.5	26.5	25.2
Ln Grp LOS	B	B	B	C	A	A	E	C	C	D	C	C
Approach Vol, veh/h		1628			1941			713			791	
Approach Delay, s/veh		17.7			7.9			38.3			27.1	
Approach LOS		B			A			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		53.0		37.0		53.0		37.0
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 48		31.2		* 48		31.2
Max Allow Headway (MAH), s		5.3		5.1		5.3		4.7
Max Q Clear (g_c+l1), s		27.8		33.2		49.5		26.3
Green Ext Time (g_e), s		12.1		0.0		0.0		1.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.97
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		249		737		333		866
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1558		1504		1558		1504
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	76	0	191	0	93	0	91
Grp Sat Flow (s), veh/h/ln	0	249	0	737	0	333	0	866
Q Serve Time (g_s), s	0.0	18.6	0.0	14.8	0.0	21.7	0.0	8.7
Cycle Q Clear Time (g_c), s	0.0	18.6	0.0	31.2	0.0	47.5	0.0	24.3
Perm LT Sat Flow (s_l), veh/h/ln	0	249	0	737	0	333	0	866
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.5	0.0	31.2	0.0	47.5	0.0	31.2
Perm LT Serve Time (g_u), s	0.0	47.5	0.0	14.8	0.0	21.7	0.0	15.6
Perm LT Q Serve Time (g_ps), s	0.0	18.6	0.0	14.8	0.0	21.7	0.0	8.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	212	0	201	0	160	0	230
V/C Ratio (X)	0.00	0.36	0.00	0.95	0.00	0.58	0.00	0.40
Avail Cap (c_a), veh/h	0	212	0	201	0	160	0	230
Upstream Filter (I)	0.00	1.00	0.00	0.61	0.00	0.46	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.4	0.0	40.3	0.0	14.4	0.0	34.4
Incr Delay (d2), s/veh	0.0	4.7	0.0	36.3	0.0	6.9	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.1	0.0	76.6	0.0	21.2	0.0	35.5
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	4.1	0.0	1.4	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	2.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.52	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.2	0.0	9.3	0.0	3.1	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.44	0.00	3.65	0.00	0.57	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1341	0	392	0	1799	0	408
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	25.8	0.0	15.6	0.0	0.0	0.0	16.4
Cycle Q Clear Time (g_c), s	0.0	25.8	0.0	15.6	0.0	0.0	0.0	16.4
Lane Grp Cap (c), veh/h	0	1876	0	648	0	1876	0	648
V/C Ratio (X)	0.00	0.71	0.00	0.60	0.00	0.96	0.00	0.63
Avail Cap (c_a), veh/h	0	1876	0	648	0	1876	0	648
Upstream Filter (I)	0.00	1.00	0.00	0.61	0.00	0.46	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.1	0.0	24.3	0.0	0.0	0.0	24.6
Incr Delay (d2), s/veh	0.0	2.4	0.0	1.0	0.0	7.4	0.0	2.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.5	0.0	25.3	0.0	7.4	0.0	26.5
1st-Term Q (Q1), veh/ln	0.0	9.1	0.0	6.4	0.0	0.0	0.0	6.8
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.2	0.0	1.9	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	0.00	1.50	0.00	1.80	0.00	1.61
%ile Back of Q (95%), veh/ln	0.0	14.8	0.0	9.9	0.0	3.5	0.0	11.5
%ile Storage Ratio (RQ%)	0.00	3.19	0.00	0.21	0.00	0.31	0.00	0.78
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	211	0	130	0	49	0	292
Grp Sat Flow (s), veh/h/ln	0	1558	0	1504	0	1558	0	1504
Q Serve Time (g_s), s	0.0	6.7	0.0	5.6	0.0	0.0	0.0	14.2
Cycle Q Clear Time (g_c), s	0.0	6.7	0.0	5.6	0.0	0.0	0.0	14.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	822	0	521	0	822	0	521
V/C Ratio (X)	0.00	0.26	0.00	0.25	0.00	0.06	0.00	0.56
Avail Cap (c_a), veh/h	0	822	0	521	0	822	0	521
Upstream Filter (I)	0.00	1.00	0.00	0.61	0.00	0.46	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.6	0.0	21.0	0.0	0.0	0.0	23.8
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.2	0.0	0.1	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.4	0.0	21.2	0.0	0.1	0.0	25.2
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	1.8	0.0	0.0	0.0	4.7
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.74
%ile Back of Q (95%), veh/ln	0.0	4.0	0.0	3.4	0.0	0.0	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.93	0.00	0.90	0.00	0.01	0.00	2.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1485	0	0	1091	3	490	23	243	13	0	58
Future Volume (veh/h)	11	1485	0	0	1091	3	490	23	243	13	0	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1614	0	0	1186	3	411	196	264	14	0	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	170	1637	0	0	1637	724	477	193	260	28	0	125
Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.27	0.27	0.27	0.09	0.00	0.09
Sat Flow, veh/h	471	3647	0	0	3647	1571	1781	722	972	293	0	1320
Grp Volume(v), veh/h	12	1614	0	0	1186	3	411	0	460	77	0	0
Grp Sat Flow(s),veh/h/ln	471	1777	0	0	1777	1571	1781	0	1694	1614	0	0
Q Serve(g_s), s	1.5	35.1	0.0	0.0	24.3	0.1	19.8	0.0	24.1	4.1	0.0	0.0
Cycle Q Clear(g_c), s	25.8	35.1	0.0	0.0	24.3	0.1	19.8	0.0	24.1	4.1	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.57	0.18		0.82
Lane Grp Cap(c), veh/h	170	1637	0	0	1637	724	477	0	454	153	0	0
V/C Ratio(X)	0.07	0.99	0.00	0.00	0.72	0.00	0.86	0.00	1.01	0.50	0.00	0.00
Avail Cap(c_a), veh/h	170	1637	0	0	1637	724	477	0	454	179	0	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.00	0.00	0.09	0.09	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.9	3.3	0.0	0.0	19.6	13.1	31.4	0.0	33.0	38.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	14.8	0.0	0.0	0.3	0.0	14.9	0.0	45.8	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	7.5	0.0	0.0	10.6	0.1	15.1	0.0	21.6	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.4	18.1	0.0	0.0	19.9	13.1	46.2	0.0	78.8	41.2	0.0	0.0
LnGrp LOS	B	B	A	A	B	B	D	A	F	D	A	A
Approach Vol, veh/h		1626			1189			871			77	
Approach Delay, s/veh		18.0			19.9			63.4			41.2	
Approach LOS		B			B			E			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	46.6	13.9	46.6	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	37.1	6.1	26.3	26.1
Green Ext Time (p_c), s	2.7	0.1	9.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	1485	0	0	1091	3	490	23	243	13	0	58
Future Volume (veh/h)	11	1485	0	0	1091	3	490	23	243	13	0	58
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1614	0	0	1186	3	411	196	264	14	0	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	170	1637	0	0	1637	724	477	193	260	28	0	125
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.92	0.92	0.00	0.00	0.46	0.46	0.27	0.27	0.27	0.09	0.00	0.09
Unsig. Movement Delay												
Ln Grp Delay, s/veh	11.4	18.1	0.0	0.0	19.9	13.1	46.2	0.0	78.8	41.2	0.0	0.0
Ln Grp LOS	B	B	A	A	B	B	D	A	F	D	A	A
Approach Vol, veh/h		1626			1189			871			77	
Approach Delay, s/veh		18.0			19.9			63.4			41.2	
Approach LOS		B			B			E			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		46.6	29.5	13.9		46.6		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.8	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		37.1	26.1	6.1		26.3		
Green Ext Time (g_e), s		2.7	0.0	0.1		9.6		
Prob of Phs Call (p_c)		1.00	1.00	0.86		1.00		
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		471	1781	293		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	722	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	972	1320		1571		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	12	411	77	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	471	1781	1614	0	0	0	0
Q Serve Time (g_s), s	0.0	1.5	19.8	4.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	25.8	19.8	4.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	471	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.5	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	17.1	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	41.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.18	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	170	477	153	0	0	0	0
V/C Ratio (X)	0.00	0.07	0.86	0.50	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	170	477	179	0	0	0	0
Upstream Filter (I)	0.00	0.64	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.9	31.4	38.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	14.9	2.5	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.4	46.2	41.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.1	8.0	1.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	2.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.52	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.2	15.1	3.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.10	1.16	0.20	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1614	0	0	0	1186	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	35.1	0.0	0.0	0.0	24.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	35.1	0.0	0.0	0.0	24.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1637	0	0	0	1637	0	0
V/C Ratio (X)	0.00	0.99	0.00	0.00	0.00	0.72	0.00	0.00
Avail Cap (c_a), veh/h	0	1637	0	0	0	1637	0	0
Upstream Filter (I)	0.00	0.64	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.3	0.0	0.0	0.0	19.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	14.8	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.1	0.0	0.0	0.0	19.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.3	0.0	0.0	0.0	9.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	3.4	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.61	1.00	1.00	0.00	1.16	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.5	0.0	0.0	0.0	10.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.66	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	460	0	0	3	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1694	0	0	1571	0	0
Q Serve Time (g_s), s	0.0	0.0	24.1	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	24.1	0.0	0.0	0.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.57	0.82	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	454	0	0	724	0	0
V/C Ratio (X)	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	454	0	0	724	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.0	0.0	0.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	45.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	78.8	0.0	0.0	13.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.44	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	21.6	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.66	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	754	678	144	697	85	227	553	94	109	1295	49
Future Volume (veh/h)	167	754	678	144	697	85	227	553	94	109	1295	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	820	737	157	758	92	247	601	102	118	1408	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	566	604	164	870	106	208	716	584	244	1273	48
Arrive On Green	0.09	0.30	0.30	0.06	0.27	0.27	0.08	0.38	0.38	0.07	0.37	0.37
Sat Flow, veh/h	1781	1870	1561	1781	3184	386	1781	1870	1525	1781	3489	131
Grp Volume(v), veh/h	182	820	737	157	423	427	247	601	102	118	716	745
Grp Sat Flow(s),veh/h/ln	1781	1870	1561	1781	1777	1793	1781	1870	1525	1781	1777	1843
Q Serve(g_s), s	8.7	36.3	36.3	7.0	27.2	27.3	10.0	35.1	5.3	4.8	43.8	43.8
Cycle Q Clear(g_c), s	8.7	36.3	36.3	7.0	27.2	27.3	10.0	35.1	5.3	4.8	43.8	43.8
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	246	566	604	164	486	490	208	716	584	244	649	673
V/C Ratio(X)	0.74	1.45	1.22	0.96	0.87	0.87	1.18	0.84	0.17	0.48	1.10	1.11
Avail Cap(c_a), veh/h	246	566	604	164	486	490	208	716	584	246	649	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.51	0.51	0.51	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	41.8	36.9	36.0	41.6	41.6	34.5	33.7	24.5	26.2	38.1	38.1
Incr Delay (d2), s/veh	1.1	203.1	100.2	38.9	10.8	10.7	121.2	11.3	0.7	1.5	67.2	68.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.7	64.4	42.3	7.7	17.2	17.4	17.8	24.6	3.6	3.8	42.4	44.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	245.0	137.1	74.9	52.3	52.3	155.7	45.0	25.1	27.7	105.3	106.2
LnGrp LOS	C	F	F	E	D	D	F	D	C	C	F	F
Approach Vol, veh/h		1739			1007			950			1579	
Approach Delay, s/veh		177.0			55.8			71.6			99.9	
Approach LOS		F			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	42.0	16.0	49.5	16.0	38.5	13.8	51.7
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 7	* 36	10.0	* 44	* 11	* 33	8.0	* 46
Max Q Clear Time (g_c+I1), s	9.0	38.3	12.0	45.8	10.7	29.3	6.8	37.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	111.8
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	754	678	144	697	85	227	553	94	109	1295	49
Future Volume (veh/h)	167	754	678	144	697	85	227	553	94	109	1295	49
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.98	1.00		0.96	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	820	737	157	758	92	247	601	102	118	1408	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	246	566	604	164	870	106	208	716	584	244	1273	48
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.30	0.30	0.06	0.27	0.27	0.08	0.38	0.38	0.07	0.37	0.37
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.4	245.0	137.1	74.9	52.3	52.3	155.7	45.0	25.1	27.7	105.3	106.2
Ln Grp LOS	C	F	F	E	D	D	F	D	C	C	F	F
Approach Vol, veh/h		1739			1007			950			1579	
Approach Delay, s/veh		177.0			55.8			71.6			99.9	
Approach LOS		F			E			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	12.5	42.0	16.0	49.5	16.0	38.5	13.8	51.7
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 7	* 36	10.0	* 44	* 11	* 33	8.0	* 46
Max Allow Headway (MAH), s	3.7	4.5	3.8	5.1	3.7	5.0	3.8	5.0
Max Q Clear (g_c+l1), s	9.0	38.3	12.0	45.8	10.7	29.3	6.8	37.1
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	2.8
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	1.00	1.00	0.98	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1870	3489	3184	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1561	131	386	1525

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	157	0	247	0	182	0	118	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	10.0	0.0	8.7	0.0	4.8	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	10.0	0.0	8.7	0.0	4.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	331	0	363	0	649	0	744	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	32.8	0.0	43.8	0.0	32.8	0.0	43.8	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	5.5	0.0	10.9	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	5.5	0.0	6.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	164	0	208	0	246	0	244	0
V/C Ratio (X)	0.96	0.00	1.18	0.00	0.74	0.00	0.48	0.00
Avail Cap (c_a), veh/h	164	0	208	0	246	0	246	0
Upstream Filter (I)	0.51	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	36.0	0.0	34.5	0.0	31.3	0.0	26.2	0.0
Incr Delay (d2), s/veh	38.9	0.0	121.2	0.0	1.1	0.0	1.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.9	0.0	155.7	0.0	32.4	0.0	27.7	0.0
1st-Term Q (Q1), veh/ln	3.3	0.0	4.2	0.0	3.6	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	1.8	0.0	7.0	0.0	0.1	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.52	0.00	1.58	0.00	1.26	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.7	0.0	17.8	0.0	4.7	0.0	3.8	0.0
%ile Storage Ratio (RQ%)	1.21	0.00	6.26	0.00	0.42	0.00	0.75	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	820	0	716	0	423	0	601
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	36.3	0.0	43.8	0.0	27.2	0.0	35.1
Cycle Q Clear Time (g_c), s	0.0	36.3	0.0	43.8	0.0	27.2	0.0	35.1
Lane Grp Cap (c), veh/h	0	566	0	649	0	486	0	716
V/C Ratio (X)	0.00	1.45	0.00	1.10	0.00	0.87	0.00	0.84
Avail Cap (c_a), veh/h	0	566	0	649	0	486	0	716
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.51	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	38.1	0.0	41.6	0.0	33.7
Incr Delay (d2), s/veh	0.0	203.1	0.0	67.2	0.0	10.8	0.0	11.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	245.0	0.0	105.3	0.0	52.3	0.0	45.0
1st-Term Q (Q1), veh/ln	0.0	16.1	0.0	18.4	0.0	11.6	0.0	15.5
2nd-Term Q (Q2), veh/ln	0.0	31.9	0.0	12.1	0.0	1.5	0.0	2.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.34	0.00	1.39	0.00	1.32	0.00	1.39
%ile Back of Q (95%), veh/ln	0.0	64.4	0.0	42.4	0.0	17.2	0.0	24.6
%ile Storage Ratio (RQ%)	0.00	0.75	0.00	8.41	0.00	0.17	0.00	8.68
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	63.6	0.0	16.8	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	737	0	745	0	427	0	102
Grp Sat Flow (s), veh/h/ln	0	1561	0	1843	0	1793	0	1525
Q Serve Time (g_s), s	0.0	36.3	0.0	43.8	0.0	27.3	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	36.3	0.0	43.8	0.0	27.3	0.0	5.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.07	0.00	0.22	0.00	1.00
Lane Grp Cap (c), veh/h	0	604	0	673	0	490	0	584
V/C Ratio (X)	0.00	1.22	0.00	1.11	0.00	0.87	0.00	0.17
Avail Cap (c_a), veh/h	0	604	0	673	0	490	0	584
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.51	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.9	0.0	38.1	0.0	41.6	0.0	24.5
Incr Delay (d2), s/veh	0.0	100.2	0.0	68.1	0.0	10.7	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	137.1	0.0	106.2	0.0	52.3	0.0	25.1
1st-Term Q (Q1), veh/ln	0.0	17.1	0.0	19.1	0.0	11.7	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	16.8	0.0	12.7	0.0	1.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.25	0.00	1.38	0.00	1.32	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	42.3	0.0	44.1	0.0	17.4	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	8.75	0.00	0.17	0.00	1.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	33.1	0.0	18.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	111.8
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	648	290	130	524	53	94	619	148	126	1295	148
Future Volume (veh/h)	106	648	290	130	524	53	94	619	148	126	1295	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.86	0.97		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	704	315	141	570	58	102	673	161	137	1408	161
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	881	727	164	881	727	80	1441	551	251	1281	144
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	796	1870	1543	553	1870	1543	327	3554	1358	641	3158	356
Grp Volume(v), veh/h	115	704	315	141	570	58	102	673	161	137	783	786
Grp Sat Flow(s),veh/h/ln	796	1870	1543	553	1870	1543	327	1777	1358	641	1777	1736
Q Serve(g_s), s	11.6	28.7	12.2	13.7	20.9	1.9	0.0	12.5	7.2	18.0	36.5	36.5
Cycle Q Clear(g_c), s	32.4	28.7	12.2	42.4	20.9	1.9	36.5	12.5	7.2	30.5	36.5	36.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	270	881	727	164	881	727	80	1441	551	251	721	704
V/C Ratio(X)	0.43	0.80	0.43	0.86	0.65	0.08	1.27	0.47	0.29	0.55	1.09	1.12
Avail Cap(c_a), veh/h	270	881	727	164	881	727	80	1441	551	251	721	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	20.2	15.8	40.9	18.1	13.1	45.0	19.6	18.0	30.8	26.8	26.8
Incr Delay (d2), s/veh	0.4	0.7	0.2	40.8	3.7	0.2	181.9	0.2	0.2	2.5	59.4	70.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	13.0	4.9	8.5	13.9	1.1	10.4	8.1	3.8	5.0	36.2	38.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	20.9	16.0	81.7	21.8	13.3	226.9	19.8	18.3	33.2	86.2	97.3
LnGrp LOS	C	C	B	F	C	B	F	B	B	C	F	F
Approach Vol, veh/h		1134			769			936			1706	
Approach Delay, s/veh		20.6			32.1			42.1			87.1	
Approach LOS		C			C			D			F	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	48.0	42.0	48.0	42.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 42	* 37	* 42	* 37
Max Q Clear Time (g_c+I1), s	34.4	38.5	44.4	38.5
Green Ext Time (p_c), s	3.9	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	51.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	648	290	130	524	53	94	619	148	126	1295	148
Future Volume (veh/h)	106	648	290	130	524	53	94	619	148	126	1295	148
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.86	0.97		0.86
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	704	315	141	570	58	102	673	161	137	1408	161
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	270	881	727	164	881	727	80	1441	551	251	1281	144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.9	20.9	16.0	81.7	21.8	13.3	226.9	19.8	18.3	33.2	86.2	97.3
Ln Grp LOS	C	C	B	F	C	B	F	B	B	C	F	F
Approach Vol, veh/h		1134			769			936			1706	
Approach Delay, s/veh		20.6			32.1			42.1			87.1	
Approach LOS		C			C			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		48.0		42.0		48.0		42.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 42		* 37		* 42		* 37
Max Allow Headway (MAH), s		4.8		5.6		5.4		5.2
Max Q Clear (g_c+l1), s		34.4		38.5		44.4		38.5
Green Ext Time (g_e), s		3.9		0.0		0.0		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		796		327		553		641

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		3158

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1543		1358		1543		356

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	115	0	102	0	141	0	137
Grp Sat Flow (s), veh/h/ln	0	796	0	327	0	553	0	641
Q Serve Time (g_s), s	0.0	11.6	0.0	0.0	0.0	13.7	0.0	18.0
Cycle Q Clear Time (g_c), s	0.0	32.4	0.0	36.5	0.0	42.4	0.0	30.5
Perm LT Sat Flow (s_l), veh/h/ln	0	796	0	327	0	553	0	641
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	42.4	0.0	36.5	0.0	42.4	0.0	36.5
Perm LT Serve Time (g_u), s	0.0	21.5	0.0	0.0	0.0	13.7	0.0	24.0
Perm LT Q Serve Time (g_ps), s	0.0	11.6	0.0	0.0	0.0	13.7	0.0	18.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	270	0	80	0	164	0	251
V/C Ratio (X)	0.00	0.43	0.00	1.27	0.00	0.86	0.00	0.55
Avail Cap (c_a), veh/h	0	270	0	80	0	164	0	251
Upstream Filter (I)	0.00	0.09	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.4	0.0	45.0	0.0	40.9	0.0	30.8
Incr Delay (d2), s/veh	0.0	0.4	0.0	181.9	0.0	40.8	0.0	2.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.9	0.0	226.9	0.0	81.7	0.0	33.2
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	1.7	0.0	3.1	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.0	0.0	1.9	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.34	0.00	1.80	0.00	1.74	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.9	0.0	10.4	0.0	8.5	0.0	5.0
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	3.77	0.00	1.61	0.00	1.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	704	0	673	0	570	0	783
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	28.7	0.0	12.5	0.0	20.9	0.0	36.5
Cycle Q Clear Time (g_c), s	0.0	28.7	0.0	12.5	0.0	20.9	0.0	36.5
Lane Grp Cap (c), veh/h	0	881	0	1441	0	881	0	721
V/C Ratio (X)	0.00	0.80	0.00	0.47	0.00	0.65	0.00	1.09
Avail Cap (c_a), veh/h	0	881	0	1441	0	881	0	721
Upstream Filter (I)	0.00	0.09	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.2	0.0	19.6	0.0	18.1	0.0	26.8
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.2	0.0	3.7	0.0	59.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.9	0.0	19.8	0.0	21.8	0.0	86.2
1st-Term Q (Q1), veh/ln	0.0	11.1	0.0	4.8	0.0	8.1	0.0	14.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.9	0.0	11.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.15	0.00	1.68	0.00	1.55	0.00	1.40
%ile Back of Q (95%), veh/ln	0.0	13.0	0.0	8.1	0.0	13.9	0.0	36.2
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.17	0.00	0.98	0.00	1.97
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	315	0	161	0	58	0	786
Grp Sat Flow (s), veh/h/ln	0	1543	0	1358	0	1543	0	1736
Q Serve Time (g_s), s	0.0	12.2	0.0	7.2	0.0	1.9	0.0	36.5
Cycle Q Clear Time (g_c), s	0.0	12.2	0.0	7.2	0.0	1.9	0.0	36.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.20
Lane Grp Cap (c), veh/h	0	727	0	551	0	727	0	704
V/C Ratio (X)	0.00	0.43	0.00	0.29	0.00	0.08	0.00	1.12
Avail Cap (c_a), veh/h	0	727	0	551	0	727	0	704
Upstream Filter (I)	0.00	0.09	0.00	0.82	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.8	0.0	18.0	0.0	13.1	0.0	26.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.2	0.0	0.2	0.0	70.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.0	0.0	18.3	0.0	13.3	0.0	97.3
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	2.1	0.0	0.6	0.0	13.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.25	0.00	1.80	0.00	1.80	0.00	1.42
%ile Back of Q (95%), veh/ln	0.0	4.9	0.0	3.8	0.0	1.1	0.0	38.9
%ile Storage Ratio (RQ%)	0.00	0.78	0.00	0.89	0.00	0.29	0.00	2.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	51.9
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	61	70	346	686	37
Future Vol, veh/h	9	61	70	346	686	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	66	76	376	746	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1106	766	786	0	-	0
Stage 1	766	-	-	-	-	-
Stage 2	340	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	218	402	831	-	-	-
Stage 1	458	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	198	402	831	-	-	-
Mov Cap-2 Maneuver	319	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.5	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	831	-	389	-	-
HCM Lane V/C Ratio	0.092	-	0.196	-	-
HCM Control Delay (s)	9.8	-	16.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.7	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	89	8	87	272	20	634
Future Vol, veh/h	89	8	87	272	20	634
Conflicting Peds, #/hr	10	6	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	97	9	95	296	22	689

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	839	102	0	0	392	0
Stage 1	96	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	336	953	-	-	1167	-
Stage 1	928	-	-	-	-	-
Stage 2	470	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	327	948	-	-	1166	-
Mov Cap-2 Maneuver	396	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	457	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.6	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	416	1166	-
HCM Lane V/C Ratio	-	-	0.253	0.019	-
HCM Control Delay (s)	-	-	16.6	8.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	89	102	188	58	211	21	507	95	149	1323	47
Future Volume (veh/h)	126	89	102	188	58	211	21	507	95	149	1323	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		0.95	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	97	111	204	63	229	23	551	103	162	1438	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	248	284	334	110	399	172	2011	856	415	1978	70
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.19	0.19	0.19	0.57	0.57	0.57
Sat Flow, veh/h	1082	790	904	1164	350	1271	354	3554	1512	773	3494	124
Grp Volume(v), veh/h	137	0	208	204	0	292	23	551	103	162	730	759
Grp Sat Flow(s),veh/h/ln	1082	0	1693	1164	0	1621	354	1777	1512	773	1777	1841
Q Serve(g_s), s	10.9	0.0	8.6	15.0	0.0	13.6	5.5	12.0	5.1	13.5	27.2	27.4
Cycle Q Clear(g_c), s	24.5	0.0	8.6	23.6	0.0	13.6	32.9	12.0	5.1	25.5	27.2	27.4
Prop In Lane	1.00		0.53	1.00		0.78	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	257	0	532	334	0	509	172	2011	856	415	1006	1042
V/C Ratio(X)	0.53	0.00	0.39	0.61	0.00	0.57	0.13	0.27	0.12	0.39	0.73	0.73
Avail Cap(c_a), veh/h	376	0	719	462	0	688	172	2011	856	415	1006	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	0.0	24.1	33.4	0.0	25.8	42.1	20.7	18.0	18.3	14.4	14.4
Incr Delay (d2), s/veh	1.7	0.0	0.5	1.8	0.0	1.0	1.6	0.3	0.3	2.8	4.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.4	0.0	6.3	7.8	0.0	9.1	1.1	9.6	3.2	4.7	16.3	16.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	0.0	24.6	35.2	0.0	26.8	43.6	21.1	18.2	21.0	18.9	18.9
LnGrp LOS	D	A	C	D	A	C	D	C	B	C	B	B
Approach Vol, veh/h		345			496			677			1651	
Approach Delay, s/veh		29.8			30.3			21.4			19.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.9	34.1	55.9	34.1
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	29.4	26.5	34.9	25.6
Green Ext Time (p_c), s	7.9	1.5	2.2	2.3

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	89	102	188	58	211	21	507	95	149	1323	47
Future Volume (veh/h)	126	89	102	188	58	211	21	507	95	149	1323	47
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	0.99		0.99	1.00		0.95	0.99		0.95
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	97	111	204	63	229	23	551	103	162	1438	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	257	248	284	334	110	399	172	2011	856	415	1978	70
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.19	0.19	0.19	0.57	0.57	0.57
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.8	0.0	24.6	35.2	0.0	26.8	43.6	21.1	18.2	21.0	18.9	18.9
Ln Grp LOS	D	A	C	D	A	C	D	C	B	C	B	B
Approach Vol, veh/h		345			496			677			1651	
Approach Delay, s/veh		29.8			30.3			21.4			19.1	
Approach LOS		C			C			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		55.9		34.1		55.9		34.1
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.2		5.2		5.2		5.1
Max Q Clear (g_c+I1), s		29.4		26.5		34.9		25.6
Green Ext Time (g_e), s		7.9		1.5		2.2		2.3
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.10		0.00		0.14
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		773		1082		354		1164
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3494		790		3554		350
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		124		904		1512		1271
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	162	0	137	0	23	0	204
Grp Sat Flow (s), veh/h/ln	0	773	0	1082	0	354	0	1164
Q Serve Time (g_s), s	0.0	13.5	0.0	10.9	0.0	5.5	0.0	15.0
Cycle Q Clear Time (g_c), s	0.0	25.5	0.0	24.5	0.0	32.9	0.0	23.6
Perm LT Sat Flow (s_l), veh/h/ln	0	773	0	1082	0	354	0	1164
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	50.9	0.0	28.3	0.0	50.9	0.0	28.3
Perm LT Serve Time (g_u), s	0.0	39.0	0.0	14.7	0.0	23.5	0.0	19.6
Perm LT Q Serve Time (g_ps), s	0.0	13.5	0.0	10.9	0.0	5.5	0.0	15.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	415	0	257	0	172	0	334
V/C Ratio (X)	0.00	0.39	0.00	0.53	0.00	0.13	0.00	0.61
Avail Cap (c_a), veh/h	0	415	0	376	0	172	0	462
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.98	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.3	0.0	36.1	0.0	42.1	0.0	33.4
Incr Delay (d2), s/veh	0.0	2.8	0.0	1.7	0.0	1.6	0.0	1.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.0	0.0	37.8	0.0	43.6	0.0	35.2
1st-Term Q (Q1), veh/ln	0.0	2.3	0.0	2.9	0.0	0.5	0.0	4.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	0.0	0.1	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.79
%ile Back of Q (95%), veh/ln	0.0	4.7	0.0	5.4	0.0	1.1	0.0	7.8
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	3.41	0.00	0.27	0.00	0.96
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	730	0	0	0	551	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	27.2	0.0	0.0	0.0	12.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.2	0.0	0.0	0.0	12.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1006	0	0	0	2011	0	0
V/C Ratio (X)	0.00	0.73	0.00	0.00	0.00	0.27	0.00	0.00
Avail Cap (c_a), veh/h	0	1006	0	0	0	2011	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.98	0.00	0.00
Uniform Delay (d1), s/veh	0.0	14.4	0.0	0.0	0.0	20.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.6	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.9	0.0	0.0	0.0	21.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	0.0	0.0	5.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.50	0.00	1.00	0.00	1.68	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	16.3	0.0	0.0	0.0	9.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.00	0.00	0.77	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	759	0	208	0	103	0	292
Grp Sat Flow (s), veh/h/ln	0	1841	0	1693	0	1512	0	1621
Q Serve Time (g_s), s	0.0	27.4	0.0	8.6	0.0	5.1	0.0	13.6
Cycle Q Clear Time (g_c), s	0.0	27.4	0.0	8.6	0.0	5.1	0.0	13.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.07	0.00	0.53	0.00	1.00	0.00	0.78
Lane Grp Cap (c), veh/h	0	1042	0	532	0	856	0	509
V/C Ratio (X)	0.00	0.73	0.00	0.39	0.00	0.12	0.00	0.57
Avail Cap (c_a), veh/h	0	1042	0	719	0	856	0	688
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.98	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.4	0.0	24.1	0.0	18.0	0.0	25.8
Incr Delay (d2), s/veh	0.0	4.5	0.0	0.5	0.0	0.3	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.9	0.0	24.6	0.0	18.2	0.0	26.8
1st-Term Q (Q1), veh/ln	0.0	10.0	0.0	3.4	0.0	1.7	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	0.00	1.80	0.00	1.80	0.00	1.71
%ile Back of Q (95%), veh/ln	0.0	16.8	0.0	6.3	0.0	3.2	0.0	9.1
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.59	0.00	0.81	0.00	0.70
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	81	214	16	1	345	11	11	0	1	34	0	57
Future Vol, veh/h	81	214	16	1	345	11	11	0	1	34	0	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	88	233	17	1	375	12	12	0	1	37	0	62
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.4	14.1	9.2	9.3
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	92%	100%	0%	100%	0%	37%
Vol Thru, %	0%	0%	93%	0%	97%	0%
Vol Right, %	8%	0%	7%	0%	3%	63%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	81	230	1	356	91
LT Vol	11	81	0	1	0	34
Through Vol	0	0	214	0	345	0
RT Vol	1	0	16	0	11	57
Lane Flow Rate	13	88	250	1	387	99
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.022	0.139	0.355	0.002	0.551	0.147
Departure Headway (Hd)	5.951	5.67	5.118	5.653	5.128	5.345
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	595	630	700	630	700	666
Service Time	4.049	3.432	2.879	3.411	2.886	3.418
HCM Lane V/C Ratio	0.022	0.14	0.357	0.002	0.553	0.149
HCM Control Delay	9.2	9.4	10.7	8.4	14.1	9.3
HCM Lane LOS	A	A	B	A	B	A
HCM 95th-tile Q	0.1	0.5	1.6	0	3.4	0.5

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	154	100	1	154	69	116	5	0	15	4	68
Future Vol, veh/h	44	154	100	1	154	69	116	5	0	15	4	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	167	109	1	167	75	126	5	0	16	4	74
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	11	11	10.3	9
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	96%	100%	0%	100%	0%	17%
Vol Thru, %	4%	0%	61%	0%	69%	5%
Vol Right, %	0%	0%	39%	0%	31%	78%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	121	44	254	1	223	87
LT Vol	116	44	0	1	0	15
Through Vol	5	0	154	0	154	4
RT Vol	0	0	100	0	69	68
Lane Flow Rate	132	48	276	1	242	95
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.209	0.08	0.399	0.002	0.36	0.136
Departure Headway (Hd)	5.728	5.985	5.201	6.078	5.353	5.192
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	627	602	696	592	676	690
Service Time	3.759	3.69	2.907	3.786	3.061	3.225
HCM Lane V/C Ratio	0.211	0.08	0.397	0.002	0.358	0.138
HCM Control Delay	10.3	9.2	11.3	8.8	11	9
HCM Lane LOS	B	A	B	A	B	A
HCM 95th-tile Q	0.8	0.3	1.9	0	1.6	0.5

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	11	140	62	108	3	99	2	12	7	48	36
Future Vol, veh/h	0	11	140	62	108	3	99	2	12	7	48	36
Conflicting Peds, #/hr	41	0	57	57	0	41	13	0	50	50	0	13
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	12	152	67	117	3	108	2	13	8	52	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	221	0	0	380	364	119	440	515	173
Stage 1	-	-	-	-	-	-	69	69	-	294	294	-
Stage 2	-	-	-	-	-	-	311	295	-	146	221	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1348	-	-	578	564	933	527	464	871
Stage 1	0	-	-	-	-	-	941	837	-	714	670	-
Stage 2	0	-	-	-	-	-	699	669	-	857	720	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	1287	-	-	457	494	855	462	406	834
Mov Cap-2 Maneuver	-	-	-	-	-	-	502	529	-	543	467	-
Stage 1	-	-	-	-	-	-	941	799	-	714	614	-
Stage 2	-	-	-	-	-	-	572	613	-	808	688	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.8	13.6	12.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	502	855	-	-	1287	-	-	576
HCM Lane V/C Ratio	0.214	0.015	-	-	0.052	-	-	0.159
HCM Control Delay (s)	14.1	9.3	-	-	8	-	-	12.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.2	-	-	0.6

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	24	61	0	30	17	44	21	11	250	0
Future Vol, veh/h	0	0	24	61	0	30	17	44	21	11	250	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	26	66	0	33	18	48	23	12	272	0
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	7.6	8.6	8.2	10.4
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	67%	100%	0%
Vol Thru, %	0%	68%	0%	0%	0%	100%
Vol Right, %	0%	32%	100%	33%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	65	24	91	11	250
LT Vol	17	0	0	61	11	0
Through Vol	0	44	0	0	0	250
RT Vol	0	21	24	30	0	0
Lane Flow Rate	18	71	26	99	12	272
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.029	0.095	0.032	0.132	0.018	0.371
Departure Headway (Hd)	5.584	4.853	4.378	4.813	5.415	4.913
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	642	738	817	746	662	734
Service Time	3.314	2.584	2.411	2.839	3.14	2.638
HCM Lane V/C Ratio	0.028	0.096	0.032	0.133	0.018	0.371
HCM Control Delay	8.5	8.1	7.6	8.6	8.2	10.5
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	0.1	0.3	0.1	0.5	0.1	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	940	189	147	378	84	143	434	87	140	534	25
Future Volume (veh/h)	126	940	189	147	378	84	143	434	87	140	534	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.88	1.00		0.84	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	1022	205	160	411	91	155	472	95	152	580	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	1083	424	178	1108	435	174	599	428	178	604	432
Arrive On Green	0.09	0.30	0.30	0.10	0.31	0.31	0.10	0.32	0.32	0.10	0.32	0.32
Sat Flow, veh/h	1781	3554	1390	1781	3554	1394	1781	1870	1337	1781	1870	1339
Grp Volume(v), veh/h	137	1022	205	160	411	91	155	472	95	152	580	27
Grp Sat Flow(s),veh/h/ln	1781	1777	1390	1781	1777	1394	1781	1870	1337	1781	1870	1339
Q Serve(g_s), s	9.1	33.7	14.4	10.7	10.8	5.8	10.3	27.5	6.2	10.1	36.5	1.7
Cycle Q Clear(g_c), s	9.1	33.7	14.4	10.7	10.8	5.8	10.3	27.5	6.2	10.1	36.5	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	1083	424	178	1108	435	174	599	428	178	604	432
V/C Ratio(X)	0.83	0.94	0.48	0.90	0.37	0.21	0.89	0.79	0.22	0.85	0.96	0.06
Avail Cap(c_a), veh/h	286	1083	424	178	1108	435	174	599	428	187	608	435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.78	0.78
Uniform Delay (d), s/veh	53.5	40.7	34.0	53.4	32.1	30.4	53.5	37.1	29.9	53.1	39.9	28.1
Incr Delay (d2), s/veh	10.0	16.7	3.9	40.0	1.0	1.1	39.4	7.0	0.3	23.6	23.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.9	23.5	9.0	10.9	8.3	3.7	10.7	19.5	3.6	9.1	26.7	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.5	57.4	37.9	93.4	33.1	31.5	92.9	44.1	30.1	76.7	62.9	28.1
LnGrp LOS	E	E	D	F	C	C	F	D	C	E	E	C
Approach Vol, veh/h		1364			662			722			759	
Approach Delay, s/veh		55.1			47.4			52.7			64.4	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	42.4	16.7	43.7	18.0	41.6	17.0	43.4
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	19.3	* 29	11.7	* 39	12.0	* 36	12.6	* 38
Max Q Clear Time (g_c+I1), s	11.1	12.8	12.3	38.5	12.7	35.7	12.1	29.5
Green Ext Time (p_c), s	0.2	2.6	0.0	0.2	0.0	0.4	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	55.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	940	189	147	378	84	143	434	87	140	534	25
Future Volume (veh/h)	126	940	189	147	378	84	143	434	87	140	534	25
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.88	1.00		0.88	1.00		0.84	1.00		0.84
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	1022	205	160	411	91	155	472	95	152	580	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	165	1083	424	178	1108	435	174	599	428	178	604	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.30	0.30	0.10	0.31	0.31	0.10	0.32	0.32	0.10	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	63.5	57.4	37.9	93.4	33.1	31.5	92.9	44.1	30.1	76.7	62.9	28.1
Ln Grp LOS	E	E	D	F	C	C	F	D	C	E	E	C
Approach Vol, veh/h		1364			662			722			759	
Approach Delay, s/veh		55.1			47.4			52.7			64.4	
Approach LOS		E			D			D			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.1	42.4	16.7	43.7	18.0	41.6	17.0	43.4
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	19.3	* 29	11.7	* 39	12.0	* 36	12.6	* 38
Max Allow Headway (MAH), s	3.7	4.9	3.8	5.1	3.7	4.9	3.8	5.0
Max Q Clear (g_c+l1), s	11.1	12.8	12.3	38.5	12.7	35.7	12.1	29.5
Green Ext Time (g_e), s	0.2	2.6	0.0	0.2	0.0	0.4	0.0	2.1
Prob of Phs Call (p_c)	0.99	1.00	0.99	1.00	1.00	1.00	0.99	1.00
Prob of Max Out (p_x)	0.01	0.00	1.00	1.00	1.00	0.00	1.00	0.43

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1394		1339		1390		1337

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	137	0	155	0	160	0	152	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.1	0.0	10.3	0.0	10.7	0.0	10.1	0.0
Cycle Q Clear Time (g_c), s	9.1	0.0	10.3	0.0	10.7	0.0	10.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	165	0	174	0	178	0	178	0
V/C Ratio (X)	0.83	0.00	0.89	0.00	0.90	0.00	0.85	0.00
Avail Cap (c_a), veh/h	286	0	174	0	178	0	187	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.78	0.00
Uniform Delay (d1), s/veh	53.5	0.0	53.5	0.0	53.4	0.0	53.1	0.0
Incr Delay (d2), s/veh	10.0	0.0	39.4	0.0	40.0	0.0	23.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.5	0.0	92.9	0.0	93.4	0.0	76.7	0.0
1st-Term Q (Q1), veh/ln	4.0	0.0	4.6	0.0	4.7	0.0	4.5	0.0
2nd-Term Q (Q2), veh/ln	0.5	0.0	1.9	0.0	2.0	0.0	1.2	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.78	0.00	1.64	0.00	1.64	0.00	1.61	0.00
%ile Back of Q (95%), veh/ln	7.9	0.0	10.7	0.0	10.9	0.0	9.1	0.0
%ile Storage Ratio (RQ%)	0.93	0.00	2.16	0.00	1.38	0.00	2.56	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	411	0	580	0	1022	0	472
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	10.8	0.0	36.5	0.0	33.7	0.0	27.5
Cycle Q Clear Time (g_c), s	0.0	10.8	0.0	36.5	0.0	33.7	0.0	27.5
Lane Grp Cap (c), veh/h	0	1108	0	604	0	1083	0	599
V/C Ratio (X)	0.00	0.37	0.00	0.96	0.00	0.94	0.00	0.79
Avail Cap (c_a), veh/h	0	1108	0	608	0	1083	0	599
Upstream Filter (I)	0.00	1.00	0.00	0.78	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.1	0.0	39.9	0.0	40.7	0.0	37.1
Incr Delay (d2), s/veh	0.0	1.0	0.0	23.0	0.0	16.7	0.0	7.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.1	0.0	62.9	0.0	57.4	0.0	44.1
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	16.4	0.0	14.2	0.0	12.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	3.9	0.0	2.5	0.0	1.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.76	0.00	1.32	0.00	1.40	0.00	1.45
%ile Back of Q (95%), veh/ln	0.0	8.3	0.0	26.7	0.0	23.5	0.0	19.5
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.55	0.00	0.73	0.00	0.93
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	91	0	27	0	205	0	95
Grp Sat Flow (s), veh/h/ln	0	1394	0	1339	0	1390	0	1337
Q Serve Time (g_s), s	0.0	5.8	0.0	1.7	0.0	14.4	0.0	6.2
Cycle Q Clear Time (g_c), s	0.0	5.8	0.0	1.7	0.0	14.4	0.0	6.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	435	0	432	0	424	0	428
V/C Ratio (X)	0.00	0.21	0.00	0.06	0.00	0.48	0.00	0.22
Avail Cap (c_a), veh/h	0	435	0	435	0	424	0	428
Upstream Filter (I)	0.00	1.00	0.00	0.78	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.4	0.0	28.1	0.0	34.0	0.0	29.9
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	0.0	3.9	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.5	0.0	28.1	0.0	37.9	0.0	30.1
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.5	0.0	4.8	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.71	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.7	0.0	1.0	0.0	9.0	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.94	0.00	0.22	0.00	2.30	0.00	0.53
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.2
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	220	358	132	0	309	30	0	507	264
Future Volume (veh/h)	0	0	0	220	358	132	0	309	30	0	507	264
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				239	389	143	0	336	33	0	551	287
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				256	417	566	0	1794	175	0	632	329
Arrive On Green				0.37	0.37	0.37	0.00	1.00	1.00	0.00	0.55	0.55
Sat Flow, veh/h				699	1137	1546	0	3354	318	0	1148	598
Grp Volume(v), veh/h				628	0	143	0	182	187	0	0	838
Grp Sat Flow(s),veh/h/ln				1835	0	1546	0	1777	1801	0	0	1747
Q Serve(g_s), s				39.5	0.0	7.7	0.0	0.0	0.0	0.0	0.0	49.8
Cycle Q Clear(g_c), s				39.5	0.0	7.7	0.0	0.0	0.0	0.0	0.0	49.8
Prop In Lane				0.38		1.00	0.00		0.18	0.00		0.34
Lane Grp Cap(c), veh/h				672	0	566	0	978	991	0	0	961
V/C Ratio(X)				0.93	0.00	0.25	0.00	0.19	0.19	0.00	0.00	0.87
Avail Cap(c_a), veh/h				734	0	618	0	978	991	0	0	961
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				0.39	0.00	0.39	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				36.6	0.0	26.5	0.0	0.0	0.0	0.0	0.0	23.3
Incr Delay (d2), s/veh				8.8	0.0	0.1	0.0	0.4	0.4	0.0	0.0	10.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				23.1	0.0	4.5	0.0	0.2	0.2	0.0	0.0	29.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.4	0.0	26.6	0.0	0.4	0.4	0.0	0.0	34.1
LnGrp LOS				D	A	C	A	A	A	A	A	C
Approach Vol, veh/h					771			369			838	
Approach Delay, s/veh					41.9			0.4			34.1	
Approach LOS					D			A			C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	71.0	49.0	71.0
Change Period (Y+Rc), s	* 5	* 5	* 5
Max Green Setting (Gmax), s	* 62	* 48	* 62
Max Q Clear Time (g_c+I1), s	51.8	41.5	2.0
Green Ext Time (p_c), s	5.6	2.4	3.4

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	220	358	132	0	309	30	0	507	264
Future Volume (veh/h)	0	0	0	220	358	132	0	309	30	0	507	264
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				239	389	143	0	336	33	0	551	287
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Opposing Right Turn Influence				Yes			No			No		
Cap, veh/h				256	417	566	0	1794	175	0	632	329
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green				0.37	0.37	0.37	0.00	1.00	1.00	0.00	0.55	0.55
Unsig. Movement Delay												
Ln Grp Delay, s/veh				45.4	0.0	26.6	0.0	0.4	0.4	0.0	0.0	34.1
Ln Grp LOS				D	A	C	A	A	A	A	A	C
Approach Vol, veh/h					771			369			838	
Approach Delay, s/veh					41.9			0.4			34.1	
Approach LOS					D			A			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		8.0		11.0		8.0		
Phs Duration (G+Y+Rc), s		71.0		49.0		71.0		
Change Period (Y+Rc), s		* 5		* 5		* 5		
Max Green (Gmax), s		* 62		* 48		* 62		
Max Allow Headway (MAH), s		6.2		4.9		6.2		
Max Q Clear (g_c+l1), s		51.8		41.5		2.0		
Green Ext Time (g_e), s		5.6		2.4		3.4		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.73		0.76		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		0		699		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1148		1137		3354		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		598		1546		318		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment				L+T				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	628	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1835	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	39.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	39.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	66.0	0.0	0.0	0.0	66.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	672	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	734	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	36.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	8.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	45.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.24	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	23.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.26	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	182	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	978	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	978	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	838	0	143	0	187	0	0
Grp Sat Flow (s), veh/h/ln	0	1747	0	1546	0	1801	0	0
Q Serve Time (g_s), s	0.0	49.8	0.0	7.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	49.8	0.0	7.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	0.00	1.00	0.00	0.18	0.00	0.00
Lane Grp Cap (c), veh/h	0	961	0	566	0	991	0	0
V/C Ratio (X)	0.00	0.87	0.00	0.25	0.00	0.19	0.00	0.00
Avail Cap (c_a), veh/h	0	961	0	618	0	991	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.39	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.3	0.0	26.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.7	0.0	0.1	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.1	0.0	26.6	0.0	0.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	19.1	0.0	2.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.9	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.35	0.00	1.61	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	29.7	0.0	4.5	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	3.44	0.00	0.25	0.00	0.08	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	17	333	613	1423	213
Future Volume (veh/h)	13	17	333	613	1423	213
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.80	1.00			0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	18	362	666	1547	232
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	96	124	356	2621	1452	209
Arrive On Green	0.16	0.16	0.20	0.74	0.16	0.16
Sat Flow, veh/h	619	795	1781	3647	3119	435
Grp Volume(v), veh/h	33	0	362	666	882	897
Grp Sat Flow(s),veh/h/ln	1458	0	1781	1777	1777	1684
Q Serve(g_s), s	1.8	0.0	18.0	5.4	43.2	43.2
Cycle Q Clear(g_c), s	1.8	0.0	18.0	5.4	43.2	43.2
Prop In Lane	0.42	0.55	1.00			0.26
Lane Grp Cap(c), veh/h	227	0	356	2621	853	808
V/C Ratio(X)	0.15	0.00	1.02	0.25	1.03	1.11
Avail Cap(c_a), veh/h	292	0	356	2621	853	808
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.83	0.83	0.58	0.58
Uniform Delay (d), s/veh	32.8	0.0	36.0	3.8	37.9	37.9
Incr Delay (d2), s/veh	0.3	0.0	47.6	0.2	32.8	60.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	0.0	17.7	2.8	35.8	43.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.1	0.0	83.6	4.0	70.7	98.2
LnGrp LOS	C	A	F	A	F	F
Approach Vol, veh/h	33			1028	1779	
Approach Delay, s/veh	33.1			32.0	84.6	
Approach LOS	C			C	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		71.5		18.5	23.2	48.3
Change Period (Y+Rc), s		5.1		4.5	* 5.2	5.1
Max Green Setting (Gmax), s		62.4		18.0	* 18	39.2
Max Q Clear Time (g_c+I1), s		7.4		3.8	20.0	45.2
Green Ext Time (p_c), s		5.4		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	17	333	613	1423	213
Future Volume (veh/h)	13	17	333	613	1423	213
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.80	1.00			0.83
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	18	362	666	1547	232
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	96	124	356	2621	1452	209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Prop Arrive On Green	0.16	0.16	0.20	0.74	0.16	0.16
Unsig. Movement Delay						
Ln Grp Delay, s/veh	33.1	0.0	83.6	4.0	70.7	98.2
Ln Grp LOS	C	A	F	A	F	F
Approach Vol, veh/h	33			1028	1779	
Approach Delay, s/veh	33.1			32.0	84.6	
Approach LOS	C			C	F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		71.5		18.5	23.2	48.3		
Change Period (Y+Rc), s		5.1		4.5	* 5.2	5.1		
Max Green (Gmax), s		62.4		18.0	* 18	39.2		
Max Allow Headway (MAH), s		5.2		4.2	3.8	5.3		
Max Q Clear (g_c+I1), s		7.4		3.8	20.0	45.2		
Green Ext Time (g_e), s		5.4		0.0	0.0	0.0		
Prob of Phs Call (p_c)		1.00		0.89	1.00	1.00		
Prob of Max Out (p_x)		0.00		0.00	1.00	1.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				619	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		44		3119		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		795		435		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	33	362	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1458	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	1.8	18.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.8	18.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	43.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.42	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	227	356	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.15	1.02	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	292	356	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.83	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	32.8	36.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	47.6	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	33.1	83.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.6	7.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.44	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	1.1	17.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.06	9.01	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	666	0	0	0	882	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	5.4	0.0	0.0	0.0	43.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.4	0.0	0.0	0.0	43.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2621	0	0	0	853	0	0
V/C Ratio (X)	0.00	0.25	0.00	0.00	0.00	1.03	0.00	0.00
Avail Cap (c_a), veh/h	0	2621	0	0	0	853	0	0
Upstream Filter (I)	0.00	0.83	0.00	0.00	0.00	0.58	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.8	0.0	0.0	0.0	37.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	32.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.0	0.0	0.0	0.0	70.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	0.0	0.0	20.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	7.8	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.27	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	2.8	0.0	0.0	0.0	35.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.00	0.00	2.89	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	897	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1684	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	43.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	43.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.55	0.00	0.26	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	808	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	808	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	37.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	60.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	98.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	19.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	13.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.32	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	43.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	3.51	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	22.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.0
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	15	1	0	15	0	0	254	4	0	691	0
Future Volume (veh/h)	0	15	1	0	15	0	0	254	4	0	691	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	16	1	0	16	0	0	276	4	0	751	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Cap, veh/h	0	44	3	0	47	0	0	3136	45	0	1636	0
Arrive On Green	0.00	0.03	0.03	0.00	0.03	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	0	1742	109	0	1870	0	0	3679	52	0	1870	0
Grp Volume(v), veh/h	0	0	17	0	16	0	0	137	143	0	751	0
Grp Sat Flow(s),veh/h/ln	0	0	1851	0	1870	0	0	1777	1861	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.00		0.06	0.00		0.00	0.00		0.03	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	47	0	47	0	0	1554	1628	0	1636	0
V/C Ratio(X)	0.00	0.00	0.36	0.00	0.34	0.00	0.00	0.09	0.09	0.00	0.46	0.00
Avail Cap(c_a), veh/h	0	0	108	0	109	0	0	1554	1628	0	1636	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.97	0.97	0.00	0.15	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.5	0.0	57.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	20.6	0.0	18.4	0.0	0.0	0.1	0.1	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.4	0.0	1.3	0.0	0.0	0.1	0.1	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	78.1	0.0	75.9	0.0	0.0	0.1	0.1	0.0	0.1	0.0
LnGrp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		17			16			280			751	
Approach Delay, s/veh		78.1			75.9			0.1			0.1	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.0	10.0	110.0	10.0
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	2.0	3.1	2.0	3.0
Green Ext Time (p_c), s	2.5	0.0	10.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	2.5
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	15	1	0	15	0	0	254	4	0	691	0
Future Volume (veh/h)	0	15	1	0	15	0	0	254	4	0	691	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	16	1	0	16	0	0	276	4	0	751	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	44	3	0	47	0	0	3136	45	0	1636	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.03	0.03	0.00	0.03	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	78.1	0.0	75.9	0.0	0.0	0.1	0.1	0.0	0.1	0.0
Ln Grp LOS	A	A	E	A	E	A	A	A	A	A	A	A
Approach Vol, veh/h		17			16			280			751	
Approach Delay, s/veh		78.1			75.9			0.1			0.1	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.0		10.0		110.0		10.0
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+I1), s		2.0		3.1		2.0		3.0
Green Ext Time (g_e), s		2.5		0.0		10.1		0.0
Prob of Phs Call (p_c)		1.00		0.43		1.00		0.41
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3679		1742		1870		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		52		109		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.0	0.0	3.0	0.0	105.0	0.0	3.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	137	0	0	0	751	0	16
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	1870
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Lane Grp Cap (c), veh/h	0	1554	0	0	0	1636	0	47
V/C Ratio (X)	0.00	0.09	0.00	0.00	0.00	0.46	0.00	0.34
Avail Cap (c_a), veh/h	0	1554	0	0	0	1636	0	109
Upstream Filter (I)	0.00	0.97	0.00	0.00	0.00	0.15	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	18.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	75.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.04	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	143	0	17	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1861	0	1851	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.03	0.00	0.06	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1628	0	47	0	0	0	0
V/C Ratio (X)	0.00	0.09	0.00	0.36	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1628	0	108	0	0	0	0
Upstream Filter (I)	0.00	0.97	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	57.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	20.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	78.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	1.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	2.5
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	788	284	0	0	30	0	180	219	42	659	0
Future Volume (veh/h)	107	788	284	0	0	30	0	180	219	42	659	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.94	1.00		0.94	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	116	857	309	0	0	33	0	196	238	46	716	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	2	2	0
Cap, veh/h	945	972	395	0	0	42	0	837	703	529	1081	0
Arrive On Green	0.27	0.27	0.27	0.00	0.00	0.03	0.00	0.47	0.47	0.13	1.00	0.00
Sat Flow, veh/h	3456	3554	1442	0	0	1494	0	1870	1492	1781	1870	0
Grp Volume(v), veh/h	116	857	309	0	0	33	0	196	238	46	716	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1442	0	0	1494	0	1777	1492	1781	1870	0
Q Serve(g_s), s	3.0	27.7	23.8	0.0	0.0	2.6	0.0	7.9	12.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	3.0	27.7	23.8	0.0	0.0	2.6	0.0	7.9	12.0	1.4	0.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	945	972	395	0	0	42	0	837	703	529	1081	0
V/C Ratio(X)	0.12	0.88	0.78	0.00	0.00	0.79	0.00	0.23	0.34	0.09	0.66	0.00
Avail Cap(c_a), veh/h	979	1007	409	0	0	224	0	837	703	561	1081	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.88	0.88	0.00
Uniform Delay (d), s/veh	32.8	41.7	40.3	0.0	0.0	58.0	0.0	18.9	20.0	12.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	9.3	9.9	0.0	0.0	27.9	0.0	0.7	1.3	0.1	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	19.0	26.0	0.0	0.0	2.3	0.0	6.0	7.8	0.9	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	51.1	50.2	0.0	0.0	85.9	0.0	19.5	21.3	12.3	2.8	0.0
LnGrp LOS	C	D	D	A	A	F	A	B	C	B	A	A
Approach Vol, veh/h		1282			33			434			762	
Approach Delay, s/veh		49.2			85.9			20.5			3.4	
Approach LOS		D			F			C			A	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	74.3		37.8	12.8	61.5		7.8
Change Period (Y+Rc), s	* 5		* 5	* 5	* 5		4.5
Max Green Setting (Gmax), s	* 54		* 34	* 10	* 39		18.0
Max Q Clear Time (g_c+I1), s	2.0		29.7	3.4	14.0		4.6
Green Ext Time (p_c), s	12.7		3.1	0.0	5.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	788	284	0	0	30	0	180	219	42	659	0
Future Volume (veh/h)	107	788	284	0	0	30	0	180	219	42	659	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.91	1.00		0.94	1.00		0.94	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	116	857	309	0	0	33	0	196	238	46	716	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			No			No			Yes		
Cap, veh/h	945	972	395	0	0	42	0	837	703	529	1081	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.27	0.27	0.27	0.00	0.00	0.03	0.00	0.47	0.47	0.13	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.8	51.1	50.2	0.0	0.0	85.9	0.0	19.5	21.3	12.3	2.8	0.0
Ln Grp LOS	C	D	D	A	A	F	A	B	C	B	A	A
Approach Vol, veh/h		1282			33			434			762	
Approach Delay, s/veh		49.2			85.9			20.5			3.4	
Approach LOS		D			F			C			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	8.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		74.3	7.8	37.8	12.8	61.5		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 54	18.0	* 34	* 10	* 39		
Max Allow Headway (MAH), s		7.1	5.5	5.7	3.8	7.4		
Max Q Clear (g_c+I1), s		2.0	4.6	29.7	3.4	14.0		
Green Ext Time (g_e), s		12.7	0.1	3.1	0.0	5.1		
Prob of Phs Call (p_c)		1.00	0.71	1.00	0.78	1.00		
Prob of Max Out (p_x)		0.03	0.00	1.00	0.02	0.07		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			0	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		1870		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1494	1442		1492		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment				LL (Pr/Pm)				

Lanes in Grp	0	0	0	2	1	0	0	0
Grp Vol (v), veh/h	0	0	0	116	46	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	3.0	1.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.0	1.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	952	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	58.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	44.5	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	3.3	0.0	0.0	56.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	945	529	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.12	0.09	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	979	561	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.88	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	32.8	12.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	32.8	12.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.3	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	2.3	0.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.16	0.40	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	716	0	857	0	196	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	27.7	0.0	7.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	27.7	0.0	7.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1081	0	972	0	837	0	0
V/C Ratio (X)	0.00	0.66	0.00	0.88	0.00	0.23	0.00	0.00
Avail Cap (c_a), veh/h	0	1081	0	1007	0	837	0	0
Upstream Filter (I)	0.00	0.88	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	41.7	0.0	18.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.8	0.0	9.3	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	2.8	0.0	51.1	0.0	19.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	11.8	0.0	3.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	1.3	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.45	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.5	0.0	19.0	0.0	6.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.50	0.00	0.81	0.00	0.45	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	33	309	0	238	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1494	1442	0	1492	0	0
Q Serve Time (g_s), s	0.0	0.0	2.6	23.8	0.0	12.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	2.6	23.8	0.0	12.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	42	395	0	703	0	0
V/C Ratio (X)	0.00	0.00	0.79	0.78	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	0	224	409	0	703	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	58.0	40.3	0.0	20.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	27.9	9.9	0.0	1.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	85.9	50.2	0.0	21.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.0	17.8	0.0	4.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	1.1	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.38	0.00	1.78	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	2.3	26.0	0.0	7.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.14	8.80	0.00	0.58	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱		↑		↱
Traffic Vol, veh/h	868	76	0	38	0	129
Future Vol, veh/h	868	76	0	38	0	129
Conflicting Peds, #/hr	0	53	53	0	14	32
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	943	83	0	41	0	140

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	557
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	-	-	0	-	0	475
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	443
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	16.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	443	-	-	-
HCM Lane V/C Ratio	0.317	-	-	-
HCM Control Delay (s)	16.8	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.3	-	-	-

HCM 6th Signalized Intersection Summary
20: Lankershim Blvd & Chandler Blvd (S)/Chandler Blvd

02/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	610	127	538	7	249	20	476	131	174	1186	11
Future Volume (veh/h)	265	610	127	538	7	249	20	476	131	174	1186	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.86	0.93		0.84	1.00		0.86	0.97		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	288	663	138	585	8	271	22	517	142	189	1289	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	536	1004	386	605	456	459	39	1232	621	387	1454	517
Arrive On Green	0.18	0.38	0.38	0.09	0.24	0.24	0.02	0.35	0.35	0.08	0.41	0.41
Sat Flow, veh/h	1781	3554	1368	3456	1870	1334	1781	3554	1357	1781	3554	1264
Grp Volume(v), veh/h	288	663	138	585	8	271	22	517	142	189	1289	12
Grp Sat Flow(s),veh/h/ln	1781	1777	1368	1728	1870	1334	1781	1777	1357	1781	1777	1264
Q Serve(g_s), s	14.4	18.6	8.7	11.4	0.4	20.6	1.5	13.3	7.8	7.9	40.3	0.7
Cycle Q Clear(g_c), s	14.4	18.6	8.7	11.4	0.4	20.6	1.5	13.3	7.8	7.9	40.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	536	1004	386	605	456	459	39	1232	621	387	1454	517
V/C Ratio(X)	0.54	0.66	0.36	0.97	0.02	0.59	0.57	0.42	0.23	0.49	0.89	0.02
Avail Cap(c_a), veh/h	536	1007	388	605	464	465	74	1232	621	480	1454	517
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96	0.09	0.09	0.09
Uniform Delay (d), s/veh	25.7	32.7	29.6	38.3	34.4	34.0	58.1	30.0	20.9	21.8	32.9	21.1
Incr Delay (d2), s/veh	1.1	1.6	0.6	28.3	0.0	1.9	12.1	1.0	0.8	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.8	12.3	5.1	9.8	0.3	11.2	1.4	9.8	4.7	4.2	19.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	34.3	30.2	66.7	34.4	35.9	70.2	31.0	21.7	21.9	33.7	21.1
LnGrp LOS	C	C	C	E	C	D	E	C	C	C	C	C
Approach Vol, veh/h		1089			864			681			1490	
Approach Delay, s/veh		31.8			56.7			30.3			32.1	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	54.9	21.6	35.3	15.7	47.4	17.0	39.9
Change Period (Y+Rc), s	5.6	* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s	5.0	* 47	16.0	* 30	16.4	* 35	11.4	* 34
Max Q Clear Time (g_c+I1), s	3.5	42.3	16.4	22.6	9.9	15.3	13.4	20.6
Green Ext Time (p_c), s	0.0	3.1	0.0	0.7	0.3	4.0	0.0	4.3

Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	265	610	127	538	7	249	20	476	131	174	1186	11
Future Volume (veh/h)	265	610	127	538	7	249	20	476	131	174	1186	11
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.90		0.86	0.93		0.84	1.00		0.86	0.97		0.80
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	288	663	138	585	8	271	22	517	142	189	1289	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	536	1004	386	605	456	459	39	1232	621	387	1454	517
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.18	0.38	0.38	0.09	0.24	0.24	0.02	0.35	0.35	0.08	0.41	0.41
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.8	34.3	30.2	66.7	34.4	35.9	70.2	31.0	21.7	21.9	33.7	21.1
Ln Grp LOS	C	C	C	E	C	D	E	C	C	C	C	C
Approach Vol, veh/h		1089			864			681			1490	
Approach Delay, s/veh		31.8			56.7			30.3			32.1	
Approach LOS		C			E			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	8.2	54.9	21.6	35.3	15.7	47.4	17.0	39.9
Change Period (Y+Rc), s	5.6	* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s	5.0	* 47	16.0	* 30	16.4	* 35	11.4	* 34
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.5	3.8	5.1	3.8	5.1
Max Q Clear (g_c+I1), s	3.5	42.3	16.4	22.6	9.9	15.3	13.4	20.6
Green Ext Time (g_e), s	0.0	3.1	0.0	0.7	0.3	4.0	0.0	4.3
Prob of Phs Call (p_c)	0.52	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.25	0.11	0.00	1.00	0.24

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		3456	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1264		1334		1357		1368

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	2	0
Grp Vol (v), veh/h	22	0	288	0	189	0	585	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1728	0
Q Serve Time (g_s), s	1.5	0.0	14.4	0.0	7.9	0.0	11.4	0.0
Cycle Q Clear Time (g_c), s	1.5	0.0	14.4	0.0	7.9	0.0	11.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	989	0	749	0	615	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	30.3	0.0	43.6	0.0	29.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	28.9	0.0	28.2	0.0	15.3	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.5	0.0	5.2	0.0	15.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	39	0	536	0	387	0	605	0
V/C Ratio (X)	0.57	0.00	0.54	0.00	0.49	0.00	0.97	0.00
Avail Cap (c_a), veh/h	74	0	536	0	480	0	605	0
Upstream Filter (I)	0.96	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	58.1	0.0	25.7	0.0	21.8	0.0	38.3	0.0
Incr Delay (d2), s/veh	12.1	0.0	1.1	0.0	0.1	0.0	28.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	70.2	0.0	26.8	0.0	21.9	0.0	66.7	0.0
1st-Term Q (Q1), veh/ln	0.7	0.0	5.7	0.0	3.3	0.0	3.4	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.2	0.0	0.0	0.0	2.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.68	0.00	1.27	0.00	1.68	0.00
%ile Back of Q (95%), veh/ln	1.4	0.0	9.8	0.0	4.2	0.0	9.8	0.0
%ile Storage Ratio (RQ%)	0.24	0.00	4.16	0.00	0.96	0.00	1.84	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	2
Grp Vol (v), veh/h	0	1289	0	8	0	517	0	663
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	40.3	0.0	0.4	0.0	13.3	0.0	18.6
Cycle Q Clear Time (g_c), s	0.0	40.3	0.0	0.4	0.0	13.3	0.0	18.6
Lane Grp Cap (c), veh/h	0	1454	0	456	0	1232	0	1004
V/C Ratio (X)	0.00	0.89	0.00	0.02	0.00	0.42	0.00	0.66
Avail Cap (c_a), veh/h	0	1454	0	464	0	1232	0	1007
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.96	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.9	0.0	34.4	0.0	30.0	0.0	32.7
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	1.0	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.7	0.0	34.4	0.0	31.0	0.0	34.3
1st-Term Q (Q1), veh/ln	0.0	17.0	0.0	0.2	0.0	5.7	0.0	7.5
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.12	0.00	1.80	0.00	1.66	0.00	1.59
%ile Back of Q (95%), veh/ln	0.0	19.2	0.0	0.3	0.0	9.8	0.0	12.3
%ile Storage Ratio (RQ%)	0.00	2.14	0.00	0.02	0.00	0.71	0.00	2.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	12	0	271	0	142	0	138
Grp Sat Flow (s), veh/h/ln	0	1264	0	1334	0	1357	0	1368
Q Serve Time (g_s), s	0.0	0.7	0.0	20.6	0.0	7.8	0.0	8.7
Cycle Q Clear Time (g_c), s	0.0	0.7	0.0	20.6	0.0	7.8	0.0	8.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	10.1	0.0	11.4	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	517	0	459	0	621	0	386
V/C Ratio (X)	0.00	0.02	0.00	0.59	0.00	0.23	0.00	0.36
Avail Cap (c_a), veh/h	0	517	0	465	0	621	0	388
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.96	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.1	0.0	34.0	0.0	20.9	0.0	29.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.9	0.0	0.8	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.1	0.0	35.9	0.0	21.7	0.0	30.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	6.6	0.0	2.5	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.63	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.4	0.0	11.2	0.0	4.7	0.0	5.1
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	2.10	0.00	0.35	0.00	0.98
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	57.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	237	736	30	15	489	84	1	0	23	72	0	221
Future Vol, veh/h	237	736	30	15	489	84	1	0	23	72	0	221
Conflicting Peds, #/hr	0	0	39	39	0	0	2	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	258	800	33	16	532	91	1	0	25	78	0	240

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	623	0	0	872	0	0	1672	2027	456	1526	1998	314
Stage 1	-	-	-	-	-	-	1372	1372	-	610	610	-
Stage 2	-	-	-	-	-	-	300	655	-	916	1388	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	954	-	-	769	-	-	63	57	551	81	59	682
Stage 1	-	-	-	-	-	-	154	212	-	448	483	-
Stage 2	-	-	-	-	-	-	684	461	-	293	208	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	954	-	-	745	-	-	31	40	534	~ 60	41	681
Mov Cap-2 Maneuver	-	-	-	-	-	-	31	40	-	~ 60	41	-
Stage 1	-	-	-	-	-	-	109	150	-	327	473	-
Stage 2	-	-	-	-	-	-	433	451	-	204	147	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0.3	17.3	$ 361.6
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	319	954	-	-	745	-	-	192
HCM Lane V/C Ratio	0.082	0.27	-	-	0.022	-	-	1.659
HCM Control Delay (s)	17.3	10.2	-	-	9.9	-	-	$ 361.6
HCM Lane LOS	C	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.3	1.1	-	-	0.1	-	-	21.4

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	698	6	2	475	133	2	1	7	150	1	132
Future Volume (veh/h)	178	698	6	2	475	133	2	1	7	150	1	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.99		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	759	7	2	516	145	2	1	8	154	14	143
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	374	2200	20	433	849	239	97	65	306	457	38	391
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	774	3606	33	698	1392	391	181	239	1119	1373	140	1431
Grp Volume(v), veh/h	193	374	392	2	0	661	11	0	0	154	0	157
Grp Sat Flow(s),veh/h/ln	774	1777	1863	698	0	1783	1538	0	0	1373	0	1571
Q Serve(g_s), s	18.5	9.4	9.4	0.1	0.0	20.7	0.0	0.0	0.0	7.7	0.0	7.3
Cycle Q Clear(g_c), s	39.2	9.4	9.4	9.5	0.0	20.7	0.4	0.0	0.0	8.1	0.0	7.3
Prop In Lane	1.00		0.02	1.00		0.22	0.18		0.73	1.00		0.91
Lane Grp Cap(c), veh/h	374	1084	1136	433	0	1087	468	0	0	457	0	429
V/C Ratio(X)	0.52	0.34	0.35	0.00	0.00	0.61	0.02	0.00	0.00	0.34	0.00	0.37
Avail Cap(c_a), veh/h	374	1084	1136	433	0	1087	468	0	0	457	0	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.72	0.00	0.72	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.0	8.7	8.7	11.0	0.0	10.9	23.9	0.0	0.0	26.7	0.0	26.4
Incr Delay (d2), s/veh	5.0	0.9	0.8	0.0	0.0	1.8	0.1	0.0	0.0	0.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.6	5.9	6.2	0.0	0.0	11.0	0.3	0.0	0.0	4.9	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	9.5	9.5	11.0	0.0	12.7	24.0	0.0	0.0	27.1	0.0	26.9
LnGrp LOS	C	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		959			663			11			311	
Approach Delay, s/veh		13.2			12.7			24.0			27.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	22.7	10.1	41.2	2.4
Green Ext Time (p_c), s	8.3	1.2	6.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	698	6	2	475	133	2	1	7	150	1	132
Future Volume (veh/h)	178	698	6	2	475	133	2	1	7	150	1	132
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	0.99		0.96	0.99		0.98	0.98		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	759	7	2	516	145	2	1	8	154	14	143
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	374	2200	20	433	849	239	97	65	306	457	38	391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	28.0	9.5	9.5	11.0	0.0	12.7	24.0	0.0	0.0	27.1	0.0	26.9
Ln Grp LOS	C	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		959			663			11			311	
Approach Delay, s/veh		13.2			12.7			24.0			27.0	
Approach LOS		B			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		4.8		6.5		5.7
Max Q Clear (g_c+l1), s		22.7		10.1		41.2		2.4
Green Ext Time (g_e), s		8.3		1.2		6.9		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.06		0.02		0.59		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		698		1373		774		181
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1392		140		3606		239
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		391		1431		33		1119
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	2	0	154	0	193	0	11
Grp Sat Flow (s), veh/h/ln	0	698	0	1373	0	774	0	1538
Q Serve Time (g_s), s	0.0	0.1	0.0	7.7	0.0	18.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.5	0.0	8.1	0.0	39.2	0.0	0.4
Perm LT Sat Flow (s_l), veh/h/ln	0	698	0	1373	0	774	0	1233
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1740	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	45.5	0.0	24.2	0.0	34.2	0.0	17.3
Perm LT Q Serve Time (g_ps), s	0.0	0.1	0.0	7.7	0.0	18.5	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.18
Lane Grp Cap (c), veh/h	0	433	0	457	0	374	0	468
V/C Ratio (X)	0.00	0.00	0.00	0.34	0.00	0.52	0.00	0.02
Avail Cap (c_a), veh/h	0	433	0	457	0	374	0	468
Upstream Filter (I)	0.00	0.72	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.0	0.0	26.7	0.0	23.0	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	5.0	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.0	0.0	27.1	0.0	28.0	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.7	0.0	3.1	0.0	0.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	4.9	0.0	6.6	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	4.31	0.00	1.11	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	374	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	9.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	9.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	9.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	661	0	157	0	392	0	0
Grp Sat Flow (s), veh/h/ln	0	1783	0	1571	0	1863	0	0
Q Serve Time (g_s), s	0.0	20.7	0.0	7.3	0.0	9.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.7	0.0	7.3	0.0	9.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.22	0.00	0.91	0.00	0.02	0.00	0.73
Lane Grp Cap (c), veh/h	0	1087	0	429	0	1136	0	0
V/C Ratio (X)	0.00	0.61	0.00	0.37	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	1087	0	429	0	1136	0	0
Upstream Filter (I)	0.00	0.72	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	10.9	0.0	26.4	0.0	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.5	0.0	0.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.7	0.0	26.9	0.0	9.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	2.7	0.0	3.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.52	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	11.0	0.0	5.0	0.0	6.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	4.35	0.00	0.73	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	469	362	164	600	1209	385
Future Volume (veh/h)	469	362	164	600	1209	385
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	510	393	178	652	1314	418
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	917	421	205	2288	1760	765
Arrive On Green	0.27	0.27	0.12	0.64	0.99	0.99
Sat Flow, veh/h	3456	1585	1781	3647	3647	1545
Grp Volume(v), veh/h	510	393	178	652	1314	418
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1545
Q Serve(g_s), s	15.3	29.1	11.8	9.6	1.6	0.7
Cycle Q Clear(g_c), s	15.3	29.1	11.8	9.6	1.6	0.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	917	421	205	2288	1760	765
V/C Ratio(X)	0.56	0.93	0.87	0.29	0.75	0.55
Avail Cap(c_a), veh/h	950	436	223	2288	1760	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.90	0.90	0.74	0.74	0.71	0.71
Uniform Delay (d), s/veh	38.0	43.0	52.2	9.3	0.3	0.3
Incr Delay (d2), s/veh	0.6	25.0	21.6	0.2	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.5	20.1	10.0	6.1	1.2	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.6	68.1	73.8	9.6	2.4	2.3
LnGrp LOS	D	E	E	A	A	A
Approach Vol, veh/h	903			830	1732	
Approach Delay, s/veh	51.4			23.3	2.4	
Approach LOS	D			C	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.8	64.3		37.9		82.1
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	13.8	3.6		31.1		11.6
Green Ext Time (p_c), s	0.1	17.3		0.8		3.5

Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	469	362	164	600	1209	385
Future Volume (veh/h)	469	362	164	600	1209	385
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	510	393	178	652	1314	418
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	917	421	205	2288	1760	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.27	0.27	0.12	0.64	0.99	0.99
Unsig. Movement Delay						
Ln Grp Delay, s/veh	38.6	68.1	73.8	9.6	2.4	2.3
Ln Grp LOS	D	E	E	A	A	A
Approach Vol, veh/h	903			830	1732	
Approach Delay, s/veh	51.4			23.3	2.4	
Approach LOS	D			C	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	17.8	64.3		37.9		82.1		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.8		3.9		5.0		
Max Q Clear (g_c+l1), s	13.8	3.6		31.1		11.6		
Green Ext Time (g_e), s	0.1	17.3		0.8		3.5		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.79		1.00		0.15		
Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1545		1585		0		
Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	178	0	0	510	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	11.8	0.0	0.0	15.3	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	11.8	0.0	0.0	15.3	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	59.4	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	205	0	0	917	0	0	0	0
V/C Ratio (X)	0.87	0.00	0.00	0.56	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.74	0.00	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	52.2	0.0	0.0	38.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	21.6	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	73.8	0.0	0.0	38.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	0.0	6.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.56	1.00	0.00	1.61	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	10.0	0.0	0.0	10.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.21	0.00	0.00	2.43	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1314	0	0	0	652	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	1.6	0.0	0.0	0.0	9.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	0.0	0.0	9.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	1760	0	0	0	2288	0	0
V/C Ratio (X)	0.00	0.75	0.00	0.00	0.00	0.29	0.00	0.00
Avail Cap (c_a), veh/h	0	1760	0	0	0	2288	0	0
Upstream Filter (I)	0.00	0.71	0.00	0.00	0.00	0.74	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.3	0.0	0.0	0.0	9.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	2.4	0.0	0.0	0.0	9.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	3.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.76	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.2	0.0	0.0	0.0	6.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.00	0.00	0.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	418	0	393	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1545	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.7	0.0	29.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.7	0.0	29.1	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	765	0	421	0	0	0	0
V/C Ratio (X)	0.00	0.55	0.00	0.93	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	765	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.71	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.3	0.0	43.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	25.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	2.3	0.0	68.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	11.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	2.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.41	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	1.0	0.0	20.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.47	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		20.2						
HCM 6th LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	116	31	835	212	47	1512
Future Volume (veh/h)	116	31	835	212	47	1512
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.92		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	34	908	230	51	1643
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	198	53	1912	484	66	2674
Arrive On Green	0.15	0.15	1.00	1.00	0.04	0.75
Sat Flow, veh/h	1333	360	2898	709	1781	3647
Grp Volume(v), veh/h	161	0	575	563	51	1643
Grp Sat Flow(s),veh/h/ln	1703	0	1777	1736	1781	1777
Q Serve(g_s), s	10.7	0.0	0.0	0.0	3.4	25.5
Cycle Q Clear(g_c), s	10.7	0.0	0.0	0.0	3.4	25.5
Prop In Lane	0.78	0.21		0.41	1.00	
Lane Grp Cap(c), veh/h	253	0	1212	1184	66	2674
V/C Ratio(X)	0.64	0.00	0.47	0.48	0.77	0.61
Avail Cap(c_a), veh/h	326	0	1212	1184	223	2674
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.83	0.83	0.09	0.09
Uniform Delay (d), s/veh	48.1	0.0	0.0	0.0	57.3	6.8
Incr Delay (d2), s/veh	2.7	0.0	1.1	1.1	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	0.7	0.7	2.2	8.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	50.7	0.0	1.1	1.1	59.0	6.9
LnGrp LOS	D	A	A	A	E	A
Approach Vol, veh/h	161		1138			1694
Approach Delay, s/veh	50.7		1.1			8.5
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		97.2		22.8	8.5	88.7
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		27.5		12.7	5.4	2.0
Green Ext Time (p_c), s		0.0		0.3	0.0	22.3

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	116	31	835	212	47	1512
Future Volume (veh/h)	116	31	835	212	47	1512
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.92		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	126	34	908	230	51	1643
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	198	53	1912	484	66	2674
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.15	0.15	1.00	1.00	0.04	0.75
Unsig. Movement Delay						
Ln Grp Delay, s/veh	50.7	0.0	1.1	1.1	59.0	6.9
Ln Grp LOS	D	A	A	A	E	A
Approach Vol, veh/h	161		1138			1694
Approach Delay, s/veh	50.7		1.1			8.5
Approach LOS	D		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		97.2		22.8	8.5	88.7		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+I1), s		27.5		12.7	5.4	2.0		
Green Ext Time (g_e), s		0.0		0.3	0.0	22.3		
Prob of Phs Call (p_c)		1.00		1.00	0.82	1.00		
Prob of Max Out (p_x)		1.00		0.00	0.00	0.12		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1333	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		11		2898		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		360		709		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	161	51	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1703	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	10.7	3.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.7	3.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	81.8	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.78	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	253	66	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.64	0.77	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	326	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.09	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	48.1	57.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.7	1.7	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.7	59.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.5	1.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.76	1.40	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	8.3	2.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.16	0.41	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1643	0	0	0	575	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	25.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	25.5	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2674	0	0	0	1212	0	0
V/C Ratio (X)	0.00	0.61	0.00	0.00	0.00	0.47	0.00	0.00
Avail Cap (c_a), veh/h	0	2674	0	0	0	1212	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.83	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	6.9	0.0	0.0	0.0	1.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.18	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	8.9	0.0	0.0	0.0	0.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.00	0.00	0.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	563	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1736	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.21	0.00	0.41	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1184	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1184	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	240	34	124	142	8	37	78	55	56	11	75
Future Vol, veh/h	8	240	34	124	142	8	37	78	55	56	11	75
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	261	37	135	154	9	40	85	60	61	12	82
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.8	13	11.1	10.6
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	22%	3%	45%	39%
Vol Thru, %	46%	85%	52%	8%
Vol Right, %	32%	12%	3%	53%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	282	274	142
LT Vol	37	8	124	56
Through Vol	78	240	142	11
RT Vol	55	34	8	75
Lane Flow Rate	185	307	298	154
Geometry Grp	1	1	1	1
Degree of Util (X)	0.293	0.454	0.453	0.244
Departure Headway (Hd)	5.702	5.33	5.472	5.68
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	626	674	655	628
Service Time	3.765	3.384	3.527	3.746
HCM Lane V/C Ratio	0.296	0.455	0.455	0.245
HCM Control Delay	11.1	12.8	13	10.6
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.2	2.4	2.4	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	38	38	57	49	73	82	586	92	63	1728	193
Future Volume (veh/h)	26	38	38	57	49	73	82	586	92	63	1728	193
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.98		0.98	1.00		0.93	0.98		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	41	41	62	53	79	89	637	100	68	1878	210
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	84	106	83	170	128	227	145	2230	349	550	2349	255
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	232	723	568	740	873	1546	197	3042	476	710	3204	348
Grp Volume(v), veh/h	110	0	0	115	0	79	89	371	366	68	1017	1071
Grp Sat Flow(s),veh/h/ln	1523	0	0	1613	0	1546	197	1777	1741	710	1777	1776
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	4.1	29.5	6.4	6.4	3.2	32.2	36.5
Cycle Q Clear(g_c), s	6.1	0.0	0.0	5.4	0.0	4.1	66.0	6.4	6.4	9.6	32.2	36.5
Prop In Lane	0.25		0.37	0.54		1.00	1.00		0.27	1.00		0.20
Lane Grp Cap(c), veh/h	274	0	0	299	0	227	145	1303	1276	550	1303	1302
V/C Ratio(X)	0.40	0.00	0.00	0.39	0.00	0.35	0.62	0.29	0.29	0.12	0.78	0.82
Avail Cap(c_a), veh/h	532	0	0	550	0	484	145	1303	1276	550	1303	1302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.61	0.61	0.61	0.28	0.28	0.28
Uniform Delay (d), s/veh	35.0	0.0	0.0	35.0	0.0	34.5	34.3	4.1	4.1	5.7	7.5	8.1
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.8	0.0	0.9	11.4	0.3	0.3	0.1	1.4	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	0.0	0.0	4.3	0.0	2.9	4.3	3.2	3.2	0.8	11.6	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	0.0	0.0	35.8	0.0	35.4	45.7	4.4	4.4	5.8	8.9	9.8
LnGrp LOS	D	A	A	D	A	D	D	A	A	A	A	A
Approach Vol, veh/h		110			194			826			2156	
Approach Delay, s/veh		36.0			35.7			8.8			9.2	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	71.0	19.0	71.0	19.0
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	38.5	7.4	68.0	8.1
Green Ext Time (p_c), s	10.7	0.9	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	38	38	57	49	73	82	586	92	63	1728	193
Future Volume (veh/h)	26	38	38	57	49	73	82	586	92	63	1728	193
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.98	0.98		0.98	1.00		0.93	0.98		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	41	41	62	53	79	89	637	100	68	1878	210
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	84	106	83	170	128	227	145	2230	349	550	2349	255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.73	0.73	0.73	0.73	0.73	0.73
Unsig. Movement Delay												
Ln Grp Delay, s/veh	36.0	0.0	0.0	35.8	0.0	35.4	45.7	4.4	4.4	5.8	8.9	9.8
Ln Grp LOS	D	A	A	D	A	D	D	A	A	A	A	A
Approach Vol, veh/h		110			194			826			2156	
Approach Delay, s/veh		36.0			35.7			8.8			9.2	
Approach LOS		D			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		71.0		19.0		71.0		19.0
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.2		5.0		6.6		5.6
Max Q Clear (g_c+I1), s		38.5		7.4		68.0		8.1
Green Ext Time (g_e), s		10.7		0.9		0.0		0.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		710		740		197		232
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3204		873		3042		723
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		348		1546		476		568
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	68	0	115	0	89	0	110
Grp Sat Flow (s), veh/h/ln	0	710	0	1613	0	197	0	1523
Q Serve Time (g_s), s	0.0	3.2	0.0	0.0	0.0	29.5	0.0	0.7
Cycle Q Clear Time (g_c), s	0.0	9.6	0.0	5.4	0.0	66.0	0.0	6.1
Perm LT Sat Flow (s_l), veh/h/ln	0	710	0	1315	0	197	0	1257
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1683	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	66.0	0.0	13.2	0.0	66.0	0.0	13.2
Perm LT Serve Time (g_u), s	0.0	59.6	0.0	7.1	0.0	29.5	0.0	7.8
Perm LT Q Serve Time (g_ps), s	0.0	3.2	0.0	0.0	0.0	29.5	0.0	0.7
Time to First Blk (g_f), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	4.7
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	4.7
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.54	0.00	1.00	0.00	0.25
Lane Grp Cap (c), veh/h	0	550	0	299	0	145	0	274
V/C Ratio (X)	0.00	0.12	0.00	0.39	0.00	0.62	0.00	0.40
Avail Cap (c_a), veh/h	0	550	0	550	0	145	0	532
Upstream Filter (I)	0.00	0.28	0.00	1.00	0.00	0.61	0.00	1.00
Uniform Delay (d1), s/veh	0.0	5.7	0.0	35.0	0.0	34.3	0.0	35.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.8	0.0	11.4	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	5.8	0.0	35.8	0.0	45.7	0.0	36.0
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	2.3	0.0	1.9	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.5	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.8	0.0	4.3	0.0	4.3	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.23	0.00	0.92	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1017	0	0	0	371	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	32.2	0.0	0.0	0.0	6.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.2	0.0	0.0	0.0	6.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1303	0	0	0	1303	0	0
V/C Ratio (X)	0.00	0.78	0.00	0.00	0.00	0.29	0.00	0.00
Avail Cap (c_a), veh/h	0	1303	0	0	0	1303	0	0
Upstream Filter (I)	0.00	0.28	0.00	0.00	0.00	0.61	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.5	0.0	0.0	0.0	4.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.9	0.0	0.0	0.0	4.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.5	0.0	0.0	0.0	1.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.29	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	11.6	0.0	0.0	0.0	3.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.84	0.00	0.00	0.00	0.11	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	1071	0	79	0	366	0	0
Grp Sat Flow (s), veh/h/ln	0	1776	0	1546	0	1741	0	0
Q Serve Time (g_s), s	0.0	36.5	0.0	4.1	0.0	6.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	36.5	0.0	4.1	0.0	6.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.20	0.00	1.00	0.00	0.27	0.00	0.37
Lane Grp Cap (c), veh/h	0	1302	0	227	0	1276	0	0
V/C Ratio (X)	0.00	0.82	0.00	0.35	0.00	0.29	0.00	0.00
Avail Cap (c_a), veh/h	0	1302	0	484	0	1276	0	0
Upstream Filter (I)	0.00	0.28	0.00	1.00	0.00	0.61	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	34.5	0.0	4.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.9	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.8	0.0	35.4	0.0	4.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	1.6	0.0	1.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.27	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	13.1	0.0	2.9	0.0	3.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.95	0.00	1.84	0.00	0.11	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Future Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	729	735	422	1235	0				854	558	335
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	934	808	113	1868	0				653	401	241
Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Sat Flow, veh/h	0	1870	1537	362	3647	0				1781	1093	656
Grp Volume(v), veh/h	0	729	735	422	1235	0				854	0	893
Grp Sat Flow(s),veh/h/ln	0	1777	1537	362	1777	0				1781	0	1749
Q Serve(g_s), s	0.0	29.7	39.1	8.2	22.7	0.0				33.0	0.0	33.0
Cycle Q Clear(g_c), s	0.0	29.7	39.1	47.3	22.7	0.0				33.0	0.0	33.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	934	808	113	1868	0				653	0	641
V/C Ratio(X)	0.00	0.78	0.91	3.74	0.66	0.00				1.31	0.00	1.39
Avail Cap(c_a), veh/h	0	934	808	113	1868	0				653	0	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.65	0.65	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.2	19.4	43.8	15.5	0.0				28.5	0.0	28.5
Incr Delay (d2), s/veh	0.0	6.4	16.1	1247.0	1.2	0.0				149.3	0.0	186.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	18.3	22.5	72.7	12.5	0.0				59.2	0.0	69.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.6	35.5	1290.8	16.7	0.0				177.8	0.0	214.5
LnGrp LOS	A	C	D	F	B	A				F	A	F
Approach Vol, veh/h		1464			1657						1747	
Approach Delay, s/veh		29.6			341.2						196.6	
Approach LOS		C			F						F	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	52.0	38.0	52.0
Change Period (Y+Rc), s	* 4.7	5.0	* 4.7
Max Green Setting (Gmax), s	* 47	33.0	* 47
Max Q Clear Time (g_c+I1), s	49.3	35.0	41.1
Green Ext Time (p_c), s	0.0	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	195.6
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Future Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	729	735	422	1235	0				854	558	335
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	934	808	113	1868	0				653	401	241
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.53	0.53	0.53	0.53	0.00				0.37	0.37	0.37
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	23.6	35.5	1290.8	16.7	0.0				177.8	0.0	214.5
Ln Grp LOS	A	C	D	F	B	A				F	A	F
Approach Vol, veh/h		1464			1657						1747	
Approach Delay, s/veh		29.6			341.2						196.6	
Approach LOS		C			F						F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		52.0		38.0		52.0		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		6.6		4.5		5.3		
Max Q Clear (g_c+I1), s		49.3		35.0		41.1		
Green Ext Time (g_e), s		0.0		0.0		4.5		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		1.00		0.96		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		362		1781		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1093		1870		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		656		1537		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	422	0	854	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	362	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	8.2	0.0	33.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	47.3	0.0	33.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	362	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	47.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	113	0	653	0	0	0	0
V/C Ratio (X)	0.00	3.74	0.00	1.31	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	113	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.65	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	43.8	0.0	28.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1247.0	0.0	149.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1290.8	0.0	177.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.5	0.0	12.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	39.1	0.0	27.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.48	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	72.7	0.0	59.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	5.63	0.00	3.11	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	77.3	0.0	50.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.9	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1235	0	0	0	729	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	22.7	0.0	0.0	0.0	29.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.7	0.0	0.0	0.0	29.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1868	0	0	0	934	0	0
V/C Ratio (X)	0.00	0.66	0.00	0.00	0.00	0.78	0.00	0.00
Avail Cap (c_a), veh/h	0	1868	0	0	0	934	0	0
Upstream Filter (I)	0.00	0.65	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	15.5	0.0	0.0	0.0	17.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	6.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.7	0.0	0.0	0.0	23.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.3	0.0	0.0	0.0	10.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	1.7	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.45	0.00	1.00	0.00	1.46	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	12.5	0.0	0.0	0.0	18.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.96	0.00	0.00	0.00	0.99	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	893	0	735	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1749	0	1537	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	33.0	0.0	39.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	33.0	0.0	39.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.38	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	641	0	808	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.39	0.00	0.91	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	641	0	808	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	28.5	0.0	19.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	186.0	0.0	16.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	214.5	0.0	35.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	12.6	0.0	12.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	33.1	0.0	3.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.51	0.00	1.41	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	69.0	0.0	22.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	3.63	0.00	1.21	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	62.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	195.6
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1384	0	0	1073	433	462	3	337	0	0	0
Future Volume (veh/h)	164	1384	0	0	1073	433	462	3	337	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	178	1504	0	0	1166	471	436	96	366			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	166	2065	0	0	2052	827	523	99	378			
Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Sat Flow, veh/h	307	3647	0	0	3700	1423	1781	338	1287			
Grp Volume(v), veh/h	178	1504	0	0	1124	513	436	0	462			
Grp Sat Flow(s),veh/h/ln	307	1777	0	0	1702	1551	1781	0	1625			
Q Serve(g_s), s	25.3	0.0	0.0	0.0	26.9	27.0	20.6	0.0	25.3			
Cycle Q Clear(g_c), s	52.3	0.0	0.0	0.0	26.9	27.0	20.6	0.0	25.3			
Prop In Lane	1.00		0.00	0.00		0.92	1.00		0.79			
Lane Grp Cap(c), veh/h	166	2065	0	0	1978	901	523	0	477			
V/C Ratio(X)	1.07	0.73	0.00	0.00	0.57	0.57	0.83	0.00	0.97			
Avail Cap(c_a), veh/h	166	2065	0	0	1978	901	523	0	477			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.27	0.27	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.6	0.0	0.0	0.0	26.1	26.2	29.8	0.0	31.4			
Incr Delay (d2), s/veh	43.1	0.2	0.0	0.0	0.1	0.2	11.2	0.0	33.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	6.8	0.1	0.0	0.0	15.1	13.9	15.0	0.0	19.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	0.2	0.0	0.0	26.2	26.4	40.9	0.0	64.7			
LnGrp LOS	F	A	A	A	C	C	D	A	E			
Approach Vol, veh/h		1682			1637			898				
Approach Delay, s/veh		6.8			26.3			53.2				
Approach LOS		A			C			D				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	58.0	32.0	58.0
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	54.3	27.3	29.0
Green Ext Time (p_c), s	0.0	0.0	12.9

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1384	0	0	1073	433	462	3	337	0	0	0
Future Volume (veh/h)	164	1384	0	0	1073	433	462	3	337	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	178	1504	0	0	1166	471	436	96	366			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	166	2065	0	0	2052	827	523	99	378			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	62.7	0.2	0.0	0.0	26.2	26.4	40.9	0.0	64.7			
Ln Grp LOS	F	A	A	A	C	C	D	A	E			
Approach Vol, veh/h		1682			1637			898				
Approach Delay, s/veh		6.8			26.3			53.2				
Approach LOS		A			C			D				

Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6					
Case No			6.0		10.0		8.0					
Phs Duration (G+Y+Rc), s			58.0		32.0		58.0					
Change Period (Y+Rc), s			* 5.7		* 5.6		* 5.7					
Max Green (Gmax), s			* 52		* 26		* 52					
Max Allow Headway (MAH), s			5.9		4.5		5.2					
Max Q Clear (g_c+I1), s			54.3		27.3		29.0					
Green Ext Time (g_e), s			0.0		0.0		12.9					
Prob of Phs Call (p_c)			1.00		1.00		1.00					
Prob of Max Out (p_x)			0.00		1.00		0.43					
Left-Turn Movement Data												
Assigned Mvmt			5		7		1					
Mvmt Sat Flow, veh/h			307		1781		0					
Through Movement Data												
Assigned Mvmt			2		4		6					
Mvmt Sat Flow, veh/h			3647		338		3700					
Right-Turn Movement Data												
Assigned Mvmt			12		14		16					
Mvmt Sat Flow, veh/h			0		1287		1423					
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	0			
Lane Assignment			L		L							

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	178	0	436	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	307	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	25.3	0.0	20.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	52.3	0.0	20.6	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	307	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	52.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	25.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	25.3	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	52.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	166	0	523	0	0	0	0
V/C Ratio (X)	0.00	1.07	0.00	0.83	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	166	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.6	0.0	29.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	43.1	0.0	11.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	62.7	0.0	40.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.3	0.0	8.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	1.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.29	0.00	1.52	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	6.8	0.0	15.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.04	0.00	0.84	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1504	0	0	0	1124	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	26.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2065	0	0	0	1978	0	0
V/C Ratio (X)	0.00	0.73	0.00	0.00	0.00	0.57	0.00	0.00
Avail Cap (c_a), veh/h	0	2065	0	0	0	1978	0	0
Upstream Filter (I)	0.00	0.09	0.00	0.00	0.00	0.27	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.2	0.0	0.0	0.0	26.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	12.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.24	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	15.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.42	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	462	0	513	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1625	0	1551	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	25.3	0.0	27.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	25.3	0.0	27.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.79	0.00	0.92	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	477	0	901	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.97	0.00	0.57	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	477	0	901	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.27	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.4	0.0	26.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	33.3	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	64.7	0.0	26.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.3	0.0	11.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	4.4	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.44	0.00	1.26	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	19.7	0.0	13.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	1.10	0.00	0.39	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	862	548	272	1031	1	156	299	137	54	620	316
Future Volume (veh/h)	280	862	548	272	1031	1	156	299	137	54	620	316
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	937	596	296	1121	1	170	325	149	59	674	343
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	673	409	238	1224	526	153	831	825	379	831	684
Arrive On Green	0.02	0.11	0.11	0.18	0.69	0.69	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1781	2088	1271	1781	3554	1528	554	1870	1540	913	1870	1540
Grp Volume(v), veh/h	304	791	742	296	1121	1	170	325	149	59	674	343
Grp Sat Flow(s),veh/h/ln	1781	1777	1582	1781	1777	1528	554	1870	1540	913	1870	1540
Q Serve(g_s), s	6.0	29.0	29.0	8.0	23.9	0.0	11.8	10.5	4.5	4.2	28.2	14.3
Cycle Q Clear(g_c), s	6.0	29.0	29.0	8.0	23.9	0.0	40.0	10.5	4.5	14.7	28.2	14.3
Prop In Lane	1.00		0.80	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	238	573	510	238	1224	526	153	831	825	379	831	684
V/C Ratio(X)	1.28	1.38	1.46	1.24	0.92	0.00	1.11	0.39	0.18	0.16	0.81	0.50
Avail Cap(c_a), veh/h	238	573	510	238	1224	526	153	831	825	379	831	684
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.53	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	40.2	40.2	21.3	12.9	9.2	42.2	16.8	10.8	21.8	21.7	17.9
Incr Delay (d2), s/veh	140.7	177.5	210.9	139.2	12.1	0.0	106.0	1.4	0.5	0.9	8.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.9	60.0	61.4	19.1	10.3	0.0	13.3	8.2	2.8	1.7	19.6	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	169.8	217.7	251.1	160.5	25.0	9.2	148.2	18.2	11.3	22.6	30.2	20.5
LnGrp LOS	F	F	F	F	C	A	F	B	B	C	C	C
Approach Vol, veh/h		1837			1418			644			1076	
Approach Delay, s/veh		223.2			53.3			50.9			26.7	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	36.0		45.0	11.0	34.0		45.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	6.0	* 31		* 40	8.0	* 29		* 40
Max Q Clear Time (g_c+I1), s	10.0	25.9		30.2	10.0	31.0		42.0
Green Ext Time (p_c), s	0.0	3.1		4.4	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	110.0
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	862	548	272	1031	1	156	299	137	54	620	316
Future Volume (veh/h)	280	862	548	272	1031	1	156	299	137	54	620	316
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	0.99		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	937	596	296	1121	1	170	325	149	59	674	343
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	238	673	409	238	1224	526	153	831	825	379	831	684
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.02	0.11	0.11	0.18	0.69	0.69	0.44	0.44	0.44	0.44	0.44	0.44
Unsig. Movement Delay												
Ln Grp Delay, s/veh	169.8	217.7	251.1	160.5	25.0	9.2	148.2	18.2	11.3	22.6	30.2	20.5
Ln Grp LOS	F	F	F	F	C	A	F	B	B	C	C	C
Approach Vol, veh/h		1837			1418			644			1076	
Approach Delay, s/veh		223.2			53.3			50.9			26.7	
Approach LOS		F			D			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	9.0	36.0		45.0	11.0	34.0		45.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	6.0	* 31		* 40	8.0	* 29		* 40
Max Allow Headway (MAH), s	3.8	5.1		4.9	3.8	5.3		5.6
Max Q Clear (g_c+I1), s	8.0	25.9		30.2	10.0	31.0		42.0
Green Ext Time (g_e), s	0.0	3.1		4.4	0.0	0.0		0.0
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			913	1781			554

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		2088		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1528		1540		1271		1540

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	304	0	0	59	296	0	0	170
Grp Sat Flow (s), veh/h/ln	1781	0	0	913	1781	0	0	554
Q Serve Time (g_s), s	6.0	0.0	0.0	4.2	8.0	0.0	0.0	11.8
Cycle Q Clear Time (g_c), s	6.0	0.0	0.0	14.7	8.0	0.0	0.0	40.0
Perm LT Sat Flow (s_l), veh/h/ln	502	0	0	913	339	0	0	554
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	29.0	0.0	0.0	40.0	30.0	0.0	0.0	40.0
Perm LT Serve Time (g_u), s	7.1	0.0	0.0	29.5	0.0	0.0	0.0	11.8
Perm LT Q Serve Time (g_ps), s	7.1	0.0	0.0	4.2	0.0	0.0	0.0	11.8
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	238	0	0	379	238	0	0	153
V/C Ratio (X)	1.28	0.00	0.00	0.16	1.24	0.00	0.00	1.11
Avail Cap (c_a), veh/h	238	0	0	379	238	0	0	153
Upstream Filter (I)	0.53	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	29.1	0.0	0.0	21.8	21.3	0.0	0.0	42.2
Incr Delay (d2), s/veh	140.7	0.0	0.0	0.9	139.2	0.0	0.0	106.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	169.8	0.0	0.0	22.6	160.5	0.0	0.0	148.2
1st-Term Q (Q1), veh/ln	2.2	0.0	0.0	0.9	2.8	0.0	0.0	3.4
2nd-Term Q (Q2), veh/ln	9.3	0.0	0.0	0.1	9.2	0.0	0.0	4.5
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.47	0.00	0.00	1.80	1.59	0.00	0.00	1.69
%ile Back of Q (95%), veh/ln	16.9	0.0	0.0	1.7	19.1	0.0	0.0	13.3
%ile Storage Ratio (RQ%)	2.87	0.00	0.00	0.25	3.46	0.00	0.00	1.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	16.5	0.0	0.0	0.0	14.4	0.0	0.0	4.3
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.3
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1121	0	674	0	791	0	325
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	23.9	0.0	28.2	0.0	29.0	0.0	10.5
Cycle Q Clear Time (g_c), s	0.0	23.9	0.0	28.2	0.0	29.0	0.0	10.5
Lane Grp Cap (c), veh/h	0	1224	0	831	0	573	0	831
V/C Ratio (X)	0.00	0.92	0.00	0.81	0.00	1.38	0.00	0.39
Avail Cap (c_a), veh/h	0	1224	0	831	0	573	0	831
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.53	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.9	0.0	21.7	0.0	40.2	0.0	16.8
Incr Delay (d2), s/veh	0.0	12.1	0.0	8.4	0.0	177.5	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.0	0.0	30.2	0.0	217.7	0.0	18.2
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	11.6	0.0	13.7	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	2.1	0.0	1.9	0.0	28.2	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.66	0.00	1.45	0.00	1.43	0.00	1.76
%ile Back of Q (95%), veh/ln	0.0	10.3	0.0	19.6	0.0	60.0	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.73	0.00	1.69	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	54.6	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1	0	343	0	742	0	149
Grp Sat Flow (s), veh/h/ln	0	1528	0	1540	0	1582	0	1540
Q Serve Time (g_s), s	0.0	0.0	0.0	14.3	0.0	29.0	0.0	4.5
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.3	0.0	29.0	0.0	4.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.80	0.00	1.00
Lane Grp Cap (c), veh/h	0	526	0	684	0	510	0	825
V/C Ratio (X)	0.00	0.00	0.00	0.50	0.00	1.46	0.00	0.18
Avail Cap (c_a), veh/h	0	526	0	684	0	510	0	825
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.53	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.2	0.0	17.9	0.0	40.2	0.0	10.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.6	0.0	210.9	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.2	0.0	20.5	0.0	251.1	0.0	11.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.8	0.0	12.2	0.0	1.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.5	0.0	29.9	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.71	0.00	1.46	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	9.1	0.0	61.4	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.32	0.00	1.73	0.00	0.79
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	58.1	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	110.0
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	671	239	58	866	111	102	426	51	116	1155	472
Future Volume (veh/h)	262	671	239	58	866	111	102	426	51	116	1155	472
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.89	1.00		0.83	0.97		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	729	260	63	941	121	111	463	55	126	1255	513
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	737	578	64	957	380	60	1249	147	428	1255	478
Arrive On Green	0.08	0.39	0.39	0.27	0.27	0.27	0.40	0.40	0.40	0.07	0.51	0.51
Sat Flow, veh/h	1781	1870	1467	569	3554	1412	270	3122	367	1781	2449	932
Grp Volume(v), veh/h	285	729	260	63	941	121	111	261	257	126	885	883
Grp Sat Flow(s),veh/h/ln	1781	1870	1467	569	1777	1412	270	1777	1712	1781	1777	1604
Q Serve(g_s), s	9.6	46.4	15.7	0.9	31.6	8.2	0.0	12.4	12.7	4.7	58.1	61.5
Cycle Q Clear(g_c), s	9.6	46.4	15.7	32.3	31.6	8.2	48.0	12.4	12.7	4.7	58.1	61.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.58
Lane Grp Cap(c), veh/h	206	737	578	64	957	380	60	711	685	428	911	822
V/C Ratio(X)	1.39	0.99	0.45	0.98	0.98	0.32	1.85	0.37	0.37	0.29	0.97	1.07
Avail Cap(c_a), veh/h	206	737	578	64	957	380	60	711	685	430	911	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.68	0.68	0.68	0.88	0.88	0.88	0.32	0.32	0.32
Uniform Delay (d), s/veh	32.9	36.1	26.8	60.0	43.6	35.1	60.0	25.3	25.4	18.3	28.4	29.3
Incr Delay (d2), s/veh	200.8	30.3	0.5	86.8	20.1	0.3	433.2	1.3	1.4	0.1	11.5	41.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	24.7	35.3	9.4	6.0	21.9	5.2	16.3	9.0	8.9	3.2	30.8	39.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	233.7	66.3	27.3	146.8	63.7	35.4	493.2	26.6	26.8	18.5	39.9	70.7
LnGrp LOS	F	E	C	F	E	D	F	C	C	B	D	F
Approach Vol, veh/h		1274			1125			629			1894	
Approach Delay, s/veh		95.8			65.3			109.0			52.8	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	67.0	15.0	38.0	13.5	53.5	53.0
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 62	* 9.6	* 32	8.0	* 48	* 47
Max Q Clear Time (g_c+I1), s	63.5	11.6	34.3	6.7	50.0	48.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	74.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	671	239	58	866	111	102	426	51	116	1155	472
Future Volume (veh/h)	262	671	239	58	866	111	102	426	51	116	1155	472
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.93	1.00		0.89	1.00		0.83	0.97		0.92
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	729	260	63	941	121	111	463	55	126	1255	513
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	206	737	578	64	957	380	60	1249	147	428	1255	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.39	0.39	0.27	0.27	0.27	0.40	0.40	0.40	0.07	0.51	0.51
Unsig. Movement Delay												
Ln Grp Delay, s/veh	233.7	66.3	27.3	146.8	63.7	35.4	493.2	26.6	26.8	18.5	39.9	70.7
Ln Grp LOS	F	E	C	F	E	D	F	C	C	B	D	F
Approach Vol, veh/h		1274			1125			629			1894	
Approach Delay, s/veh		95.8			65.3			109.0			52.8	
Approach LOS		F			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		67.0	15.0	38.0	13.5	53.5		53.0
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 62	* 9.6	* 32	8.0	* 48		* 47
Max Allow Headway (MAH), s		5.3	3.8	5.3	3.8	6.8		5.0
Max Q Clear (g_c+I1), s		63.5	11.6	34.3	6.7	50.0		48.4
Green Ext Time (g_e), s		0.0	0.0	0.0	0.0	0.0		0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.99	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		1.00

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	569	1781	270		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2449		3554		3122		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		932		1412		367		1467

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment			L (Pr/Pm)		LL (Pr/Pm)	L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	285	63	126	111	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	569	1781	270	0	0
Q Serve Time (g_s), s	0.0	0.0	9.6	0.9	4.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	9.6	32.3	4.7	48.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	531	569	853	270	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	34.3	32.3	50.0	48.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.7	0.9	35.3	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.7	0.9	2.5	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	206	64	428	60	0	0
V/C Ratio (X)	0.00	0.00	1.39	0.98	0.29	1.85	0.00	0.00
Avail Cap (c_a), veh/h	0	0	206	64	430	60	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.68	0.32	0.88	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	32.9	60.0	18.3	60.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	200.8	86.8	0.1	433.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	233.7	146.8	18.5	493.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.2	1.9	1.9	1.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	11.5	1.5	0.0	7.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.57	1.73	1.67	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	24.7	6.0	3.2	16.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	4.18	0.76	0.91	1.97	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	19.8	0.0	0.0	12.7	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.5	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	885	0	941	0	261	0	729
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	58.1	0.0	31.6	0.0	12.4	0.0	46.4
Cycle Q Clear Time (g_c), s	0.0	58.1	0.0	31.6	0.0	12.4	0.0	46.4
Lane Grp Cap (c), veh/h	0	911	0	957	0	711	0	737
V/C Ratio (X)	0.00	0.97	0.00	0.98	0.00	0.37	0.00	0.99
Avail Cap (c_a), veh/h	0	911	0	957	0	711	0	737
Upstream Filter (I)	0.00	0.32	0.00	0.68	0.00	0.88	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.4	0.0	43.6	0.0	25.3	0.0	36.1
Incr Delay (d2), s/veh	0.0	11.5	0.0	20.1	0.0	1.3	0.0	30.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	39.9	0.0	63.7	0.0	26.6	0.0	66.3
1st-Term Q (Q1), veh/ln	0.0	23.2	0.0	13.7	0.0	5.2	0.0	20.7
2nd-Term Q (Q2), veh/ln	0.0	2.9	0.0	2.7	0.0	0.3	0.0	6.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.18	0.00	1.33	0.00	1.66	0.00	1.32
%ile Back of Q (95%), veh/ln	0.0	30.8	0.0	21.9	0.0	9.0	0.0	35.3
%ile Storage Ratio (RQ%)	0.00	1.07	0.00	0.47	0.00	0.08	0.00	1.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	883	0	121	0	257	0	260
Grp Sat Flow (s), veh/h/ln	0	1604	0	1412	0	1712	0	1467
Q Serve Time (g_s), s	0.0	61.5	0.0	8.2	0.0	12.7	0.0	15.7
Cycle Q Clear Time (g_c), s	0.0	61.5	0.0	8.2	0.0	12.7	0.0	15.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.58	0.00	1.00	0.00	0.21	0.00	1.00
Lane Grp Cap (c), veh/h	0	822	0	380	0	685	0	578
V/C Ratio (X)	0.00	1.07	0.00	0.32	0.00	0.37	0.00	0.45
Avail Cap (c_a), veh/h	0	822	0	380	0	685	0	578
Upstream Filter (I)	0.00	0.32	0.00	0.68	0.00	0.88	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.3	0.0	35.1	0.0	25.4	0.0	26.8
Incr Delay (d2), s/veh	0.0	41.4	0.0	0.3	0.0	1.4	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	70.7	0.0	35.4	0.0	26.8	0.0	27.3
1st-Term Q (Q1), veh/ln	0.0	22.2	0.0	2.8	0.0	5.1	0.0	5.5
2nd-Term Q (Q2), veh/ln	0.0	9.5	0.0	0.0	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.24	0.00	1.80	0.00	1.66	0.00	1.70
%ile Back of Q (95%), veh/ln	0.0	39.2	0.0	5.2	0.0	8.9	0.0	9.4
%ile Storage Ratio (RQ%)	0.00	1.37	0.00	1.09	0.00	0.08	0.00	1.60
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	15.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	74.0
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	653	46	103	716	135	166	474	84	306	975	203
Future Volume (veh/h)	74	653	46	103	716	135	166	474	84	306	975	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	710	50	112	778	147	180	515	91	333	1060	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	806	655	138	1276	241	198	869	369	239	963	400
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.04	0.08	0.08	0.13	0.27	0.27
Sat Flow, veh/h	600	1870	1520	704	2959	559	1781	3554	1511	1781	3554	1474
Grp Volume(v), veh/h	80	710	50	112	467	458	180	515	91	333	1060	221
Grp Sat Flow(s),veh/h/ln	600	1870	1520	704	1777	1741	1781	1777	1511	1781	1777	1474
Q Serve(g_s), s	10.7	31.3	1.7	7.5	18.3	18.3	9.1	12.6	5.1	12.1	24.4	11.6
Cycle Q Clear(g_c), s	28.9	31.3	1.7	38.8	18.3	18.3	9.1	12.6	5.1	12.1	24.4	11.6
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	806	655	138	766	751	198	869	369	239	963	400
V/C Ratio(X)	0.37	0.88	0.08	0.81	0.61	0.61	0.91	0.59	0.25	1.39	1.10	0.55
Avail Cap(c_a), veh/h	217	806	655	138	766	751	198	869	369	239	963	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.18	0.18	0.18	1.00	1.00	1.00	0.89	0.89	0.89	0.16	0.16	0.16
Uniform Delay (d), s/veh	30.9	23.5	15.1	43.1	19.8	19.8	42.9	37.0	33.6	38.9	32.8	28.1
Incr Delay (d2), s/veh	0.9	2.8	0.0	38.1	3.6	3.7	36.7	1.0	0.3	179.9	48.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.4	15.9	1.0	7.0	12.4	12.2	10.0	9.8	3.4	22.9	20.2	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	26.3	15.1	81.2	23.4	23.4	79.6	38.0	33.9	218.8	81.0	28.4
LnGrp LOS	C	C	B	F	C	C	E	D	C	F	F	C
Approach Vol, veh/h		840			1037			786			1614	
Approach Delay, s/veh		26.1			29.6			47.1			102.2	
Approach LOS		C			C			D			F	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.8	15.6	29.6		44.8	18.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green Setting (Gmax), s		* 39	10.0	* 24		* 39	12.1	* 22
Max Q Clear Time (g_c+I1), s		40.8	11.1	26.4		33.3	14.1	14.6
Green Ext Time (p_c), s		0.0	0.0	0.0		2.6	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	59.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	653	46	103	716	135	166	474	84	306	975	203
Future Volume (veh/h)	74	653	46	103	716	135	166	474	84	306	975	203
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.96	1.00		0.96	1.00		0.95	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	710	50	112	778	147	180	515	91	333	1060	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	217	806	655	138	1276	241	198	869	369	239	963	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.04	0.08	0.08	0.13	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.8	26.3	15.1	81.2	23.4	23.4	79.6	38.0	33.9	218.8	81.0	28.4
Ln Grp LOS	C	C	B	F	C	C	E	D	C	F	F	C
Approach Vol, veh/h		840			1037			786			1614	
Approach Delay, s/veh		26.1			29.6			47.1			102.2	
Approach LOS		C			C			D			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		44.8	15.6	29.6		44.8	18.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 39	10.0	* 24		* 39	12.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.9		5.2	3.7	4.9
Max Q Clear (g_c+l1), s		40.8	11.1	26.4		33.3	14.1	14.6
Green Ext Time (g_e), s		0.0	0.0	0.0		2.6	0.0	2.1
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00	1.00	0.52

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		704	1781			600	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2959		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		559		1474		1520		1511

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	112	180	0	0	80	333	0
Grp Sat Flow (s), veh/h/ln	0	704	1781	0	0	600	1781	0
Q Serve Time (g_s), s	0.0	7.5	9.1	0.0	0.0	10.7	12.1	0.0
Cycle Q Clear Time (g_c), s	0.0	38.8	9.1	0.0	0.0	28.9	12.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	704	0	0	0	600	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.8	0.0	0.0	0.0	38.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	7.5	0.0	0.0	0.0	20.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	7.5	0.0	0.0	0.0	10.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	138	198	0	0	217	239	0
V/C Ratio (X)	0.00	0.81	0.91	0.00	0.00	0.37	1.39	0.00
Avail Cap (c_a), veh/h	0	138	198	0	0	217	239	0
Upstream Filter (I)	0.00	1.00	0.89	0.00	0.00	0.18	0.16	0.00
Uniform Delay (d1), s/veh	0.0	43.1	42.9	0.0	0.0	30.9	38.9	0.0
Incr Delay (d2), s/veh	0.0	38.1	36.7	0.0	0.0	0.9	179.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	81.2	79.6	0.0	0.0	31.8	218.8	0.0
1st-Term Q (Q1), veh/ln	0.0	2.4	4.1	0.0	0.0	1.5	5.1	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.5	2.0	0.0	0.0	0.1	12.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.62	0.00	0.00	1.56	1.35	0.00
%ile Back of Q (95%), veh/ln	0.0	7.0	10.0	0.0	0.0	2.4	22.9	0.0
%ile Storage Ratio (RQ%)	0.00	1.02	2.54	0.00	0.00	0.35	3.89	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	23.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	467	0	1060	0	710	0	515
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	18.3	0.0	24.4	0.0	31.3	0.0	12.6
Cycle Q Clear Time (g_c), s	0.0	18.3	0.0	24.4	0.0	31.3	0.0	12.6
Lane Grp Cap (c), veh/h	0	766	0	963	0	806	0	869
V/C Ratio (X)	0.00	0.61	0.00	1.10	0.00	0.88	0.00	0.59
Avail Cap (c_a), veh/h	0	766	0	963	0	806	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.16	0.00	0.18	0.00	0.89
Uniform Delay (d1), s/veh	0.0	19.8	0.0	32.8	0.0	23.5	0.0	37.0
Incr Delay (d2), s/veh	0.0	3.6	0.0	48.2	0.0	2.8	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.4	0.0	81.0	0.0	26.3	0.0	38.0
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	9.8	0.0	12.7	0.0	5.9
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	6.4	0.0	0.6	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.59	0.00	1.24	0.00	1.19	0.00	1.63
%ile Back of Q (95%), veh/ln	0.0	12.4	0.0	20.2	0.0	15.9	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.46	0.00	0.34	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	24.1	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	458	0	221	0	50	0	91
Grp Sat Flow (s), veh/h/ln	0	1741	0	1474	0	1520	0	1511
Q Serve Time (g_s), s	0.0	18.3	0.0	11.6	0.0	1.7	0.0	5.1
Cycle Q Clear Time (g_c), s	0.0	18.3	0.0	11.6	0.0	1.7	0.0	5.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.32	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	751	0	400	0	655	0	369
V/C Ratio (X)	0.00	0.61	0.00	0.55	0.00	0.08	0.00	0.25
Avail Cap (c_a), veh/h	0	751	0	400	0	655	0	369
Upstream Filter (I)	0.00	1.00	0.00	0.16	0.00	0.18	0.00	0.89
Uniform Delay (d1), s/veh	0.0	19.8	0.0	28.1	0.0	15.1	0.0	33.6
Incr Delay (d2), s/veh	0.0	3.7	0.0	0.3	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.4	0.0	28.4	0.0	15.1	0.0	33.9
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	3.9	0.0	0.6	0.0	1.9
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.59	0.00	1.33	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	12.2	0.0	5.2	0.0	1.0	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.35	0.00	0.88	0.00	0.26	0.00	0.69
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	59.5
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	150	488	0	0	1148
Future Vol, veh/h	22	150	488	0	0	1148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	163	530	0	0	1248

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1154	530	0	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	204	548	-	0	0	-
Stage 1	589	-	-	0	0	-
Stage 2	497	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	204	548	-	-	-	-
Mov Cap-2 Maneuver	338	-	-	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	497	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	338	548	-
HCM Lane V/C Ratio	-	0.071	0.298	-
HCM Control Delay (s)	-	16.5	14.3	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.2	1.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	887	210	251	199	141	49	543	694	273	845	38
Future Volume (veh/h)	44	887	210	251	199	141	49	543	694	273	845	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	964	228	273	216	153	53	590	754	297	918	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	468	882	208	229	1247	556	238	1173	523	275	1221	545
Arrive On Green	0.05	0.31	0.31	0.09	0.35	0.35	0.06	0.33	0.33	0.08	0.34	0.34
Sat Flow, veh/h	1781	2853	673	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	48	600	592	273	216	153	53	590	754	297	918	41
Grp Sat Flow(s),veh/h/ln	1781	1777	1749	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.1	37.1	37.1	11.4	5.0	8.3	2.2	16.0	39.6	9.1	27.4	2.1
Cycle Q Clear(g_c), s	2.1	37.1	37.1	11.4	5.0	8.3	2.2	16.0	39.6	9.1	27.4	2.1
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	468	549	541	229	1247	556	238	1173	523	275	1221	545
V/C Ratio(X)	0.10	1.09	1.10	1.19	0.17	0.28	0.22	0.50	1.44	1.08	0.75	0.08
Avail Cap(c_a), veh/h	492	549	541	229	1247	556	261	1173	523	275	1221	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.80	0.80	0.80	1.00	1.00	1.00	0.32	0.32	0.32
Uniform Delay (d), s/veh	25.1	41.5	41.5	34.5	26.9	28.0	25.9	32.3	40.2	34.9	34.9	26.5
Incr Delay (d2), s/veh	0.0	44.5	46.1	115.2	0.1	0.2	0.5	1.5	209.3	54.7	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	26.5	26.4	18.4	3.8	5.6	1.7	11.3	68.7	10.9	14.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	86.0	87.5	149.6	27.0	28.2	26.4	33.8	249.5	89.5	36.3	26.6
LnGrp LOS	C	F	F	F	C	C	C	C	F	F	D	C
Approach Vol, veh/h		1240			642			1397			1256	
Approach Delay, s/veh		84.3			79.4			150.0			48.5	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	46.6	12.0	48.0	15.0	45.0	17.0	43.0
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	39.7	8.0	40.5	9.1	39.6	11.4	37.1
Max Q Clear Time (g_c+I1), s	4.2	29.4	4.1	10.3	11.1	41.6	13.4	39.1
Green Ext Time (p_c), s	0.0	4.4	0.0	1.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	94.0
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	887	210	251	199	141	49	543	694	273	845	38
Future Volume (veh/h)	44	887	210	251	199	141	49	543	694	273	845	38
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	964	228	273	216	153	53	590	754	297	918	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	468	882	208	229	1247	556	238	1173	523	275	1221	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.05	0.31	0.31	0.09	0.35	0.35	0.06	0.33	0.33	0.08	0.34	0.34
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.1	86.0	87.5	149.6	27.0	28.2	26.4	33.8	249.5	89.5	36.3	26.6
Ln Grp LOS	C	F	F	F	C	C	C	C	F	F	D	C
Approach Vol, veh/h		1240			642			1397			1256	
Approach Delay, s/veh		84.3			79.4			150.0			48.5	
Approach LOS		F			E			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	13.4	46.6	12.0	48.0	15.0	45.0	17.0	43.0
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	39.7	8.0	40.5	9.1	39.6	11.4	37.1
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.4	3.7	5.1
Max Q Clear (g_c+I1), s	4.2	29.4	4.1	10.3	11.1	41.6	13.4	39.1
Green Ext Time (g_e), s	0.0	4.4	0.0	1.8	0.0	0.0	0.0	0.0
Prob of Phs Call (p_c)	0.83	1.00	0.80	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)	0.25	0.00	0.81	0.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		2853

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1585		1585		673

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	53	0	48	0	297	0	273	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.2	0.0	2.1	0.0	9.1	0.0	11.4	0.0
Cycle Q Clear Time (g_c), s	2.2	0.0	2.1	0.0	9.1	0.0	11.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	586	0	1013	0	406	0	470	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.6	0.0	37.1	0.0	39.6	0.0	38.5	0.0
Perm LT Serve Time (g_u), s	13.8	0.0	37.1	0.0	23.6	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	2.6	0.0	0.0	0.0	23.6	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	238	0	468	0	275	0	229	0
V/C Ratio (X)	0.22	0.00	0.10	0.00	1.08	0.00	1.19	0.00
Avail Cap (c_a), veh/h	261	0	492	0	275	0	229	0
Upstream Filter (I)	1.00	0.00	0.09	0.00	0.32	0.00	0.80	0.00
Uniform Delay (d1), s/veh	25.9	0.0	25.1	0.0	34.9	0.0	34.5	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	54.7	0.0	115.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.4	0.0	25.1	0.0	89.5	0.0	149.6	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	0.9	0.0	3.7	0.0	4.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	4.2	0.0	7.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.52	0.00	1.37	0.00	1.52	0.00
%ile Back of Q (95%), veh/ln	1.7	0.0	1.3	0.0	10.9	0.0	18.4	0.0
%ile Storage Ratio (RQ%)	0.21	0.00	0.43	0.00	1.23	0.00	3.89	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	5.5	0.0	10.9	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	918	0	216	0	590	0	600
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	27.4	0.0	5.0	0.0	16.0	0.0	37.1
Cycle Q Clear Time (g_c), s	0.0	27.4	0.0	5.0	0.0	16.0	0.0	37.1
Lane Grp Cap (c), veh/h	0	1221	0	1247	0	1173	0	549
V/C Ratio (X)	0.00	0.75	0.00	0.17	0.00	0.50	0.00	1.09
Avail Cap (c_a), veh/h	0	1221	0	1247	0	1173	0	549
Upstream Filter (I)	0.00	0.32	0.00	0.80	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	34.9	0.0	26.9	0.0	32.3	0.0	41.5
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.1	0.0	1.5	0.0	44.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.3	0.0	27.0	0.0	33.8	0.0	86.0
1st-Term Q (Q1), veh/ln	0.0	11.5	0.0	2.1	0.0	6.7	0.0	15.7
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.3	0.0	6.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.27	0.00	1.80	0.00	1.62	0.00	1.18
%ile Back of Q (95%), veh/ln	0.0	14.9	0.0	3.8	0.0	11.3	0.0	26.5
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.12	0.00	0.90	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	41	0	153	0	754	0	592
Grp Sat Flow (s), veh/h/ln	0	1585	0	1585	0	1585	0	1749
Q Serve Time (g_s), s	0.0	2.1	0.0	8.3	0.0	39.6	0.0	37.1
Cycle Q Clear Time (g_c), s	0.0	2.1	0.0	8.3	0.0	39.6	0.0	37.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.38
Lane Grp Cap (c), veh/h	0	545	0	556	0	523	0	541
V/C Ratio (X)	0.00	0.08	0.00	0.28	0.00	1.44	0.00	1.10
Avail Cap (c_a), veh/h	0	545	0	556	0	523	0	541
Upstream Filter (I)	0.00	0.32	0.00	0.80	0.00	1.00	0.00	0.09
Uniform Delay (d1), s/veh	0.0	26.5	0.0	28.0	0.0	40.2	0.0	41.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.0	209.3	0.0	46.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.6	0.0	28.2	0.0	249.5	0.0	87.5
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	3.1	0.0	14.8	0.0	15.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	30.4	0.0	6.9
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.52	0.00	1.18
%ile Back of Q (95%), veh/ln	0.0	1.4	0.0	5.6	0.0	68.7	0.0	26.4
%ile Storage Ratio (RQ%)	0.00	0.29	0.00	1.19	0.00	10.91	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	57.7	0.0	12.9
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	94.0
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	508	0	356	0	480	0	0	1506	0
Future Volume (veh/h)	0	0	0	508	0	356	0	480	0	0	1506	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	552	0	387	0	522	0	0	1637	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Cap, veh/h	0	652	0	741	0	542	0	1758	0	0	1758	0
Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.00	0.49	0.00	0.00	0.49	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1554	0	3741	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	552	0	387	0	522	0	0	1637	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1554	0	1777	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	17.5	0.0	13.0	0.0	5.2	0.0	0.0	25.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	17.5	0.0	13.0	0.0	5.2	0.0	0.0	25.9	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	652	0	741	0	542	0	1758	0	0	1758	0
V/C Ratio(X)	0.00	0.00	0.00	0.74	0.00	0.71	0.00	0.30	0.00	0.00	0.93	0.00
Avail Cap(c_a), veh/h	0	701	0	788	0	583	0	1758	0	0	1758	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.95	0.00	0.00	0.09	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.4	0.0	16.9	0.0	9.0	0.0	0.0	14.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.6	0.0	3.8	0.0	0.4	0.0	0.0	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	11.5	0.0	8.2	0.0	3.1	0.0	0.0	9.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.1	0.0	20.8	0.0	9.4	0.0	0.0	15.4	0.0
LnGrp LOS	A	A	A	C	A	C	A	A	A	A	B	A
Approach Vol, veh/h		0			939			522			1637	
Approach Delay, s/veh		0.0			21.5			9.4			15.4	
Approach LOS					C			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	34.6	25.4	34.6	25.4
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	28.1	22.5	28.1	22.5
Max Q Clear Time (g_c+I1), s	7.2	19.5	27.9	0.0
Green Ext Time (p_c), s	3.3	1.4	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	508	0	356	0	480	0	0	1506	0
Future Volume (veh/h)	0	0	0	508	0	356	0	480	0	0	1506	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	0	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	552	0	387	0	522	0	0	1637	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	0	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			No			No		
Cap, veh/h	0	652	0	741	0	542	0	1758	0	0	1758	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.00	0.49	0.00	0.00	0.49	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	22.1	0.0	20.8	0.0	9.4	0.0	0.0	15.4	0.0
Ln Grp LOS	A	A	A	C	A	C	A	A	A	A	B	A
Approach Vol, veh/h		0			939			522			1637	
Approach Delay, s/veh		0.0			21.5			9.4			15.4	
Approach LOS					C			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		34.6		25.4		34.6		25.4
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		28.1		22.5		28.1		22.5
Max Allow Headway (MAH), s		5.1		4.5		5.1		0.0
Max Q Clear (g_c+I1), s		7.2		19.5		27.9		0.0
Green Ext Time (g_e), s		3.3		1.4		0.2		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3741		0		3741		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1554		0		0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment				L				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	552	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	29.7	0.0	0.0	0.0	29.7	0.0	20.9
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	741	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	788	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	22.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.61	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	11.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	522	0	0	0	1637	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	5.2	0.0	0.0	0.0	25.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.2	0.0	0.0	0.0	25.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1758	0	0	0	1758	0	652
V/C Ratio (X)	0.00	0.30	0.00	0.00	0.00	0.93	0.00	0.00
Avail Cap (c_a), veh/h	0	1758	0	0	0	1758	0	701
Upstream Filter (I)	0.00	0.95	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.0	0.0	0.0	0.0	14.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	1.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.4	0.0	0.0	0.0	15.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	0.0	0.0	8.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.17	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	3.1	0.0	0.0	0.0	9.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.00	0.00	0.17	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	387	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1554	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	542	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	583	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	16.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.76	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	454	229	86	355	81	102	326	69	258	1295	433
Future Volume (veh/h)	55	454	229	86	355	81	102	326	69	258	1295	433
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	493	249	93	386	88	111	354	75	280	1408	471
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	594	299	245	778	175	210	1230	540	552	1391	612
Arrive On Green	0.06	0.26	0.26	0.07	0.27	0.27	0.07	0.35	0.35	0.12	0.39	0.39
Sat Flow, veh/h	1781	2276	1143	1781	2871	647	1781	3554	1562	1781	3554	1564
Grp Volume(v), veh/h	60	384	358	93	237	237	111	354	75	280	1408	471
Grp Sat Flow(s),veh/h/ln	1781	1777	1642	1781	1777	1742	1781	1777	1562	1781	1777	1564
Q Serve(g_s), s	2.1	18.4	18.5	3.3	10.1	10.3	3.5	6.5	3.0	8.6	35.2	23.6
Cycle Q Clear(g_c), s	2.1	18.4	18.5	3.3	10.1	10.3	3.5	6.5	3.0	8.6	35.2	23.6
Prop In Lane	1.00		0.70	1.00		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	464	429	245	481	472	210	1230	540	552	1391	612
V/C Ratio(X)	0.18	0.83	0.83	0.38	0.49	0.50	0.53	0.29	0.14	0.51	1.01	0.77
Avail Cap(c_a), veh/h	361	582	538	258	582	571	219	1230	540	559	1391	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.96	0.96	0.96	0.09	0.09	0.09
Uniform Delay (d), s/veh	22.0	31.3	31.4	23.4	27.6	27.7	21.6	21.4	20.2	14.6	27.4	23.9
Incr Delay (d2), s/veh	0.0	0.8	0.9	1.0	0.8	0.8	2.1	0.6	0.5	0.1	10.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	8.9	8.3	2.5	7.5	7.5	2.6	4.9	2.0	4.1	18.0	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	32.1	32.3	24.4	28.4	28.5	23.7	21.9	20.7	14.7	38.0	24.7
LnGrp LOS	C	C	C	C	C	C	C	C	C	B	F	C
Approach Vol, veh/h		802			567			540			2159	
Approach Delay, s/veh		31.4			27.8			22.1			32.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	40.6	9.4	29.4	14.6	36.5	10.3	28.5
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.6	28.1	7.0	* 30	11.0	24.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	5.5	37.2	4.1	12.3	10.6	8.5	5.3	20.5
Green Ext Time (p_c), s	0.0	0.0	0.0	2.4	0.0	2.2	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	30.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	454	229	86	355	81	102	326	69	258	1295	433
Future Volume (veh/h)	55	454	229	86	355	81	102	326	69	258	1295	433
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	493	249	93	386	88	111	354	75	280	1408	471
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	330	594	299	245	778	175	210	1230	540	552	1391	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.26	0.26	0.07	0.27	0.27	0.07	0.35	0.35	0.12	0.39	0.39
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.0	32.1	32.3	24.4	28.4	28.5	23.7	21.9	20.7	14.7	38.0	24.7
Ln Grp LOS	C	C	C	C	C	C	C	C	C	B	F	C
Approach Vol, veh/h		802			567			540			2159	
Approach Delay, s/veh		31.4			27.8			22.1			32.1	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	10.6	40.6	9.4	29.4	14.6	36.5	10.3	28.5
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	11.0	24.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.9	3.7	5.1	3.8	4.9	3.7	5.1
Max Q Clear (g_c+l1), s	5.5	37.2	4.1	12.3	10.6	8.5	5.3	20.5
Green Ext Time (g_e), s	0.0	0.0	0.0	2.4	0.0	2.2	0.0	3.0
Prob of Phs Call (p_c)	0.94	1.00	0.78	1.00	1.00	1.00	0.90	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.03	1.00	0.00	1.00	0.51

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	3554	2871	3554	2276

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1564	647	1562	1143

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	111	0	60	0	280	0	93	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	3.5	0.0	2.1	0.0	8.6	0.0	3.3	0.0
Cycle Q Clear Time (g_c), s	3.5	0.0	2.1	0.0	8.6	0.0	3.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	242	0	914	0	954	0	716	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	31.1	0.0	23.5	0.0	33.1	0.0	23.5	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	14.1	0.0	24.6	0.0	5.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.7	0.0	3.5	0.0	2.8	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	210	0	330	0	552	0	245	0
V/C Ratio (X)	0.53	0.00	0.18	0.00	0.51	0.00	0.38	0.00
Avail Cap (c_a), veh/h	219	0	361	0	559	0	258	0
Upstream Filter (I)	0.96	0.00	0.09	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	21.6	0.0	22.0	0.0	14.6	0.0	23.4	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.0	0.1	0.0	1.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	23.7	0.0	22.0	0.0	14.7	0.0	24.4	0.0
1st-Term Q (Q1), veh/ln	1.3	0.0	0.8	0.0	3.2	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.53	0.00	1.27	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	2.6	0.0	1.3	0.0	4.1	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	0.28	0.00	0.60	0.00	0.63	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1408	0	237	0	354	0	384
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	35.2	0.0	10.1	0.0	6.5	0.0	18.4
Cycle Q Clear Time (g_c), s	0.0	35.2	0.0	10.1	0.0	6.5	0.0	18.4
Lane Grp Cap (c), veh/h	0	1391	0	481	0	1230	0	464
V/C Ratio (X)	0.00	1.01	0.00	0.49	0.00	0.29	0.00	0.83
Avail Cap (c_a), veh/h	0	1391	0	582	0	1230	0	582
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.96	0.00	0.09
Uniform Delay (d1), s/veh	0.0	27.4	0.0	27.6	0.0	21.4	0.0	31.3
Incr Delay (d2), s/veh	0.0	10.6	0.0	0.8	0.0	0.6	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.0	0.0	28.4	0.0	21.9	0.0	32.1
1st-Term Q (Q1), veh/ln	0.0	13.8	0.0	4.1	0.0	2.6	0.0	7.4
2nd-Term Q (Q2), veh/ln	0.0	2.0	0.0	0.1	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.14	0.00	1.80	0.00	1.80	0.00	1.18
%ile Back of Q (95%), veh/ln	0.0	18.0	0.0	7.5	0.0	4.9	0.0	8.9
%ile Storage Ratio (RQ%)	0.00	1.29	0.00	0.15	0.00	0.19	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	471	0	237	0	75	0	358
Grp Sat Flow (s), veh/h/ln	0	1564	0	1742	0	1562	0	1642
Q Serve Time (g_s), s	0.0	23.6	0.0	10.3	0.0	3.0	0.0	18.5
Cycle Q Clear Time (g_c), s	0.0	23.6	0.0	10.3	0.0	3.0	0.0	18.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.37	0.00	1.00	0.00	0.70
Lane Grp Cap (c), veh/h	0	612	0	472	0	540	0	429
V/C Ratio (X)	0.00	0.77	0.00	0.50	0.00	0.14	0.00	0.83
Avail Cap (c_a), veh/h	0	612	0	571	0	540	0	538
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.96	0.00	0.09
Uniform Delay (d1), s/veh	0.0	23.9	0.0	27.7	0.0	20.2	0.0	31.4
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.8	0.0	0.5	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.7	0.0	28.5	0.0	20.7	0.0	32.3
1st-Term Q (Q1), veh/ln	0.0	8.0	0.0	4.1	0.0	1.0	0.0	6.9
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.17	0.00	1.80	0.00	1.80	0.00	1.19
%ile Back of Q (95%), veh/ln	0.0	9.6	0.0	7.5	0.0	2.0	0.0	8.3
%ile Storage Ratio (RQ%)	0.00	1.87	0.00	0.15	0.00	0.39	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.0
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	380	176	60	383	45	53	409	39	37	1490	131
Future Volume (veh/h)	64	380	176	60	383	45	53	409	39	37	1490	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	413	191	65	416	49	58	445	42	40	1620	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	501	232	211	777	654	120	1345	126	405	1356	117
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	925	1207	558	814	1870	1575	272	3270	307	895	3297	285
Grp Volume(v), veh/h	70	0	604	65	416	49	58	241	246	40	864	898
Grp Sat Flow(s),veh/h/ln	925	0	1766	814	1870	1575	272	1777	1800	895	1777	1805
Q Serve(g_s), s	3.7	0.0	18.2	4.6	10.0	1.1	0.0	5.5	5.6	1.9	24.7	24.7
Cycle Q Clear(g_c), s	13.7	0.0	18.2	22.9	10.0	1.1	24.7	5.5	5.6	7.5	24.7	24.7
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.17	1.00		0.16
Lane Grp Cap(c), veh/h	349	0	733	211	777	654	120	731	741	405	731	743
V/C Ratio(X)	0.20	0.00	0.82	0.31	0.54	0.07	0.48	0.33	0.33	0.10	1.18	1.21
Avail Cap(c_a), veh/h	351	0	736	212	779	656	120	731	741	405	731	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	18.4	0.0	15.6	25.8	13.2	10.6	30.0	12.0	12.0	14.6	17.7	17.7
Incr Delay (d2), s/veh	0.3	0.0	7.5	0.8	0.7	0.0	13.3	1.2	1.2	0.0	83.2	95.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	12.2	1.6	6.7	0.6	2.2	3.8	3.9	0.6	31.6	35.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	23.1	26.6	13.9	10.6	43.3	13.2	13.2	14.6	100.9	113.1
LnGrp LOS	B	A	C	C	B	B	D	B	B	B	F	F
Approach Vol, veh/h		674			530			545			1802	
Approach Delay, s/veh		22.7			15.2			16.4			105.1	
Approach LOS		C			B			B			F	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	29.7	30.3	29.7	30.3
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	26.7	20.2	26.7	24.9
Green Ext Time (p_c), s	0.0	1.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	62.4
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	380	176	60	383	45	53	409	39	37	1490	131
Future Volume (veh/h)	64	380	176	60	383	45	53	409	39	37	1490	131
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	0.98		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	413	191	65	416	49	58	445	42	40	1620	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	349	501	232	211	777	654	120	1345	126	405	1356	117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.41	0.41
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.6	0.0	23.1	26.6	13.9	10.6	43.3	13.2	13.2	14.6	100.9	113.1
Ln Grp LOS	B	A	C	C	B	B	D	B	B	B	F	F
Approach Vol, veh/h		674			530			545			1802	
Approach Delay, s/veh		22.7			15.2			16.4			105.1	
Approach LOS		C			B			B			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		29.7		30.3		29.7		30.3
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		6.1		5.2		5.2		5.1
Max Q Clear (g_c+I1), s		26.7		20.2		26.7		24.9
Green Ext Time (g_e), s		0.0		1.9		0.0		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		272		925		895		814
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3270		1207		3297		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		307		558		285		1575
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	58	0	70	0	40	0	65
Grp Sat Flow (s), veh/h/ln	0	272	0	925	0	895	0	814
Q Serve Time (g_s), s	0.0	0.0	0.0	3.7	0.0	1.9	0.0	4.6
Cycle Q Clear Time (g_c), s	0.0	24.7	0.0	13.7	0.0	7.5	0.0	22.9
Perm LT Sat Flow (s_l), veh/h/ln	0	272	0	925	0	895	0	814
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	24.7	0.0	24.9	0.0	24.7	0.0	24.9
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	14.9	0.0	19.1	0.0	6.7
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	3.7	0.0	1.9	0.0	4.6
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	120	0	349	0	405	0	211
V/C Ratio (X)	0.00	0.48	0.00	0.20	0.00	0.10	0.00	0.31
Avail Cap (c_a), veh/h	0	120	0	351	0	405	0	212
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.0	0.0	18.4	0.0	14.6	0.0	25.8
Incr Delay (d2), s/veh	0.0	13.3	0.0	0.3	0.0	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	43.3	0.0	18.6	0.0	14.6	0.0	26.6
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	0.7	0.0	0.3	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	2.2	0.0	1.3	0.0	0.6	0.0	1.6
%ile Storage Ratio (RQ%)	0.00	0.56	0.00	0.34	0.00	0.16	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	241	0	0	0	864	0	416
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	5.5	0.0	0.0	0.0	24.7	0.0	10.0
Cycle Q Clear Time (g_c), s	0.0	5.5	0.0	0.0	0.0	24.7	0.0	10.0
Lane Grp Cap (c), veh/h	0	731	0	0	0	731	0	777
V/C Ratio (X)	0.00	0.33	0.00	0.00	0.00	1.18	0.00	0.54
Avail Cap (c_a), veh/h	0	731	0	0	0	731	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	0.0	0.0	17.7	0.0	13.2
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	83.2	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.2	0.0	0.0	0.0	100.9	0.0	13.9
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.0	0.0	8.3	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	16.9	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.25	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.8	0.0	0.0	0.0	31.6	0.0	6.7
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	1.22	0.00	0.16
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	33.2	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	246	0	604	0	898	0	49
Grp Sat Flow (s), veh/h/ln	0	1800	0	1766	0	1805	0	1575
Q Serve Time (g_s), s	0.0	5.6	0.0	18.2	0.0	24.7	0.0	1.1
Cycle Q Clear Time (g_c), s	0.0	5.6	0.0	18.2	0.0	24.7	0.0	1.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.17	0.00	0.32	0.00	0.16	0.00	1.00
Lane Grp Cap (c), veh/h	0	741	0	733	0	743	0	654
V/C Ratio (X)	0.00	0.33	0.00	0.82	0.00	1.21	0.00	0.07
Avail Cap (c_a), veh/h	0	741	0	736	0	743	0	656
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.0	0.0	15.6	0.0	17.7	0.0	10.6
Incr Delay (d2), s/veh	0.0	1.2	0.0	7.5	0.0	95.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.2	0.0	23.1	0.0	113.1	0.0	10.6
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	6.1	0.0	8.5	0.0	0.3
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	1.5	0.0	19.7	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.59	0.00	1.27	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	3.9	0.0	12.2	0.0	35.6	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.35	0.00	1.38	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	38.9	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	62.4
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/11/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	185	453	247	131	22	231	476	135	30	582	45	82
Future Volume (vph)	185	453	247	131	22	231	476	135	30	582	45	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.99	0.97			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Frt	1.00	0.97	0.85			1.00	0.97		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1651	3045	1304			1651	3178		1650	3198		
Flt Permitted	0.17	1.00	1.00			0.13	1.00		0.15	1.00		
Satd. Flow (perm)	298	3045	1304			219	3178		260	3198		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	201	492	268	142	24	251	517	147	33	633	49	89
RTOR Reduction (vph)	0	0	142	0	0	0	19	0	0	7	0	0
Lane Group Flow (vph)	201	626	134	0	0	275	645	0	33	764	0	0
Confl. Peds. (#/hr)	7		9	2	9	2		7	11		1	9
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	43.0	28.7	28.7			47.9	31.7		26.7	26.7		
Effective Green, g (s)	43.0	28.7	28.7			47.9	31.7		26.7	26.7		
Actuated g/C Ratio	0.31	0.20	0.20			0.34	0.23		0.19	0.19		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	229	624	267			240	719		49	609		
v/s Ratio Prot	0.09	0.21				c0.13	0.20			0.24		
v/s Ratio Perm	0.18		0.10			c0.26			0.13			
v/c Ratio	0.88	1.00	0.50			1.15	0.90		0.67	1.25		
Uniform Delay, d1	39.6	55.6	49.3			40.2	52.6		52.6	56.6		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	29.2	36.8	6.6			103.1	16.2		55.1	127.4		
Delay (s)	68.8	92.5	56.0			143.3	68.8		107.7	184.1		
Level of Service	E	F	E			F	E		F	F		
Approach Delay (s)		79.0					90.6			180.9		
Approach LOS		E					F			F		

Intersection Summary			
HCM 2000 Control Delay	139.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	120.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	13	239	1274	58	142	164	122	9
Future Volume (vph)	13	239	1274	58	142	164	122	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	1.00			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.99			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1652	3278			3195	1345	
Flt Permitted		0.12	1.00			0.95	1.00	
Satd. Flow (perm)		211	3278			3195	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	260	1385	63	154	178	133	10
RTOR Reduction (vph)	0	0	2	0	0	0	109	0
Lane Group Flow (vph)	0	274	1446	0	0	345	21	0
Confl. Peds. (#/hr)	1	9		11	2	11	7	1
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		46.1	46.1			22.2	22.2	
Effective Green, g (s)		46.1	46.1			22.2	22.2	
Actuated g/C Ratio		0.33	0.33			0.16	0.16	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		205	1079			506	213	
v/s Ratio Prot		0.13	c0.44			c0.11	0.02	
v/s Ratio Perm		0.31						
v/c Ratio		1.34	1.34			0.68	0.10	
Uniform Delay, d1		39.5	47.0			55.6	50.3	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		180.7	159.4			4.5	0.4	
Delay (s)		220.2	206.3			60.1	50.7	
Level of Service		F	F			E	D	
Approach Delay (s)			208.5			57.5		
Approach LOS			F			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	12	30	218	30	72	12	59	388	32	12	15	47
Future Volume (vph)	12	30	218	30	72	12	59	388	32	12	15	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.99				1.00	1.00			1.00	1.00
Flpb, ped/bikes		0.99	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.98			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1633	3125				1645	3240			1652	1652
Flt Permitted		0.26	1.00				0.39	1.00			0.95	0.95
Satd. Flow (perm)		446	3125				684	3240			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	33	237	33	78	13	64	422	35	13	16	51
RTOR Reduction (vph)	0	0	15	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	46	333	0	0	0	77	469	0	0	16	51
Confl. Peds. (#/hr)	4	17		1	5	1	5		4	17	3	4
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		35.2	35.2				35.2	35.2			16.0	16.0
Effective Green, g (s)		35.2	35.2				35.2	35.2			16.0	16.0
Actuated g/C Ratio		0.20	0.20				0.20	0.20			0.09	0.09
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		87	611				133	633			146	146
v/s Ratio Prot			0.11					c0.14			0.01	0.03
v/s Ratio Perm		0.10					0.11					
v/c Ratio		0.53	0.54				0.58	0.74			0.11	0.35
Uniform Delay, d1		65.0	65.2				65.7	68.1			75.4	77.1
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		5.7	1.0				6.0	4.7			0.3	1.4
Delay (s)		70.7	66.2				71.7	72.8			75.8	78.6
Level of Service		E	E				E	E			E	E
Approach Delay (s)			66.7					72.6				
Approach LOS			E					E				

Intersection Summary			
HCM 2000 Control Delay	130.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	150.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	SBL2	SBL	SBT	SBR	SBR2	SEL	SET	SER	SER2	NWL
Lane Configurations												
Traffic Volume (vph)	278	6	18	237	881	106	1	35	1170	265	36	29
Future Volume (vph)	278	6	18	237	881	106	1	35	1170	265	36	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Lane Util. Factor	0.95	1.00		1.00	0.95	1.00		1.00	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.97		1.00	1.00	0.98		1.00	1.00	0.98	0.97	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	0.85	1.00
Flt Protected	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	1.00	0.95
Satd. Flow (prot)	3303	1437		1652	3303	1448		1646	3152	1321	1440	1651
Flt Permitted	1.00	1.00		0.95	1.00	1.00		0.39	1.00	1.00	1.00	0.08
Satd. Flow (perm)	3303	1437		1652	3303	1448		672	3152	1321	1440	144
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	302	7	20	258	958	115	1	38	1272	288	39	32
RTOR Reduction (vph)	0	0	0	0	0	73	0	0	0	0	29	0
Lane Group Flow (vph)	302	7	0	278	958	43	0	38	1301	259	10	32
Confl. Peds. (#/hr)		6	6	1		3	4	6		5	3	3
Turn Type	NA	Perm	Prot	Prot	NA	Perm		Perm	NA	Perm	Perm	Perm
Protected Phases	6		5	5	2				10			
Permitted Phases		6				2		10		10	10	14
Actuated Green, G (s)	34.7	34.7		34.0	52.9	52.9		48.2	48.2	48.2	48.2	48.2
Effective Green, g (s)	34.7	34.7		34.0	52.9	52.9		48.2	48.2	48.2	48.2	48.2
Actuated g/C Ratio	0.19	0.19		0.19	0.29	0.29		0.27	0.27	0.27	0.27	0.27
Clearance Time (s)	7.2	7.2		6.3	7.7	7.7		7.6	7.6	7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	636	277		312	970	425		179	844	353	385	38
v/s Ratio Prot	0.09			c0.17	c0.29				c0.41			
v/s Ratio Perm		0.00				0.03		0.06		0.20	0.01	0.22
v/c Ratio	0.47	0.03		0.89	0.99	0.10		0.21	1.54	0.73	0.03	0.84
Uniform Delay, d1	64.6	58.9		71.2	63.2	46.3		51.2	65.9	60.1	48.6	62.3
Progression Factor	1.00	1.00		1.24	0.70	1.31		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.5	0.2		3.3	6.3	0.0		0.6	249.6	7.7	0.0	85.4
Delay (s)	67.1	59.1		91.6	50.7	60.5		51.8	315.5	67.7	48.6	147.7
Level of Service	E	E		F	D	E		D	F	E	D	F
Approach Delay (s)	68.9				59.9				263.8			
Approach LOS	E				E				F			

Intersection Summary

Movement	NWT	NWR	NWR2
Lane Configurations			
Traffic Volume (vph)	332	185	21
Future Volume (vph)	332	185	21
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	7.6	7.6	
Lane Util. Factor	0.91	0.91	
Frpb, ped/bikes	1.00	0.96	
Flpb, ped/bikes	1.00	1.00	
Frt	0.98	0.85	
Flt Protected	1.00	1.00	
Satd. Flow (prot)	3100	1295	
Flt Permitted	1.00	1.00	
Satd. Flow (perm)	3100	1295	
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	361	201	23
RTOR Reduction (vph)	0	104	0
Lane Group Flow (vph)	407	74	0
Confl. Peds. (#/hr)		17	6
Turn Type	NA	Perm	
Protected Phases	14		
Permitted Phases		14	
Actuated Green, G (s)	48.2	48.2	
Effective Green, g (s)	48.2	48.2	
Actuated g/C Ratio	0.27	0.27	
Clearance Time (s)	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	
Lane Grp Cap (vph)	830	346	
v/s Ratio Prot	0.13		
v/s Ratio Perm		0.06	
v/c Ratio	0.49	0.21	
Uniform Delay, d1	55.5	51.2	
Progression Factor	1.00	1.00	
Incremental Delay, d2	0.5	0.3	
Delay (s)	56.0	51.5	
Level of Service	E	D	
Approach Delay (s)	59.5		
Approach LOS	E		

Intersection Summary

Future with Full Buildout Conditions – Year 2037

Afternoon Peak Hour

HCM 6th Signalized Intersection Summary
1: Morella Ave/SR 170 SB Off Ramp & Burbank Blvd

02/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1727	8	0	1639	0	1	0	19	469	9	205
Future Volume (veh/h)	0	1727	8	0	1639	0	1	0	19	469	9	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1877	9	0	1782	0	1	0	21	372	204	223
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Cap, veh/h	0	2581	12	0	1749	0	3	0	64	507	232	254
Arrive On Green	0.00	0.49	0.49	0.00	0.49	0.00	0.04	0.00	0.04	0.28	0.28	0.28
Sat Flow, veh/h	0	5413	25	0	3741	0	72	0	1516	1781	816	892
Grp Volume(v), veh/h	0	1218	668	0	1782	0	22	0	0	372	0	427
Grp Sat Flow(s),veh/h/ln	0	1702	1866	0	1777	0	1588	0	0	1781	0	1709
Q Serve(g_s), s	0.0	25.5	25.5	0.0	44.3	0.0	1.2	0.0	0.0	17.0	0.0	21.5
Cycle Q Clear(g_c), s	0.0	25.5	25.5	0.0	44.3	0.0	1.2	0.0	0.0	17.0	0.0	21.5
Prop In Lane	0.00		0.01	0.00		0.00	0.05		0.95	1.00		0.52
Lane Grp Cap(c), veh/h	0	1675	918	0	1749	0	67	0	0	507	0	486
V/C Ratio(X)	0.00	0.73	0.73	0.00	1.02	0.00	0.33	0.00	0.00	0.73	0.00	0.88
Avail Cap(c_a), veh/h	0	1675	918	0	1749	0	159	0	0	590	0	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.1	18.1	0.0	22.9	0.0	41.9	0.0	0.0	29.1	0.0	30.7
Incr Delay (d2), s/veh	0.0	2.8	5.0	0.0	26.4	0.0	2.8	0.0	0.0	4.0	0.0	13.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	14.6	16.5	0.0	30.8	0.0	0.9	0.0	0.0	11.9	0.0	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	20.9	23.1	0.0	49.3	0.0	44.6	0.0	0.0	33.1	0.0	44.0
LnGrp LOS	A	C	C	A	F	A	D	A	A	C	A	D
Approach Vol, veh/h		1886			1782			22			799	
Approach Delay, s/veh		21.7			49.3			44.6			38.9	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	49.4	30.8	49.4	9.8
Change Period (Y+Rc), s	5.1	* 5.2	5.1	6.0
Max Green Setting (Gmax), s	34.9	* 30	34.9	9.0
Max Q Clear Time (g_c+I1), s	27.5	23.5	46.3	3.2
Green Ext Time (p_c), s	5.9	2.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1727	8	0	1639	0	1	0	19	469	9	205
Future Volume (veh/h)	0	1727	8	0	1639	0	1	0	19	469	9	205
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1877	9	0	1782	0	1	0	21	372	204	223
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	0	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			Yes			Yes		
Cap, veh/h	0	2581	12	0	1749	0	3	0	64	507	232	254
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.49	0.49	0.00	0.49	0.00	0.04	0.00	0.04	0.28	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	20.9	23.1	0.0	49.3	0.0	44.6	0.0	0.0	33.1	0.0	44.0
Ln Grp LOS	A	C	C	A	F	A	D	A	A	C	A	D
Approach Vol, veh/h		1886			1782			22			799	
Approach Delay, s/veh		21.7			49.3			44.6			38.9	
Approach LOS		C			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		8.0	12.0	10.0		8.0		
Phs Duration (G+Y+Rc), s		49.4	9.8	30.8		49.4		
Change Period (Y+Rc), s		5.1	6.0	* 5.2		5.1		
Max Green (Gmax), s		34.9	9.0	* 30		34.9		
Max Allow Headway (MAH), s		5.0	5.7	4.5		5.0		
Max Q Clear (g_c+I1), s		27.5	3.2	23.5		46.3		
Green Ext Time (g_e), s		5.9	0.0	2.1		0.0		
Prob of Phs Call (p_c)		1.00	0.43	1.00		1.00		
Prob of Max Out (p_x)		0.91	0.93	0.68		1.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		0	72	1781		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		5413	0	816		3741		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		25	1516	892		0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment			L+T+R	L				

Lanes in Grp	0	0	1	1	0	0	0	0
Grp Vol (v), veh/h	0	0	22	372	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1588	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	1.2	17.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	1.2	17.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	44.3	0.0	0.0	0.0	44.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.05	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	67	507	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.33	0.73	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	159	590	0	0	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	41.9	29.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.8	4.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	44.6	33.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.5	6.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.60	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.9	11.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.09	1.27	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1218	0	0	0	1782	0	0
Grp Sat Flow (s), veh/h/ln	0	1702	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	25.5	0.0	0.0	0.0	44.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	25.5	0.0	0.0	0.0	44.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1675	0	0	0	1749	0	0
V/C Ratio (X)	0.00	0.73	0.00	0.00	0.00	1.02	0.00	0.00
Avail Cap (c_a), veh/h	0	1675	0	0	0	1749	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	0.0	0.0	22.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.0	0.0	26.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.9	0.0	0.0	0.0	49.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.9	0.0	0.0	0.0	16.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	0.0	0.0	6.4	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.53	1.00	1.00	0.00	1.37	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	14.6	0.0	0.0	0.0	30.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.62	0.00	0.00	0.00	4.39	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment		T+R		T+R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	668	0	427	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1866	0	1709	0	0	0	0
Q Serve Time (g_s), s	0.0	25.5	0.0	21.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	25.5	0.0	21.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.95	0.52	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	918	0	486	0	0	0	0
V/C Ratio (X)	0.00	0.73	0.00	0.88	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	918	0	566	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	30.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.0	0.0	13.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.1	0.0	44.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	9.8	0.0	8.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	1.8	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.49	1.00	1.52	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	16.5	0.0	15.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.70	0.00	1.64	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Future Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	1757	771	134	1757	771	270	711	597	245	711	597
Arrive On Green	0.49	0.49	0.49	0.99	0.99	0.99	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	208	3554	1559	345	3554	1559	778	1870	1571	777	1870	1571
Grp Volume(v), veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Grp Sat Flow(s),veh/h/ln	208	1777	1559	345	1777	1559	778	1870	1571	777	1870	1571
Q Serve(g_s), s	0.0	30.4	2.9	14.1	44.5	0.1	21.9	15.0	10.9	5.2	12.3	14.0
Cycle Q Clear(g_c), s	44.5	30.4	2.9	44.5	44.5	0.1	34.2	15.0	10.9	20.2	12.3	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	1757	771	134	1757	771	270	711	597	245	711	597
V/C Ratio(X)	1.41	0.81	0.12	0.78	1.10	0.12	1.36	0.56	0.43	0.22	0.47	0.53
Avail Cap(c_a), veh/h	80	1757	771	134	1757	771	270	711	597	245	711	597
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.14	0.14	0.14	0.57	0.57	0.57	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	19.2	12.2	19.1	0.5	0.3	37.3	22.0	20.7	29.9	21.1	21.7
Incr Delay (d2), s/veh	244.2	4.2	0.3	6.2	48.6	0.0	176.0	0.6	0.3	0.4	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.9	17.8	1.8	3.0	15.4	0.1	29.2	9.3	6.2	1.7	8.8	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	289.2	23.4	12.5	25.3	49.1	0.3	213.3	22.5	21.0	30.4	21.6	22.5
LnGrp LOS	F	C	B	C	F	A	F	C	C	C	C	C
Approach Vol, veh/h		1629			2138			1021			706	
Approach Delay, s/veh		41.2			45.8			90.7			22.7	
Approach LOS		D			D			F			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	50.0	40.0	50.0	40.0
Change Period (Y+Rc), s	* 5.5	5.8	* 5.5	5.8
Max Green Setting (Gmax), s	* 45	34.2	* 45	34.2
Max Q Clear Time (g_c+I1), s	46.5	36.2	46.5	22.2
Green Ext Time (p_c), s	0.0	0.0	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Future Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	80	1757	771	134	1757	771	270	711	597	245	711	597
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.49	0.49	0.49	0.99	0.99	0.99	0.38	0.38	0.38	0.38	0.38	0.38
Unsig. Movement Delay												
Ln Grp Delay, s/veh	289.2	23.4	12.5	25.3	49.1	0.3	213.3	22.5	21.0	30.4	21.6	22.5
Ln Grp LOS	F	C	B	C	F	A	F	C	C	C	C	C
Approach Vol, veh/h		1629			2138			1021			706	
Approach Delay, s/veh		41.2			45.8			90.7			22.7	
Approach LOS		D			D			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		5.0
Phs Duration (G+Y+Rc), s		50.0		40.0		50.0		40.0
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5		5.8
Max Green (Gmax), s		* 45		34.2		* 45		34.2
Max Allow Headway (MAH), s		5.8		5.0		5.2		4.6
Max Q Clear (g_c+I1), s		46.5		36.2		46.5		22.2
Green Ext Time (g_e), s		0.0		0.0		0.0		2.7
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		0.18
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		208		778		345		777
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1559		1571		1559		1571
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	113	0	367	0	104	0	53
Grp Sat Flow (s), veh/h/ln	0	208	0	778	0	345	0	777
Q Serve Time (g_s), s	0.0	0.0	0.0	21.9	0.0	14.1	0.0	5.2
Cycle Q Clear Time (g_c), s	0.0	44.5	0.0	34.2	0.0	44.5	0.0	20.2
Perm LT Sat Flow (s_l), veh/h/ln	0	208	0	778	0	345	0	777
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	44.5	0.0	34.2	0.0	44.5	0.0	34.2
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	21.9	0.0	14.1	0.0	19.2
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	21.9	0.0	14.1	0.0	5.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	80	0	270	0	134	0	245
V/C Ratio (X)	0.00	1.41	0.00	1.36	0.00	0.78	0.00	0.22
Avail Cap (c_a), veh/h	0	80	0	270	0	134	0	245
Upstream Filter (I)	0.00	1.00	0.00	0.57	0.00	0.14	0.00	1.00
Uniform Delay (d1), s/veh	0.0	45.0	0.0	37.3	0.0	19.1	0.0	29.9
Incr Delay (d2), s/veh	0.0	244.2	0.0	176.0	0.0	6.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	289.2	0.0	213.3	0.0	25.3	0.0	30.4
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	5.8	0.0	1.9	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	5.4	0.0	13.2	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.54	0.00	1.42	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	12.9	0.0	29.2	0.0	3.0	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	2.62	0.00	11.41	0.00	0.55	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	8.2	0.0	24.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1424	0	397	0	1941	0	337
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	30.4	0.0	15.0	0.0	44.5	0.0	12.3
Cycle Q Clear Time (g_c), s	0.0	30.4	0.0	15.0	0.0	44.5	0.0	12.3
Lane Grp Cap (c), veh/h	0	1757	0	711	0	1757	0	711
V/C Ratio (X)	0.00	0.81	0.00	0.56	0.00	1.10	0.00	0.47
Avail Cap (c_a), veh/h	0	1757	0	711	0	1757	0	711
Upstream Filter (I)	0.00	1.00	0.00	0.57	0.00	0.14	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.2	0.0	22.0	0.0	0.5	0.0	21.1
Incr Delay (d2), s/veh	0.0	4.2	0.0	0.6	0.0	48.6	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.4	0.0	22.5	0.0	49.1	0.0	21.6
1st-Term Q (Q1), veh/ln	0.0	11.1	0.0	6.1	0.0	0.2	0.0	5.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.1	0.0	11.9	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.47	0.00	1.50	0.00	1.28	0.00	1.73
%ile Back of Q (95%), veh/ln	0.0	17.8	0.0	9.3	0.0	15.4	0.0	8.8
%ile Storage Ratio (RQ%)	0.00	3.83	0.00	0.19	0.00	1.36	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	46.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	92	0	257	0	93	0	316
Grp Sat Flow (s), veh/h/ln	0	1559	0	1571	0	1559	0	1571
Q Serve Time (g_s), s	0.0	2.9	0.0	10.9	0.0	0.1	0.0	14.0
Cycle Q Clear Time (g_c), s	0.0	2.9	0.0	10.9	0.0	0.1	0.0	14.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	771	0	597	0	771	0	597
V/C Ratio (X)	0.00	0.12	0.00	0.43	0.00	0.12	0.00	0.53
Avail Cap (c_a), veh/h	0	771	0	597	0	771	0	597
Upstream Filter (I)	0.00	1.00	0.00	0.57	0.00	0.14	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.2	0.0	20.7	0.0	0.3	0.0	21.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.5	0.0	21.0	0.0	0.3	0.0	22.5
1st-Term Q (Q1), veh/ln	0.0	0.9	0.0	3.7	0.0	0.0	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.64	0.00	1.80	0.00	1.74
%ile Back of Q (95%), veh/ln	0.0	1.8	0.0	6.2	0.0	0.1	0.0	8.6
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	1.65	0.00	0.01	0.00	2.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1469	0	0	1260	10	685	74	264	6	0	23
Future Volume (veh/h)	25	1469	0	0	1260	10	685	74	264	6	0	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1597	0	0	1370	11	556	345	287	7	0	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	149	1757	0	0	1757	779	477	252	209	21	0	76
Arrive On Green	0.66	0.66	0.00	0.00	0.49	0.49	0.27	0.27	0.27	0.06	0.00	0.06
Sat Flow, veh/h	392	3647	0	0	3647	1575	1781	940	782	350	0	1250
Grp Volume(v), veh/h	27	1597	0	0	1370	11	556	0	632	32	0	0
Grp Sat Flow(s),veh/h/ln	392	1777	0	0	1777	1575	1781	0	1722	1600	0	0
Q Serve(g_s), s	5.2	34.4	0.0	0.0	28.6	0.3	24.1	0.0	24.1	1.7	0.0	0.0
Cycle Q Clear(g_c), s	33.8	34.4	0.0	0.0	28.6	0.3	24.1	0.0	24.1	1.7	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.45	0.22		0.78
Lane Grp Cap(c), veh/h	149	1757	0	0	1757	779	477	0	461	98	0	0
V/C Ratio(X)	0.18	0.91	0.00	0.00	0.78	0.01	1.17	0.00	1.37	0.33	0.00	0.00
Avail Cap(c_a), veh/h	149	1757	0	0	1757	779	477	0	461	178	0	0
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	0.00	0.00	0.09	0.09	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.6	13.7	0.0	0.0	18.7	11.6	33.0	0.0	33.0	40.5	0.0	0.0
Incr Delay (d2), s/veh	1.4	4.8	0.0	0.0	0.3	0.0	95.3	0.0	180.0	1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	13.0	0.0	0.0	12.0	0.2	32.9	0.0	49.3	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	18.5	0.0	0.0	19.0	11.6	128.3	0.0	213.0	42.4	0.0	0.0
LnGrp LOS	C	B	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1624			1381			1188			32	
Approach Delay, s/veh		18.6			19.0			173.3			42.4	
Approach LOS		B			B			F			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	49.6	10.9	49.6	29.5
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	5.4
Max Green Setting (Gmax), s	* 40	* 10	* 40	24.1
Max Q Clear Time (g_c+I1), s	36.4	3.7	30.6	26.1
Green Ext Time (p_c), s	3.3	0.0	7.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	62.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1469	0	0	1260	10	685	74	264	6	0	23
Future Volume (veh/h)	25	1469	0	0	1260	10	685	74	264	6	0	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	1597	0	0	1370	11	556	345	287	7	0	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			No			Yes			Yes		
Cap, veh/h	149	1757	0	0	1757	779	477	252	209	21	0	76
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.66	0.66	0.00	0.00	0.49	0.49	0.27	0.27	0.27	0.06	0.00	0.06
Unsig. Movement Delay												
Ln Grp Delay, s/veh	27.0	18.5	0.0	0.0	19.0	11.6	128.3	0.0	213.0	42.4	0.0	0.0
Ln Grp LOS	C	B	A	A	B	B	F	A	F	D	A	A
Approach Vol, veh/h		1624			1381			1188			32	
Approach Delay, s/veh		18.6			19.0			173.3			42.4	
Approach LOS		B			B			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4		6		
Case No		6.0	10.0	12.0		7.0		
Phs Duration (G+Y+Rc), s		49.6	29.5	10.9		49.6		
Change Period (Y+Rc), s		* 5.1	5.4	* 5.4		* 5.1		
Max Green (Gmax), s		* 40	24.1	* 10		* 40		
Max Allow Headway (MAH), s		6.9	4.5	5.7		6.8		
Max Q Clear (g_c+l1), s		36.4	26.1	3.7		30.6		
Green Ext Time (g_e), s		3.3	0.0	0.0		7.7		
Prob of Phs Call (p_c)		1.00	1.00	0.59		1.00		
Prob of Max Out (p_x)		0.00	1.00	0.57		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		392	1781	350		0		
Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3647	940	0		3647		
Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	782	1250		1575		
Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L	L+T+R				

Lanes in Grp	0	1	1	1	0	0	0	0
Grp Vol (v), veh/h	0	27	556	32	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	392	1781	1600	0	0	0	0
Q Serve Time (g_s), s	0.0	5.2	24.1	1.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	33.8	24.1	1.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	392	1781	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	44.5	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	15.9	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	44.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.22	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	149	477	98	0	0	0	0
V/C Ratio (X)	0.00	0.18	1.17	0.33	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	149	477	178	0	0	0	0
Upstream Filter (I)	0.00	0.52	1.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.6	33.0	40.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	95.3	1.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	27.0	128.3	42.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.4	9.7	0.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	12.6	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.47	1.80	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.9	32.9	1.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.35	2.53	0.08	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	19.8	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1597	0	0	0	1370	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	34.4	0.0	0.0	0.0	28.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	34.4	0.0	0.0	0.0	28.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	1757	0	0	0	1757	0	0
V/C Ratio (X)	0.00	0.91	0.00	0.00	0.00	0.78	0.00	0.00
Avail Cap (c_a), veh/h	0	1757	0	0	0	1757	0	0
Upstream Filter (I)	0.00	0.52	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.7	0.0	0.0	0.0	18.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.8	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.5	0.0	0.0	0.0	19.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.2	0.0	0.0	0.0	10.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.39	1.00	1.00	0.00	1.15	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	13.0	0.0	0.0	0.0	12.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.14	0.00	0.00	0.00	0.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R			R		
Lanes in Grp	0	0	1	0	0	1	0	0
Grp Vol (v), veh/h	0	0	632	0	0	11	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1722	0	0	1575	0	0
Q Serve Time (g_s), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	24.1	0.0	0.0	0.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.45	0.78	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	461	0	0	779	0	0
V/C Ratio (X)	0.00	0.00	1.37	0.00	0.00	0.01	0.00	0.00
Avail Cap (c_a), veh/h	0	0	461	0	0	779	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.0	0.0	0.0	11.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	180.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	213.0	0.0	0.0	11.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	9.4	0.0	0.0	0.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	23.1	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.52	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	49.3	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	3.79	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	42.7	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	62.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	385	766	413	219	768	128	302	911	131	77	683	77
Future Volume (veh/h)	385	766	413	219	768	128	302	911	131	77	683	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.90	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	418	833	449	238	835	139	328	990	142	84	742	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	566	653	231	842	140	321	651	494	172	938	106
Arrive On Green	0.12	0.30	0.30	0.10	0.28	0.28	0.12	0.35	0.35	0.06	0.29	0.29
Sat Flow, veh/h	1781	1870	1549	1781	3036	505	1781	1870	1419	1781	3187	361
Grp Volume(v), veh/h	418	833	449	238	489	485	328	990	142	84	413	413
Grp Sat Flow(s),veh/h/ln	1781	1870	1549	1781	1777	1764	1781	1870	1419	1781	1777	1771
Q Serve(g_s), s	14.5	36.3	28.5	11.5	32.9	32.9	14.0	41.8	8.7	3.8	25.7	25.7
Cycle Q Clear(g_c), s	14.5	36.3	28.5	11.5	32.9	32.9	14.0	41.8	8.7	3.8	25.7	25.7
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	277	566	653	231	493	490	321	651	494	172	523	521
V/C Ratio(X)	1.51	1.47	0.69	1.03	0.99	0.99	1.02	1.52	0.29	0.49	0.79	0.79
Avail Cap(c_a), veh/h	277	566	653	231	493	490	321	651	494	208	523	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	41.8	28.5	33.2	43.2	43.2	30.5	39.1	28.3	31.2	39.0	39.0
Incr Delay (d2), s/veh	230.3	213.4	0.5	26.5	10.3	10.3	56.3	241.8	1.5	2.2	11.6	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	31.3	67.0	11.9	7.9	17.3	17.2	16.9	94.6	5.6	3.1	18.5	18.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	265.3	255.3	29.0	59.7	53.5	53.5	86.8	280.9	29.8	33.4	50.6	50.7
LnGrp LOS	F	F	C	F	D	D	F	F	C	C	D	D
Approach Vol, veh/h		1700			1212			1460			910	
Approach Delay, s/veh		198.0			54.7			212.9			49.0	
Approach LOS		F			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	42.0	20.0	41.0	20.0	39.0	13.5	47.5
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green Setting (Gmax), s	* 12	* 36	14.0	* 35	* 15	* 33	10.0	* 39
Max Q Clear Time (g_c+I1), s	13.5	38.3	16.0	27.7	16.5	34.9	5.8	43.8
Green Ext Time (p_c), s	0.0	0.0	0.0	3.0	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	143.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	385	766	413	219	768	128	302	911	131	77	683	77
Future Volume (veh/h)	385	766	413	219	768	128	302	911	131	77	683	77
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.98	1.00		0.90	1.00		0.93
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	418	833	449	238	835	139	328	990	142	84	742	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	277	566	653	231	842	140	321	651	494	172	938	106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.30	0.30	0.10	0.28	0.28	0.12	0.35	0.35	0.06	0.29	0.29
Unsig. Movement Delay												
Ln Grp Delay, s/veh	265.3	255.3	29.0	59.7	53.5	53.5	86.8	280.9	29.8	33.4	50.6	50.7
Ln Grp LOS	F	F	C	F	D	D	F	F	C	C	D	D
Approach Vol, veh/h		1700			1212			1460			910	
Approach Delay, s/veh		198.0			54.7			212.9			49.0	
Approach LOS		F			D			F			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phs Duration (G+Y+Rc), s	17.0	42.0	20.0	41.0	20.0	39.0	13.5	47.5
Change Period (Y+Rc), s	* 5.5	* 5.7	6.0	* 5.7	* 5.5	* 5.7	6.0	* 5.7
Max Green (Gmax), s	* 12	* 36	14.0	* 35	* 15	* 33	10.0	* 39
Max Allow Headway (MAH), s	3.7	4.7	3.8	5.2	3.7	5.1	3.8	5.0
Max Q Clear (g_c+I1), s	13.5	38.3	16.0	27.7	16.5	34.9	5.8	43.8
Green Ext Time (g_e), s	0.0	0.0	0.0	3.0	0.0	0.0	0.1	0.0
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	1.00	0.00	0.62	0.00

Left-Turn Movement Data				
Assigned Mvmt	1	3	5	7
Mvmt Sat Flow, veh/h	1781	1781	1781	1781

Through Movement Data				
Assigned Mvmt	2	4	6	8
Mvmt Sat Flow, veh/h	1870	3187	3036	1870

Right-Turn Movement Data				
Assigned Mvmt	12	14	16	18
Mvmt Sat Flow, veh/h	1549	361	505	1419

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	238	0	328	0	418	0	84	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	11.5	0.0	14.0	0.0	14.5	0.0	3.8	0.0
Cycle Q Clear Time (g_c), s	11.5	0.0	14.0	0.0	14.5	0.0	3.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	431	0	661	0	577	0	497	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	33.3	0.0	37.3	0.0	33.3	0.0	35.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	9.6	0.0	0.4	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	9.6	0.0	0.4	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	231	0	321	0	277	0	172	0
V/C Ratio (X)	1.03	0.00	1.02	0.00	1.51	0.00	0.49	0.00
Avail Cap (c_a), veh/h	231	0	321	0	277	0	208	0
Upstream Filter (I)	0.09	0.00	1.00	0.00	0.09	0.00	1.00	0.00
Uniform Delay (d1), s/veh	33.2	0.0	30.5	0.0	35.0	0.0	31.2	0.0
Incr Delay (d2), s/veh	26.5	0.0	56.3	0.0	230.3	0.0	2.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	59.7	0.0	86.8	0.0	265.3	0.0	33.4	0.0
1st-Term Q (Q1), veh/ln	4.8	0.0	6.3	0.0	6.1	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	1.7	0.0	5.0	0.0	17.7	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.21	0.00	1.50	0.00	1.32	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	7.9	0.0	16.9	0.0	31.3	0.0	3.1	0.0
%ile Storage Ratio (RQ%)	1.25	0.00	5.98	0.00	2.84	0.00	0.61	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	1.8	0.0	1.9	0.0	35.2	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.3	0.0	0.4	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	833	0	413	0	489	0	990
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	36.3	0.0	25.7	0.0	32.9	0.0	41.8
Cycle Q Clear Time (g_c), s	0.0	36.3	0.0	25.7	0.0	32.9	0.0	41.8
Lane Grp Cap (c), veh/h	0	566	0	523	0	493	0	651
V/C Ratio (X)	0.00	1.47	0.00	0.79	0.00	0.99	0.00	1.52
Avail Cap (c_a), veh/h	0	566	0	523	0	493	0	651
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	41.8	0.0	39.0	0.0	43.2	0.0	39.1
Incr Delay (d2), s/veh	0.0	213.4	0.0	11.6	0.0	10.3	0.0	241.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	255.3	0.0	50.6	0.0	53.5	0.0	280.9
1st-Term Q (Q1), veh/ln	0.0	16.1	0.0	11.0	0.0	14.0	0.0	18.6
2nd-Term Q (Q2), veh/ln	0.0	33.5	0.0	1.7	0.0	1.4	0.0	43.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.35	0.00	1.46	0.00	1.13	0.00	1.52
%ile Back of Q (95%), veh/ln	0.0	67.0	0.0	18.5	0.0	17.3	0.0	94.6
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	3.67	0.00	0.17	0.00	33.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	66.8	0.0	0.0	0.0	0.0	0.0	84.7
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	449	0	413	0	485	0	142
Grp Sat Flow (s), veh/h/ln	0	1549	0	1771	0	1764	0	1419
Q Serve Time (g_s), s	0.0	28.5	0.0	25.7	0.0	32.9	0.0	8.7
Cycle Q Clear Time (g_c), s	0.0	28.5	0.0	25.7	0.0	32.9	0.0	8.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	1585.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.20	0.00	0.29	0.00	1.00
Lane Grp Cap (c), veh/h	0	653	0	521	0	490	0	494
V/C Ratio (X)	0.00	0.69	0.00	0.79	0.00	0.99	0.00	0.29
Avail Cap (c_a), veh/h	0	653	0	521	0	490	0	494
Upstream Filter (I)	0.00	0.09	0.00	1.00	0.00	0.09	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.5	0.0	39.0	0.0	43.2	0.0	28.3
Incr Delay (d2), s/veh	0.0	0.5	0.0	11.7	0.0	10.3	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.0	0.0	50.7	0.0	53.5	0.0	29.8
1st-Term Q (Q1), veh/ln	0.0	10.3	0.0	11.0	0.0	13.9	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.7	0.0	1.4	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.15	0.00	1.46	0.00	1.13	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.9	0.0	18.5	0.0	17.2	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	3.67	0.00	0.17	0.00	1.99
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	143.6
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	658	82	118	739	92	152	1007	212	101	790	144
Future Volume (veh/h)	127	658	82	118	739	92	152	1007	212	101	790	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	715	89	128	803	100	165	1095	230	110	859	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	860	708	165	860	708	180	1481	636	145	1242	227
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	617	1870	1540	677	1870	1540	554	3554	1526	413	2980	545
Grp Volume(v), veh/h	138	715	89	128	803	100	165	1095	230	110	512	504
Grp Sat Flow(s),veh/h/ln	617	1870	1540	677	1870	1540	554	1777	1526	413	1777	1748
Q Serve(g_s), s	4.8	30.1	3.0	11.3	36.6	3.4	16.2	23.4	9.3	14.1	21.3	21.3
Cycle Q Clear(g_c), s	41.4	30.1	3.0	41.4	36.6	3.4	37.5	23.4	9.3	37.5	21.3	21.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	113	860	708	165	860	708	180	1481	636	145	740	728
V/C Ratio(X)	1.22	0.83	0.13	0.77	0.93	0.14	0.92	0.74	0.36	0.76	0.69	0.69
Avail Cap(c_a), veh/h	113	860	708	165	860	708	180	1481	636	145	740	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	0.39	0.39	0.39	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	21.2	13.9	41.2	23.0	14.0	40.1	22.1	18.0	40.8	21.5	21.5
Incr Delay (d2), s/veh	106.1	0.9	0.0	29.1	18.2	0.4	23.2	0.8	0.1	20.5	2.8	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	13.7	1.4	7.4	25.7	2.1	7.0	12.1	4.8	5.8	13.5	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	150.4	22.2	14.0	70.4	41.2	14.5	63.3	22.9	18.2	61.4	24.3	24.3
LnGrp LOS	F	C	B	E	D	B	E	C	B	E	C	C
Approach Vol, veh/h		942			1031			1490			1126	
Approach Delay, s/veh		40.2			42.2			26.7			27.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	47.0	43.0	47.0	43.0
Change Period (Y+Rc), s	* 5.6	* 5.5	* 5.6	* 5.5
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	43.4	39.5	43.4	39.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	658	82	118	739	92	152	1007	212	101	790	144
Future Volume (veh/h)	127	658	82	118	739	92	152	1007	212	101	790	144
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	715	89	128	803	100	165	1095	230	110	859	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	113	860	708	165	860	708	180	1481	636	145	1242	227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.42	0.42	0.42	0.42	0.42	0.42
Unsig. Movement Delay												
Ln Grp Delay, s/veh	150.4	22.2	14.0	70.4	41.2	14.5	63.3	22.9	18.2	61.4	24.3	24.3
Ln Grp LOS	F	C	B	E	D	B	E	C	B	E	C	C
Approach Vol, veh/h		942			1031			1490			1126	
Approach Delay, s/veh		40.2			42.2			26.7			27.9	
Approach LOS		D			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		5.0		5.0		5.0		6.0
Phs Duration (G+Y+Rc), s		47.0		43.0		47.0		43.0
Change Period (Y+Rc), s		* 5.6		* 5.5		* 5.6		* 5.5
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		5.2		5.1		5.1		5.5
Max Q Clear (g_c+I1), s		43.4		39.5		43.4		39.5
Green Ext Time (g_e), s		0.0		0.0		0.0		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		617		554		677		413
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		3554		1870		2980
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1540		1526		1540		545
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	138	0	165	0	128	0	110
Grp Sat Flow (s), veh/h/ln	0	617	0	554	0	677	0	413
Q Serve Time (g_s), s	0.0	4.8	0.0	16.2	0.0	11.3	0.0	14.1
Cycle Q Clear Time (g_c), s	0.0	41.4	0.0	37.5	0.0	41.4	0.0	37.5
Perm LT Sat Flow (s_l), veh/h/ln	0	617	0	554	0	677	0	413
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	41.4	0.0	37.5	0.0	41.4	0.0	37.5
Perm LT Serve Time (g_u), s	0.0	4.8	0.0	16.2	0.0	11.3	0.0	14.1
Perm LT Q Serve Time (g_ps), s	0.0	4.8	0.0	16.2	0.0	11.3	0.0	14.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	113	0	180	0	165	0	145
V/C Ratio (X)	0.00	1.22	0.00	0.92	0.00	0.77	0.00	0.76
Avail Cap (c_a), veh/h	0	113	0	180	0	165	0	145
Upstream Filter (I)	0.00	0.09	0.00	0.39	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	44.3	0.0	40.1	0.0	41.2	0.0	40.8
Incr Delay (d2), s/veh	0.0	106.1	0.0	23.2	0.0	29.1	0.0	20.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	150.4	0.0	63.3	0.0	70.4	0.0	61.4
1st-Term Q (Q1), veh/ln	0.0	2.4	0.0	3.6	0.0	2.8	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	3.3	0.0	1.2	0.0	1.3	0.0	0.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.39	0.00	1.47	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	7.0	0.0	7.4	0.0	5.8
%ile Storage Ratio (RQ%)	0.00	1.28	0.00	2.52	0.00	1.39	0.00	1.83
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	715	0	1095	0	803	0	512
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	30.1	0.0	23.4	0.0	36.6	0.0	21.3
Cycle Q Clear Time (g_c), s	0.0	30.1	0.0	23.4	0.0	36.6	0.0	21.3
Lane Grp Cap (c), veh/h	0	860	0	1481	0	860	0	740
V/C Ratio (X)	0.00	0.83	0.00	0.74	0.00	0.93	0.00	0.69
Avail Cap (c_a), veh/h	0	860	0	1481	0	860	0	740
Upstream Filter (I)	0.00	0.09	0.00	0.39	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.2	0.0	22.1	0.0	23.0	0.0	21.5
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.8	0.0	18.2	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.2	0.0	22.9	0.0	41.2	0.0	24.3
1st-Term Q (Q1), veh/ln	0.0	11.8	0.0	8.9	0.0	14.3	0.0	8.1
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.2	0.0	4.4	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.14	0.00	1.34	0.00	1.38	0.00	1.56
%ile Back of Q (95%), veh/ln	0.0	13.7	0.0	12.1	0.0	25.7	0.0	13.5
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.25	0.00	1.82	0.00	0.73
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	89	0	230	0	100	0	504
Grp Sat Flow (s), veh/h/ln	0	1540	0	1526	0	1540	0	1748
Q Serve Time (g_s), s	0.0	3.0	0.0	9.3	0.0	3.4	0.0	21.3
Cycle Q Clear Time (g_c), s	0.0	3.0	0.0	9.3	0.0	3.4	0.0	21.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.31
Lane Grp Cap (c), veh/h	0	708	0	636	0	708	0	728
V/C Ratio (X)	0.00	0.13	0.00	0.36	0.00	0.14	0.00	0.69
Avail Cap (c_a), veh/h	0	708	0	636	0	708	0	728
Upstream Filter (I)	0.00	0.09	0.00	0.39	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.9	0.0	18.0	0.0	14.0	0.0	21.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.4	0.0	2.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.0	0.0	18.2	0.0	14.5	0.0	24.3
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	3.0	0.0	1.1	0.0	7.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.50	0.00	1.59	0.00	1.80	0.00	1.56
%ile Back of Q (95%), veh/ln	0.0	1.4	0.0	4.8	0.0	2.1	0.0	13.3
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	1.12	0.00	0.53	0.00	0.72
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	38	78	309	358	55
Future Vol, veh/h	13	38	78	309	358	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	45	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	41	85	336	389	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	757	419	449	0	-	0
Stage 1	419	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	359	633	1110	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	331	633	1110	-	-	-
Mov Cap-2 Maneuver	447	-	-	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	695	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1110	-	572	-	-
HCM Lane V/C Ratio	0.076	-	0.097	-	-
HCM Control Delay (s)	8.5	-	12	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	15	118	206	21	341
Future Vol, veh/h	70	15	118	206	21	341
Conflicting Peds, #/hr	12	5	0	20	20	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	16	128	224	23	371

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	577	153	0	0	372	0
Stage 1	148	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	478	893	-	-	1186	-
Stage 1	880	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	456	875	-	-	1167	-
Mov Cap-2 Maneuver	531	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	571	1167	-
HCM Lane V/C Ratio	-	-	0.162	0.02	-
HCM Control Delay (s)	-	-	12.5	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	62	46	126	126	196	30	940	103	258	671	30
Future Volume (veh/h)	147	62	46	126	126	196	30	940	103	258	671	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.97		0.97	1.00		0.91	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	67	50	137	137	213	33	1022	112	280	729	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	348	260	463	230	357	358	1862	755	225	1805	82
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.35	0.35	0.35	0.52	0.52	0.52
Sat Flow, veh/h	1023	979	730	1242	645	1003	701	3554	1441	496	3445	156
Grp Volume(v), veh/h	160	0	117	137	0	350	33	1022	112	280	376	386
Grp Sat Flow(s),veh/h/ln	1023	0	1709	1242	0	1648	701	1777	1441	496	1777	1824
Q Serve(g_s), s	13.6	0.0	4.3	7.7	0.0	15.6	3.2	20.8	4.8	26.4	11.5	11.5
Cycle Q Clear(g_c), s	29.3	0.0	4.3	12.0	0.0	15.6	14.7	20.8	4.8	47.2	11.5	11.5
Prop In Lane	1.00		0.43	1.00		0.61	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	267	0	608	463	0	587	358	1862	755	225	931	956
V/C Ratio(X)	0.60	0.00	0.19	0.30	0.00	0.60	0.09	0.55	0.15	1.24	0.40	0.40
Avail Cap(c_a), veh/h	337	0	725	548	0	700	358	1862	755	225	931	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	20.0	24.2	0.0	23.7	23.0	20.7	15.5	36.5	12.9	12.9
Incr Delay (d2), s/veh	2.2	0.0	0.2	0.4	0.0	1.0	0.4	1.0	0.4	140.9	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	0.0	3.1	4.1	0.0	10.2	1.1	13.9	2.8	22.7	8.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	0.0	20.2	24.5	0.0	24.7	23.5	21.7	15.8	177.4	14.2	14.2
LnGrp LOS	D	A	C	C	A	C	C	C	B	F	B	B
Approach Vol, veh/h		277			487			1167			1042	
Approach Delay, s/veh		30.4			24.6			21.2			58.1	
Approach LOS		C			C			C			E	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	52.2	37.8	52.2	37.8
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 41	* 38	* 41	* 38
Max Q Clear Time (g_c+I1), s	49.2	31.3	22.8	17.6
Green Ext Time (p_c), s	0.0	0.8	7.6	2.9

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	62	46	126	126	196	30	940	103	258	671	30
Future Volume (veh/h)	147	62	46	126	126	196	30	940	103	258	671	30
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.99		0.97	0.97		0.97	1.00		0.91	1.00		0.91
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	67	50	137	137	213	33	1022	112	280	729	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	267	348	260	463	230	357	358	1862	755	225	1805	82
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Prop Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.35	0.35	0.35	0.52	0.52	0.52
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.8	0.0	20.2	24.5	0.0	24.7	23.5	21.7	15.8	177.4	14.2	14.2
Ln Grp LOS	D	A	C	C	A	C	C	C	B	F	B	B
Approach Vol, veh/h		277			487			1167			1042	
Approach Delay, s/veh		30.4			24.6			21.2			58.1	
Approach LOS		C			C			C			E	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		5.0		6.0
Phs Duration (G+Y+Rc), s		52.2		37.8		52.2		37.8
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 41		* 38		* 41		* 38
Max Allow Headway (MAH), s		6.0		5.1		5.1		5.2
Max Q Clear (g_c+I1), s		49.2		31.3		22.8		17.6
Green Ext Time (g_e), s		0.0		0.8		7.6		2.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.46		0.00		0.02
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		496		1023		701		1242
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3445		979		3554		645
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		156		730		1441		1003
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	280	0	160	0	33	0	137
Grp Sat Flow (s), veh/h/ln	0	496	0	1023	0	701	0	1242
Q Serve Time (g_s), s	0.0	26.4	0.0	13.6	0.0	3.2	0.0	7.7
Cycle Q Clear Time (g_c), s	0.0	47.2	0.0	29.3	0.0	14.7	0.0	12.0
Perm LT Sat Flow (s_l), veh/h/ln	0	496	0	1023	0	701	0	1242
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	47.2	0.0	32.0	0.0	47.2	0.0	32.0
Perm LT Serve Time (g_u), s	0.0	26.4	0.0	16.4	0.0	35.6	0.0	27.8
Perm LT Q Serve Time (g_ps), s	0.0	26.4	0.0	13.6	0.0	3.2	0.0	7.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	225	0	267	0	358	0	463
V/C Ratio (X)	0.00	1.24	0.00	0.60	0.00	0.09	0.00	0.30
Avail Cap (c_a), veh/h	0	225	0	337	0	358	0	548
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.88	0.00	1.00
Uniform Delay (d1), s/veh	0.0	36.5	0.0	35.7	0.0	23.0	0.0	24.2
Incr Delay (d2), s/veh	0.0	140.9	0.0	2.2	0.0	0.4	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	177.4	0.0	37.8	0.0	23.5	0.0	24.5
1st-Term Q (Q1), veh/ln	0.0	4.9	0.0	3.4	0.0	0.6	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	8.8	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.65	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	22.7	0.0	6.4	0.0	1.1	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	3.85	0.00	4.03	0.00	0.27	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	13.7	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	2	0	0
Grp Vol (v), veh/h	0	376	0	0	0	1022	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	11.5	0.0	0.0	0.0	20.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.5	0.0	0.0	0.0	20.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	931	0	0	0	1862	0	0
V/C Ratio (X)	0.00	0.40	0.00	0.00	0.00	0.55	0.00	0.00
Avail Cap (c_a), veh/h	0	931	0	0	0	1862	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.88	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.9	0.0	0.0	0.0	20.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.2	0.0	0.0	0.0	21.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.2	0.0	0.0	0.0	9.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.77	0.00	1.00	0.00	1.51	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.0	0.0	0.0	0.0	13.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.31	0.00	0.00	0.00	1.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	386	0	117	0	112	0	350
Grp Sat Flow (s), veh/h/ln	0	1824	0	1709	0	1441	0	1648
Q Serve Time (g_s), s	0.0	11.5	0.0	4.3	0.0	4.8	0.0	15.6
Cycle Q Clear Time (g_c), s	0.0	11.5	0.0	4.3	0.0	4.8	0.0	15.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.09	0.00	0.43	0.00	1.00	0.00	0.61
Lane Grp Cap (c), veh/h	0	956	0	608	0	755	0	587
V/C Ratio (X)	0.00	0.40	0.00	0.19	0.00	0.15	0.00	0.60
Avail Cap (c_a), veh/h	0	956	0	725	0	755	0	700
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.88	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.9	0.0	20.0	0.0	15.5	0.0	23.7
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.2	0.0	0.4	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.2	0.0	20.2	0.0	15.8	0.0	24.7
1st-Term Q (Q1), veh/ln	0.0	4.3	0.0	1.7	0.0	1.5	0.0	6.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.76	0.00	1.80	0.00	1.80	0.00	1.66
%ile Back of Q (95%), veh/ln	0.0	8.2	0.0	3.1	0.0	2.8	0.0	10.2
%ile Storage Ratio (RQ%)	0.00	0.32	0.00	0.29	0.00	0.72	0.00	0.79
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	281	20	1	343	4	14	0	1	10	0	54
Future Vol, veh/h	59	281	20	1	343	4	14	0	1	10	0	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	64	305	22	1	373	4	15	0	1	11	0	59
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	11.5	13.6	9.2	8.9
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	93%	100%	0%	100%	0%	16%
Vol Thru, %	0%	0%	93%	0%	99%	0%
Vol Right, %	7%	0%	7%	0%	1%	84%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	59	301	1	347	64
LT Vol	14	59	0	1	0	10
Through Vol	0	0	281	0	343	0
RT Vol	1	0	20	0	4	54
Lane Flow Rate	16	64	327	1	377	70
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.027	0.099	0.457	0.002	0.534	0.102
Departure Headway (Hd)	5.989	5.575	5.026	5.608	5.097	5.258
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	593	641	713	636	705	677
Service Time	4.075	3.325	2.775	3.357	2.846	3.327
HCM Lane V/C Ratio	0.027	0.1	0.459	0.002	0.535	0.103
HCM Control Delay	9.2	8.9	12	8.4	13.6	8.9
HCM Lane LOS	A	A	B	A	B	A
HCM 95th-tile Q	0.1	0.3	2.4	0	3.2	0.3

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	99	65	1	228	57	144	4	0	8	6	30
Future Vol, veh/h	53	99	65	1	228	57	144	4	0	8	6	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	108	71	1	248	62	157	4	0	9	7	33
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.6	12.2	10.4	8.7
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	97%	100%	0%	100%	0%	18%
Vol Thru, %	3%	0%	60%	0%	80%	14%
Vol Right, %	0%	0%	40%	0%	20%	68%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	148	53	164	1	285	44
LT Vol	144	53	0	1	0	8
Through Vol	4	0	99	0	228	6
RT Vol	0	0	65	0	57	30
Lane Flow Rate	161	58	178	1	310	48
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.247	0.095	0.254	0.002	0.447	0.07
Departure Headway (Hd)	5.523	5.914	5.129	5.845	5.2	5.273
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	643	601	693	607	688	683
Service Time	3.612	3.701	2.915	3.627	2.981	3.273
HCM Lane V/C Ratio	0.25	0.097	0.257	0.002	0.451	0.07
HCM Control Delay	10.4	9.3	9.7	8.6	12.2	8.7
HCM Lane LOS	B	A	A	A	B	A
HCM 95th-tile Q	1	0.3	1	0	2.3	0.2

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	20	83	59	69	1	199	9	18	3	21	39
Future Vol, veh/h	2	20	83	59	69	1	199	9	18	3	21	39
Conflicting Peds, #/hr	23	0	35	35	0	23	12	0	26	26	0	12
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	110	95	-	-	100	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	22	90	64	75	1	216	10	20	3	23	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	147	0	0	309	288	83	339	378	111
Stage 1	-	-	-	-	-	-	61	61	-	227	227	-
Stage 2	-	-	-	-	-	-	248	227	-	112	151	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1494	-	-	1435	-	-	643	622	976	615	554	942
Stage 1	-	-	-	-	-	-	950	844	-	776	716	-
Stage 2	-	-	-	-	-	-	756	716	-	893	772	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1467	-	-	1395	-	-	550	566	929	551	504	916
Mov Cap-2 Maneuver	-	-	-	-	-	-	550	566	-	551	504	-
Stage 1	-	-	-	-	-	-	922	820	-	761	671	-
Stage 2	-	-	-	-	-	-	658	671	-	845	750	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	3.5	15.1	10.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	550	929	1467	-	-	1395	-	-	712
HCM Lane V/C Ratio	0.393	0.021	0.001	-	-	0.046	-	-	0.092
HCM Control Delay (s)	15.7	9	7.5	-	-	7.7	-	-	10.6
HCM Lane LOS	C	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.9	0.1	0	-	-	0.1	-	-	0.3

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	19	39	0	20	27	208	64	31	94	0
Future Vol, veh/h	0	0	19	39	0	20	27	208	64	31	94	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	21	42	0	22	29	226	70	34	102	0
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	7.7	8.5	10.1	8.6
HCM LOS	A	A	B	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	66%	100%	0%
Vol Thru, %	0%	76%	0%	0%	0%	100%
Vol Right, %	0%	24%	100%	34%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	272	19	59	31	94
LT Vol	27	0	0	39	31	0
Through Vol	0	208	0	0	0	94
RT Vol	0	64	19	20	0	0
Lane Flow Rate	29	296	21	64	34	102
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.044	0.386	0.026	0.088	0.052	0.142
Departure Headway (Hd)	5.362	4.695	4.499	4.964	5.507	5.004
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	669	769	794	722	651	717
Service Time	3.082	2.415	2.533	2.992	3.232	2.729
HCM Lane V/C Ratio	0.043	0.385	0.026	0.089	0.052	0.142
HCM Control Delay	8.3	10.3	7.7	8.5	8.5	8.6
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.1	1.8	0.1	0.3	0.2	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	517	120	58	401	264	162	556	71	53	356	58
Future Volume (veh/h)	127	517	120	58	401	264	162	556	71	53	356	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	562	130	63	436	287	176	604	77	58	387	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	1362	593	81	1193	518	205	663	555	75	526	439
Arrive On Green	0.09	0.38	0.38	0.05	0.34	0.34	0.12	0.35	0.35	0.04	0.28	0.28
Sat Flow, veh/h	1781	3554	1548	1781	3554	1543	1781	1870	1566	1781	1870	1561
Grp Volume(v), veh/h	138	562	130	63	436	287	176	604	77	58	387	63
Grp Sat Flow(s),veh/h/ln	1781	1777	1548	1781	1777	1543	1781	1870	1566	1781	1870	1561
Q Serve(g_s), s	9.1	13.9	6.8	4.2	11.1	18.2	11.6	37.0	4.0	3.9	22.5	3.6
Cycle Q Clear(g_c), s	9.1	13.9	6.8	4.2	11.1	18.2	11.6	37.0	4.0	3.9	22.5	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	1362	593	81	1193	518	205	663	555	75	526	439
V/C Ratio(X)	0.83	0.41	0.22	0.78	0.37	0.55	0.86	0.91	0.14	0.78	0.74	0.14
Avail Cap(c_a), veh/h	238	1362	593	119	1193	518	282	826	692	119	655	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.76	0.76
Uniform Delay (d), s/veh	53.5	27.1	24.9	56.7	30.2	32.5	52.1	36.9	26.3	56.9	39.1	32.3
Incr Delay (d2), s/veh	15.5	0.9	0.8	17.5	0.9	4.2	17.2	12.3	0.1	12.2	2.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	9.9	4.7	4.1	8.4	11.7	10.2	25.8	2.7	3.6	15.2	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	28.0	25.8	74.2	31.0	36.8	69.4	49.3	26.4	69.2	41.6	32.4
LnGrp LOS	E	C	C	E	C	D	E	D	C	E	D	C
Approach Vol, veh/h		830			786			857			508	
Approach Delay, s/veh		34.5			36.6			51.3			43.6	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	45.3	18.8	38.7	11.5	51.0	10.0	47.5
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green Setting (Gmax), s	16.0	* 22	19.0	* 42	8.0	* 30	8.0	* 53
Max Q Clear Time (g_c+I1), s	11.1	20.2	13.6	24.5	6.2	15.9	5.9	39.0
Green Ext Time (p_c), s	0.1	0.7	0.2	2.3	0.0	3.4	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	41.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	517	120	58	401	264	162	556	71	53	356	58
Future Volume (veh/h)	127	517	120	58	401	264	162	556	71	53	356	58
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	562	130	63	436	287	176	604	77	58	387	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	166	1362	593	81	1193	518	205	663	555	75	526	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.09	0.38	0.38	0.05	0.34	0.34	0.12	0.35	0.35	0.04	0.28	0.28
Unsig. Movement Delay												
Ln Grp Delay, s/veh	69.0	28.0	25.8	74.2	31.0	36.8	69.4	49.3	26.4	69.2	41.6	32.4
Ln Grp LOS	E	C	C	E	C	D	E	D	C	E	D	C
Approach Vol, veh/h		830			786			857			508	
Approach Delay, s/veh		34.5			36.6			51.3			43.6	
Approach LOS		C			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	17.2	45.3	18.8	38.7	11.5	51.0	10.0	47.5
Change Period (Y+Rc), s	6.0	* 5	5.0	* 5	6.0	* 5	5.0	* 5
Max Green (Gmax), s	16.0	* 22	19.0	* 42	8.0	* 30	8.0	* 53
Max Allow Headway (MAH), s	3.7	4.6	3.8	5.0	3.7	4.8	3.8	5.0
Max Q Clear (g_c+l1), s	11.1	20.2	13.6	24.5	6.2	15.9	5.9	39.0
Green Ext Time (g_e), s	0.1	0.7	0.2	2.3	0.0	3.4	0.0	3.6
Prob of Phs Call (p_c)	0.99	1.00	1.00	1.00	0.88	1.00	0.86	1.00
Prob of Max Out (p_x)	0.34	0.00	0.26	0.02	1.00	0.00	1.00	0.18

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1543		1561		1548		1566

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Prot)		L (Prot)		L (Prot)		L (Prot)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	138	0	176	0	63	0	58	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	9.1	0.0	11.6	0.0	4.2	0.0	3.9	0.0
Cycle Q Clear Time (g_c), s	9.1	0.0	11.6	0.0	4.2	0.0	3.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	166	0	205	0	81	0	75	0
V/C Ratio (X)	0.83	0.00	0.86	0.00	0.78	0.00	0.78	0.00
Avail Cap (c_a), veh/h	238	0	282	0	119	0	119	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	0.76	0.00
Uniform Delay (d1), s/veh	53.5	0.0	52.1	0.0	56.7	0.0	56.9	0.0
Incr Delay (d2), s/veh	15.5	0.0	17.2	0.0	17.5	0.0	12.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.0	0.0	69.4	0.0	74.2	0.0	69.2	0.0
1st-Term Q (Q1), veh/ln	4.0	0.0	5.2	0.0	1.9	0.0	1.7	0.0
2nd-Term Q (Q2), veh/ln	0.7	0.0	1.0	0.0	0.4	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.75	0.00	1.66	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	8.3	0.0	10.2	0.0	4.1	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	0.98	0.00	2.07	0.00	0.51	0.00	1.01	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	436	0	387	0	562	0	604
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	11.1	0.0	22.5	0.0	13.9	0.0	37.0
Cycle Q Clear Time (g_c), s	0.0	11.1	0.0	22.5	0.0	13.9	0.0	37.0
Lane Grp Cap (c), veh/h	0	1193	0	526	0	1362	0	663
V/C Ratio (X)	0.00	0.37	0.00	0.74	0.00	0.41	0.00	0.91
Avail Cap (c_a), veh/h	0	1193	0	655	0	1362	0	826
Upstream Filter (I)	0.00	1.00	0.00	0.76	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	30.2	0.0	39.1	0.0	27.1	0.0	36.9
Incr Delay (d2), s/veh	0.0	0.9	0.0	2.5	0.0	0.9	0.0	12.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.0	0.0	41.6	0.0	28.0	0.0	49.3
1st-Term Q (Q1), veh/ln	0.0	4.7	0.0	10.2	0.0	5.7	0.0	16.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.2	0.0	2.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.44	0.00	1.67	0.00	1.38
%ile Back of Q (95%), veh/ln	0.0	8.4	0.0	15.2	0.0	9.9	0.0	25.8
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.31	0.00	0.31	0.00	1.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	287	0	63	0	130	0	77
Grp Sat Flow (s), veh/h/ln	0	1543	0	1561	0	1548	0	1566
Q Serve Time (g_s), s	0.0	18.2	0.0	3.6	0.0	6.8	0.0	4.0
Cycle Q Clear Time (g_c), s	0.0	18.2	0.0	3.6	0.0	6.8	0.0	4.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	518	0	439	0	593	0	555
V/C Ratio (X)	0.00	0.55	0.00	0.14	0.00	0.22	0.00	0.14
Avail Cap (c_a), veh/h	0	518	0	546	0	593	0	692
Upstream Filter (I)	0.00	1.00	0.00	0.76	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	32.5	0.0	32.3	0.0	24.9	0.0	26.3
Incr Delay (d2), s/veh	0.0	4.2	0.0	0.1	0.0	0.8	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	36.8	0.0	32.4	0.0	25.8	0.0	26.4
1st-Term Q (Q1), veh/ln	0.0	6.7	0.0	1.4	0.0	2.5	0.0	1.5
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.61	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.7	0.0	2.5	0.0	4.7	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	2.98	0.00	0.57	0.00	1.20	0.00	0.39
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	41.4
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	134	336	67	0	333	32	0	321	101
Future Volume (veh/h)	0	0	0	134	336	67	0	333	32	0	321	101
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				146	365	73	0	362	35	0	349	110
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				163	408	472	0	1986	191	0	825	260
Arrive On Green				0.31	0.31	0.31	0.00	1.00	1.00	0.00	0.61	0.61
Sat Flow, veh/h				527	1317	1525	0	3365	314	0	1360	429
Grp Volume(v), veh/h				511	0	73	0	196	201	0	0	459
Grp Sat Flow(s),veh/h/ln				1844	0	1525	0	1777	1809	0	0	1788
Q Serve(g_s), s				31.8	0.0	4.2	0.0	0.0	0.0	0.0	0.0	16.3
Cycle Q Clear(g_c), s				31.8	0.0	4.2	0.0	0.0	0.0	0.0	0.0	16.3
Prop In Lane				0.29		1.00	0.00		0.17	0.00		0.24
Lane Grp Cap(c), veh/h				571	0	472	0	1079	1098	0	0	1086
V/C Ratio(X)				0.90	0.00	0.15	0.00	0.18	0.18	0.00	0.00	0.42
Avail Cap(c_a), veh/h				876	0	724	0	1079	1098	0	0	1086
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				0.23	0.00	0.23	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh				39.6	0.0	30.0	0.0	0.0	0.0	0.0	0.0	12.5
Incr Delay (d2), s/veh				2.1	0.0	0.0	0.0	0.4	0.4	0.0	0.0	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				17.2	0.0	2.5	0.0	0.2	0.2	0.0	0.0	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				41.6	0.0	30.1	0.0	0.4	0.4	0.0	0.0	13.7
LnGrp LOS				D	A	C	A	A	A	A	A	B
Approach Vol, veh/h					584			397			459	
Approach Delay, s/veh					40.2			0.4			13.7	
Approach LOS					D			A			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	77.9	42.1	77.9
Change Period (Y+Rc), s	* 5	* 5	* 5
Max Green Setting (Gmax), s	* 53	* 57	* 53
Max Q Clear Time (g_c+I1), s	18.3	33.8	2.0
Green Ext Time (p_c), s	4.6	3.4	3.7

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	134	336	67	0	333	32	0	321	101
Future Volume (veh/h)	0	0	0	134	336	67	0	333	32	0	321	101
Number				7	4	14	1	6	16	5	2	12
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				146	365	73	0	362	35	0	349	110
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Opposing Right Turn Influence				Yes			No			No		
Cap, veh/h				163	408	472	0	1986	191	0	825	260
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green				0.31	0.31	0.31	0.00	1.00	1.00	0.00	0.61	0.61
Unsig. Movement Delay												
Ln Grp Delay, s/veh				41.6	0.0	30.1	0.0	0.4	0.4	0.0	0.0	13.7
Ln Grp LOS				D	A	C	A	A	A	A	A	B
Approach Vol, veh/h					584			397			459	
Approach Delay, s/veh					40.2			0.4			13.7	
Approach LOS					D			A			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		8.0		11.0		8.0		
Phs Duration (G+Y+Rc), s		77.9		42.1		77.9		
Change Period (Y+Rc), s		* 5		* 5		* 5		
Max Green (Gmax), s		* 53		* 57		* 53		
Max Allow Headway (MAH), s		6.2		4.9		6.1		
Max Q Clear (g_c+I1), s		18.3		33.8		2.0		
Green Ext Time (g_e), s		4.6		3.4		3.7		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		0.01		0.00		
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		0		527		0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		1360		1317		3365		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		429		1525		314		
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment				L+T				

Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	511	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1844	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	31.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	31.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	72.9	0.0	0.0	0.0	72.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	571	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	876	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	41.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	13.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.21	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	17.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	196	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1079	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1079	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	459	0	73	0	201	0	0
Grp Sat Flow (s), veh/h/ln	0	1788	0	1525	0	1809	0	0
Q Serve Time (g_s), s	0.0	16.3	0.0	4.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	16.3	0.0	4.2	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.24	0.00	1.00	0.00	0.17	0.00	0.00
Lane Grp Cap (c), veh/h	0	1086	0	472	0	1098	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.15	0.00	0.18	0.00	0.00
Avail Cap (c_a), veh/h	0	1086	0	724	0	1098	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.23	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.5	0.0	30.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.7	0.0	30.1	0.0	0.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	1.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.64	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	10.7	0.0	2.5	0.0	0.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.18	0.00	0.14	0.00	0.07	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	16	481	1132	711	125
Future Volume (veh/h)	17	16	481	1132	711	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.84	1.00			0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	17	523	1230	773	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	101	96	557	2703	1144	201
Arrive On Green	0.13	0.13	0.31	0.76	0.13	0.13
Sat Flow, veh/h	769	726	1781	3647	3026	516
Grp Volume(v), veh/h	36	0	523	1230	468	441
Grp Sat Flow(s),veh/h/ln	1538	0	1781	1777	1777	1671
Q Serve(g_s), s	1.9	0.0	25.7	11.4	22.6	22.6
Cycle Q Clear(g_c), s	1.9	0.0	25.7	11.4	22.6	22.6
Prop In Lane	0.50	0.47	1.00			0.31
Lane Grp Cap(c), veh/h	202	0	557	2703	693	652
V/C Ratio(X)	0.18	0.00	0.94	0.46	0.68	0.68
Avail Cap(c_a), veh/h	308	0	590	2703	693	652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.37	0.37	0.92	0.92
Uniform Delay (d), s/veh	34.8	0.0	30.1	3.9	33.8	33.8
Incr Delay (d2), s/veh	0.4	0.0	10.8	0.2	4.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	15.8	4.7	17.0	16.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.2	0.0	40.9	4.1	38.6	38.9
LnGrp LOS	D	A	D	A	D	D
Approach Vol, veh/h	36			1753	909	
Approach Delay, s/veh	35.2			15.1	38.7	
Approach LOS	D			B	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		73.6		16.4	33.3	40.2
Change Period (Y+Rc), s		5.1		4.6	* 5.2	5.1
Max Green Setting (Gmax), s		62.3		18.0	* 30	27.3
Max Q Clear Time (g_c+I1), s		13.4		3.9	27.7	24.6
Green Ext Time (p_c), s		12.9		0.0	0.4	1.5

Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	16	481	1132	711	125
Future Volume (veh/h)	17	16	481	1132	711	125
Number	7	14	5	2	6	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.84	1.00			0.85
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	17	523	1230	773	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	101	96	557	2703	1144	201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Prop Arrive On Green	0.13	0.13	0.31	0.76	0.13	0.13
Unsig. Movement Delay						
Ln Grp Delay, s/veh	35.2	0.0	40.9	4.1	38.6	38.9
Ln Grp LOS	D	A	D	A	D	D
Approach Vol, veh/h	36			1753	909	
Approach Delay, s/veh	35.2			15.1	38.7	
Approach LOS	D			B	D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		73.6		16.4	33.3	40.2		
Change Period (Y+Rc), s		5.1		4.6	* 5.2	5.1		
Max Green (Gmax), s		62.3		18.0	* 30	27.3		
Max Allow Headway (MAH), s		5.2		4.1	3.8	5.3		
Max Q Clear (g_c+I1), s		13.4		3.9	27.7	24.6		
Green Ext Time (g_e), s		12.9		0.0	0.4	1.5		
Prob of Phs Call (p_c)		1.00		0.83	1.00	1.00		
Prob of Max Out (p_x)		0.03		0.00	1.00	1.00		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				769	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		43		3026		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		726		516		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	36	523	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1538	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	1.9	25.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.9	25.7	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	35.1	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.50	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	202	557	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.18	0.94	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	308	590	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.37	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	34.8	30.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	10.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	35.2	40.9	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.7	10.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.80	1.28	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	1.3	15.8	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	8.01	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1230	0	0	0	468	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	11.4	0.0	0.0	0.0	22.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.4	0.0	0.0	0.0	22.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	2703	0	0	0	693	0	0
V/C Ratio (X)	0.00	0.46	0.00	0.00	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	2703	0	0	0	693	0	0
Upstream Filter (I)	0.00	0.37	0.00	0.00	0.00	0.92	0.00	0.00
Uniform Delay (d1), s/veh	0.0	3.9	0.0	0.0	0.0	33.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	4.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	4.1	0.0	0.0	0.0	38.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.9	0.0	0.0	0.0	10.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.9	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.58	0.00	1.00	0.00	1.46	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	4.7	0.0	0.0	0.0	17.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	0.00	0.00	1.37	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	441	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1671	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	22.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	22.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.47	0.00	0.31	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	652	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	652	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	33.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	38.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	10.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.47	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	1	0	289	1	0	422	0
Future Volume (veh/h)	0	13	1	0	13	1	0	289	1	0	422	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	1	0	314	1	0	459	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Cap, veh/h	0	40	3	0	40	3	0	3187	10	0	1640	0
Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	1.00	1.00	0.00	1.00	0.00
Sat Flow, veh/h	0	1725	123	0	1725	123	0	3727	12	0	1870	0
Grp Volume(v), veh/h	0	0	15	0	0	15	0	154	161	0	459	0
Grp Sat Flow(s),veh/h/ln	0	0	1848	0	0	1848	0	1777	1868	0	1870	0
Q Serve(g_s), s	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.00		0.07	0.00		0.07	0.00		0.01	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	42	0	0	42	0	1558	1639	0	1640	0
V/C Ratio(X)	0.00	0.00	0.35	0.00	0.00	0.35	0.00	0.10	0.10	0.00	0.28	0.00
Avail Cap(c_a), veh/h	0	0	108	0	0	108	0	1558	1639	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.96	0.96	0.00	0.86	0.00
Uniform Delay (d), s/veh	0.0	0.0	57.7	0.0	0.0	57.7	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	21.6	0.0	0.0	21.6	0.0	0.1	0.1	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	1.3	0.0	0.0	1.3	0.0	0.1	0.1	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	79.4	0.0	0.0	79.4	0.0	0.1	0.1	0.0	0.4	0.0
LnGrp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		15			15			315			459	
Approach Delay, s/veh		79.4			79.4			0.1			0.4	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	110.2	9.8	110.2	9.8
Change Period (Y+Rc), s	* 5	7.0	* 5	7.0
Max Green Setting (Gmax), s	* 1E2	7.0	* 1E2	7.0
Max Q Clear Time (g_c+I1), s	2.0	3.0	2.0	3.0
Green Ext Time (p_c), s	2.8	0.0	4.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	13	1	0	13	1	0	289	1	0	422	0
Future Volume (veh/h)	0	13	1	0	13	1	0	289	1	0	422	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870	0	1870	1870	0	1870	0
Adj Flow Rate, veh/h	0	14	1	0	14	1	0	314	1	0	459	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	2	2	0	2	2	0	2	0
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	0	40	3	0	40	3	0	3187	10	0	1640	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00
Prop Arrive On Green	0.00	0.02	0.02	0.00	0.02	0.02	0.00	1.00	1.00	0.00	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	79.4	0.0	0.0	79.4	0.0	0.1	0.1	0.0	0.4	0.0
Ln Grp LOS	A	A	E	A	A	E	A	A	A	A	A	A
Approach Vol, veh/h		15			15			315			459	
Approach Delay, s/veh		79.4			79.4			0.1			0.4	
Approach LOS		E			E			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		8.0		8.0		8.0
Phs Duration (G+Y+Rc), s		110.2		9.8		110.2		9.8
Change Period (Y+Rc), s		* 5		7.0		* 5		7.0
Max Green (Gmax), s		* 1E2		7.0		* 1E2		7.0
Max Allow Headway (MAH), s		6.1		9.0		6.1		9.0
Max Q Clear (g_c+I1), s		2.0		3.0		2.0		3.0
Green Ext Time (g_e), s		2.8		0.0		4.8		0.0
Prob of Phs Call (p_c)		1.00		0.39		1.00		0.39
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		0		0		0
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3727		1725		1870		1725
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		12		123		0		123
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment								

Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	105.2	0.0	2.8	0.0	105.2	0.0	2.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	154	0	0	0	459	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1870	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1558	0	0	0	1640	0	0
V/C Ratio (X)	0.00	0.10	0.00	0.00	0.00	0.28	0.00	0.00
Avail Cap (c_a), veh/h	0	1558	0	0	0	1640	0	0
Upstream Filter (I)	0.00	0.96	0.00	0.00	0.00	0.86	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.11	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R				T+R
Lanes in Grp	0	1	0	1	0	0	0	1
Grp Vol (v), veh/h	0	161	0	15	0	0	0	15
Grp Sat Flow (s), veh/h/ln	0	1868	0	1848	0	0	0	1848
Q Serve Time (g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.01	0.00	0.07	0.00	0.00	0.00	0.07
Lane Grp Cap (c), veh/h	0	1639	0	42	0	0	0	42
V/C Ratio (X)	0.00	0.10	0.00	0.35	0.00	0.00	0.00	0.35
Avail Cap (c_a), veh/h	0	1639	0	108	0	0	0	108
Upstream Filter (I)	0.00	0.96	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	57.7	0.0	0.0	0.0	57.7
Incr Delay (d2), s/veh	0.0	0.1	0.0	21.6	0.0	0.0	0.0	21.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.1	0.0	79.4	0.0	0.0	0.0	79.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.00	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	1.3	0.0	0.0	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	522	103	0	0	32	0	226	296	39	411	0
Future Volume (veh/h)	73	522	103	0	0	32	0	226	296	39	411	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.95	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	79	567	112	0	0	35	0	246	322	42	447	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	2	2	0
Cap, veh/h	720	740	298	0	0	43	0	956	824	522	1201	0
Arrive On Green	0.21	0.21	0.21	0.00	0.00	0.03	0.00	0.54	0.54	0.13	1.00	0.00
Sat Flow, veh/h	3456	3554	1430	0	0	1505	0	1870	1532	1781	1870	0
Grp Volume(v), veh/h	79	567	112	0	0	35	0	246	322	42	447	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1430	0	0	1505	0	1777	1532	1781	1870	0
Q Serve(g_s), s	2.2	18.0	8.1	0.0	0.0	2.8	0.0	8.9	14.8	1.1	0.0	0.0
Cycle Q Clear(g_c), s	2.2	18.0	8.1	0.0	0.0	2.8	0.0	8.9	14.8	1.1	0.0	0.0
Prop In Lane	1.00		1.00	0.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	720	740	298	0	0	43	0	956	824	522	1201	0
V/C Ratio(X)	0.11	0.77	0.38	0.00	0.00	0.81	0.00	0.26	0.39	0.08	0.37	0.00
Avail Cap(c_a), veh/h	979	1007	405	0	0	232	0	956	824	558	1201	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	38.5	44.8	40.8	0.0	0.0	58.0	0.0	14.9	16.2	9.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	3.1	1.1	0.0	0.0	28.8	0.0	0.7	1.4	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	12.8	11.0	0.0	0.0	2.5	0.0	6.6	9.1	0.7	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.6	47.8	41.9	0.0	0.0	86.7	0.0	15.5	17.6	9.6	0.9	0.0
LnGrp LOS	D	D	D	A	A	F	A	B	B	A	A	A
Approach Vol, veh/h		758			35			568			489	
Approach Delay, s/veh		46.0			86.7			16.7			1.6	
Approach LOS		D			F			B			A	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	82.1		30.0	12.5	69.5		7.9
Change Period (Y+Rc), s	* 5		* 5	* 5	* 5		4.5
Max Green Setting (Gmax), s	* 53		* 34	* 10	* 38		18.5
Max Q Clear Time (g_c+I1), s	2.0		20.0	3.1	16.8		4.8
Green Ext Time (p_c), s	6.4		4.9	0.0	6.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	522	103	0	0	32	0	226	296	39	411	0
Future Volume (veh/h)	73	522	103	0	0	32	0	226	296	39	411	0
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.90	1.00		0.95	1.00		0.97	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	79	567	112	0	0	35	0	246	322	42	447	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	2	2	0
Opposing Right Turn Influence	Yes			No			No			Yes		
Cap, veh/h	720	740	298	0	0	43	0	956	824	522	1201	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.21	0.21	0.21	0.00	0.00	0.03	0.00	0.54	0.54	0.13	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	38.6	47.8	41.9	0.0	0.0	86.7	0.0	15.5	17.6	9.6	0.9	0.0
Ln Grp LOS	D	D	D	A	A	F	A	B	B	A	A	A
Approach Vol, veh/h		758			35			568			489	
Approach Delay, s/veh		46.0			86.7			16.7			1.6	
Approach LOS		D			F			B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8	4	5	6		
Case No		4.0	8.0	9.0	1.2	8.0		
Phs Duration (G+Y+Rc), s		82.1	7.9	30.0	12.5	69.5		
Change Period (Y+Rc), s		* 5	4.5	* 5	* 5	* 5		
Max Green (Gmax), s		* 53	18.5	* 34	* 10	* 38		
Max Allow Headway (MAH), s		7.1	5.5	5.8	3.8	7.4		
Max Q Clear (g_c+I1), s		2.0	4.8	20.0	3.1	16.8		
Green Ext Time (g_e), s		6.4	0.1	4.9	0.0	6.5		
Prob of Phs Call (p_c)		1.00	0.72	1.00	0.75	1.00		
Prob of Max Out (p_x)		0.00	0.00	0.31	0.01	0.21		

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			0	3456	1781	0		

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		1870	0	3554		1870		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	1505	1430		1532		

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment				LL (Pr/Pm)				

Lanes in Grp	0	0	0	2	1	0	0	0
Grp Vol (v), veh/h	0	0	0	79	42	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1728	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.2	1.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	843	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	66.5	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	49.8	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	3.4	0.0	0.0	64.5	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	720	522	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.11	0.08	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	979	558	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.97	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	38.5	9.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	38.6	9.6	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.9	0.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	1.80	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	1.7	0.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.86	0.30	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	4	0	6	0	0
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	2	0	1	0	0
Grp Vol (v), veh/h	0	447	0	567	0	246	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	18.0	0.0	8.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	18.0	0.0	8.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	1201	0	740	0	956	0	0
V/C Ratio (X)	0.00	0.37	0.00	0.77	0.00	0.26	0.00	0.00
Avail Cap (c_a), veh/h	0	1201	0	1007	0	956	0	0
Upstream Filter (I)	0.00	0.97	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	44.8	0.0	14.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	3.1	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.9	0.0	47.8	0.0	15.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.8	0.0	3.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.3	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.00	1.58	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.5	0.0	12.8	0.0	6.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.54	0.00	0.50	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment			T+R	R		T+R		
Lanes in Grp	0	0	1	1	0	1	0	0
Grp Vol (v), veh/h	0	0	35	112	0	322	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1505	1430	0	1532	0	0
Q Serve Time (g_s), s	0.0	0.0	2.8	8.1	0.0	14.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	2.8	8.1	0.0	14.8	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	43	298	0	824	0	0
V/C Ratio (X)	0.00	0.00	0.81	0.38	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	0	232	405	0	824	0	0
Upstream Filter (I)	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	58.0	40.8	0.0	16.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	28.8	1.1	0.0	1.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	86.7	41.9	0.0	17.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	1.0	6.7	0.0	5.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.1	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.80	1.63	0.00	1.71	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	2.5	11.0	0.0	9.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.15	3.74	0.00	0.68	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱		↑		↱
Traffic Vol, veh/h	932	43	0	39	0	174
Future Vol, veh/h	932	43	0	39	0	174
Conflicting Peds, #/hr	0	70	70	0	18	7
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1013	47	0	42	0	189

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	584
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.319
Pot Cap-1 Maneuver	-	-	0	-	0	456
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	428
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	428	-	-	-
HCM Lane V/C Ratio	0.442	-	-	-
HCM Control Delay (s)	19.9	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	2.2	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	659	100	362	7	387	20	905	276	153	556	12
Future Volume (veh/h)	256	659	100	362	7	387	20	905	276	153	556	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.84	0.93		0.82	0.89		0.83	1.00		0.80
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	278	716	109	393	8	421	22	984	300	166	604	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	496	1019	381	541	474	459	389	1642	747	315	2103	746
Arrive On Green	0.04	0.09	0.09	0.09	0.25	0.25	0.46	0.46	0.46	0.08	0.59	0.59
Sat Flow, veh/h	1781	3554	1328	3456	1870	1294	717	3554	1309	1781	3554	1261
Grp Volume(v), veh/h	278	716	109	393	8	421	22	984	300	166	604	13
Grp Sat Flow(s),veh/h/ln	1781	1777	1328	1728	1870	1294	717	1777	1309	1781	1777	1261
Q Serve(g_s), s	13.4	23.4	9.2	10.1	0.4	30.4	2.1	24.7	16.0	5.4	10.0	0.5
Cycle Q Clear(g_c), s	13.4	23.4	9.2	10.1	0.4	30.4	2.5	24.7	16.0	5.4	10.0	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	496	1019	381	541	474	459	389	1642	747	315	2103	746
V/C Ratio(X)	0.56	0.70	0.29	0.73	0.02	0.92	0.06	0.60	0.40	0.53	0.29	0.02
Avail Cap(c_a), veh/h	496	1019	381	541	474	459	389	1642	747	357	2103	746
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.80	0.80	0.56	0.56	0.56
Uniform Delay (d), s/veh	29.8	49.4	42.9	31.5	33.6	39.0	18.1	24.0	15.6	17.8	12.1	10.1
Incr Delay (d2), s/veh	1.4	2.2	0.4	4.9	0.0	23.1	0.2	1.3	1.3	0.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.7	17.1	5.9	8.1	0.3	21.2	0.7	15.3	8.2	4.0	6.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.2	51.6	43.3	36.4	33.6	62.1	18.4	25.3	16.9	18.6	12.2	10.1
LnGrp LOS	C	D	D	D	C	E	B	C	B	B	B	B
Approach Vol, veh/h		1103			822			1306			783	
Approach Delay, s/veh		45.6			49.6			23.3			13.6	
Approach LOS		D			D			C			B	

Timer - Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		77.2	20.4	36.4	15.6	61.6	16.4	40.4
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green Setting (Gmax), s		* 58	14.8	* 30	12.8	* 39	10.8	* 34
Max Q Clear Time (g_c+I1), s		12.0	15.4	32.4	7.4	26.7	12.1	25.4
Green Ext Time (p_c), s		4.8	0.0	0.0	0.2	6.8	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	659	100	362	7	387	20	905	276	153	556	12
Future Volume (veh/h)	256	659	100	362	7	387	20	905	276	153	556	12
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.90		0.84	0.93		0.82	0.89		0.83	1.00		0.80
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	278	716	109	393	8	421	22	984	300	166	604	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	496	1019	381	541	474	459	389	1642	747	315	2103	746
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.04	0.09	0.09	0.09	0.25	0.25	0.46	0.46	0.46	0.08	0.59	0.59
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.2	51.6	43.3	36.4	33.6	62.1	18.4	25.3	16.9	18.6	12.2	10.1
Ln Grp LOS	C	D	D	D	C	E	B	C	B	B	B	B
Approach Vol, veh/h		1103			822			1306			783	
Approach Delay, s/veh		45.6			49.6			23.3			13.6	
Approach LOS		D			D			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	1.1	3.0	1.2	5.3	1.1	3.0
Phs Duration (G+Y+Rc), s		77.2	20.4	36.4	15.6	61.6	16.4	40.4
Change Period (Y+Rc), s		* 5.8	5.6	* 6	5.6	* 5.8	5.6	* 6
Max Green (Gmax), s		* 58	14.8	* 30	12.8	* 39	10.8	* 34
Max Allow Headway (MAH), s		5.2	3.8	4.6	3.8	5.1	3.8	5.1
Max Q Clear (g_c+l1), s		12.0	15.4	32.4	7.4	26.7	12.1	25.4
Green Ext Time (g_e), s		4.8	0.0	0.0	0.2	6.8	0.0	3.4
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	0.26	0.00	1.00	0.57

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			1781		1781	717	3456	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		3554		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1261		1294		1309		1328

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment		L (Pr/Pm)		L (Pr/Pm)		LL (Pr/Pm)		

Lanes in Grp	0	0	1	0	1	1	2	0
Grp Vol (v), veh/h	0	0	278	0	166	22	393	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	0	1781	717	1728	0
Q Serve Time (g_s), s	0.0	0.0	13.4	0.0	5.4	2.1	10.1	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	13.4	0.0	5.4	2.5	10.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	865	0	428	717	601	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	30.8	0.0	57.4	55.4	30.4	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	30.0	0.0	30.0	55.0	11.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.4	0.0	17.3	2.1	9.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	496	0	315	389	541	0
V/C Ratio (X)	0.00	0.00	0.56	0.00	0.53	0.06	0.73	0.00
Avail Cap (c_a), veh/h	0	0	496	0	357	389	541	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.56	0.80	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	29.8	0.0	17.8	18.1	31.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.4	0.0	0.8	0.2	4.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	31.2	0.0	18.6	18.4	36.4	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	6.3	0.0	2.1	0.3	4.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	0.1	0.0	0.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.64	0.00	1.80	1.80	1.77	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	10.7	0.0	4.0	0.7	8.1	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	4.54	0.00	0.92	0.11	1.52	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	2
Grp Vol (v), veh/h	0	604	0	8	0	984	0	716
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1777
Q Serve Time (g_s), s	0.0	10.0	0.0	0.4	0.0	24.7	0.0	23.4
Cycle Q Clear Time (g_c), s	0.0	10.0	0.0	0.4	0.0	24.7	0.0	23.4
Lane Grp Cap (c), veh/h	0	2103	0	474	0	1642	0	1019
V/C Ratio (X)	0.00	0.29	0.00	0.02	0.00	0.60	0.00	0.70
Avail Cap (c_a), veh/h	0	2103	0	474	0	1642	0	1019
Upstream Filter (I)	0.00	0.56	0.00	1.00	0.00	0.80	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.1	0.0	33.6	0.0	24.0	0.0	49.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	1.3	0.0	2.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.2	0.0	33.6	0.0	25.3	0.0	51.6
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	0.2	0.0	10.2	0.0	11.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.62	0.00	1.80	0.00	1.45	0.00	1.48
%ile Back of Q (95%), veh/ln	0.0	6.4	0.0	0.3	0.0	15.3	0.0	17.1
%ile Storage Ratio (RQ%)	0.00	0.71	0.00	0.02	0.00	1.11	0.00	3.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	13	0	421	0	300	0	109
Grp Sat Flow (s), veh/h/ln	0	1261	0	1294	0	1309	0	1328
Q Serve Time (g_s), s	0.0	0.5	0.0	30.4	0.0	16.0	0.0	9.2
Cycle Q Clear Time (g_c), s	0.0	0.5	0.0	30.4	0.0	16.0	0.0	9.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1585.1	0.0	1585.1	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	10.0	0.0	10.8	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	746	0	459	0	747	0	381
V/C Ratio (X)	0.00	0.02	0.00	0.92	0.00	0.40	0.00	0.29
Avail Cap (c_a), veh/h	0	746	0	459	0	747	0	381
Upstream Filter (I)	0.00	0.56	0.00	1.00	0.00	0.80	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.1	0.0	39.0	0.0	15.6	0.0	42.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	23.1	0.0	1.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.1	0.0	62.1	0.0	16.9	0.0	43.3
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	11.9	0.0	4.7	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.9	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.43	0.00	1.66	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	21.2	0.0	8.2	0.0	5.9
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	3.99	0.00	0.60	0.00	1.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Intersection	
Int Delay, s/veh	149.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	321	696	50	15	529	84	7	0	29	88	0	213
Future Vol, veh/h	321	696	50	15	529	84	7	0	29	88	0	213
Conflicting Peds, #/hr	0	0	87	87	0	0	0	0	11	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	349	757	54	16	575	91	8	0	32	96	0	232

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	666	0	0	898	0	0	1889	2267	504	1741	2249	333
Stage 1	-	-	-	-	-	-	1569	1569	-	653	653	-
Stage 2	-	-	-	-	-	-	320	698	-	1088	1596	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	919	-	-	752	-	-	43	40	513	~ 56	41	663
Stage 1	-	-	-	-	-	-	116	170	-	423	462	-
Stage 2	-	-	-	-	-	-	666	440	-	230	165	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	919	-	-	700	-	-	18	23	473	~ 36	23	663
Mov Cap-2 Maneuver	-	-	-	-	-	-	18	23	-	~ 36	23	-
Stage 1	-	-	-	-	-	-	67	98	-	262	451	-
Stage 2	-	-	-	-	-	-	424	430	-	132	95	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.4	0.2	87.1	$ 985.8
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	80	919	-	-	700	-	-	109
HCM Lane V/C Ratio	0.489	0.38	-	-	0.023	-	-	3.002
HCM Control Delay (s)	87.1	11.3	-	-	10.3	-	-	$ 985.8
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	2	1.8	-	-	0.1	-	-	31.2

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	733	8	4	532	122	2	0	6	85	0	143
Future Volume (veh/h)	57	733	8	4	532	122	2	0	6	85	0	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.99		0.95	0.98		0.96	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	797	9	4	578	133	2	0	7	92	0	155
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	2194	25	415	887	204	110	26	305	424	0	416
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	739	3597	41	672	1455	335	223	96	1117	1372	0	1522
Grp Volume(v), veh/h	62	394	412	4	0	711	9	0	0	92	0	155
Grp Sat Flow(s),veh/h/ln	739	1777	1861	672	0	1789	1436	0	0	1372	0	1522
Q Serve(g_s), s	5.3	10.0	10.0	0.3	0.0	23.1	0.0	0.0	0.0	0.0	0.0	7.4
Cycle Q Clear(g_c), s	28.5	10.0	10.0	10.3	0.0	23.1	7.4	0.0	0.0	6.6	0.0	7.4
Prop In Lane	1.00		0.02	1.00		0.19	0.22		0.78	1.00		1.00
Lane Grp Cap(c), veh/h	341	1084	1135	415	0	1091	441	0	0	424	0	416
V/C Ratio(X)	0.18	0.36	0.36	0.01	0.00	0.65	0.02	0.00	0.00	0.22	0.00	0.37
Avail Cap(c_a), veh/h	341	1084	1135	415	0	1091	441	0	0	424	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.64	0.00	0.64	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.6	8.8	8.8	11.4	0.0	11.4	23.9	0.0	0.0	26.2	0.0	26.5
Incr Delay (d2), s/veh	1.2	0.9	0.9	0.0	0.0	1.9	0.1	0.0	0.0	0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	6.3	6.6	0.1	0.0	11.9	0.3	0.0	0.0	2.9	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	9.7	9.7	11.4	0.0	13.3	24.0	0.0	0.0	26.4	0.0	27.0
LnGrp LOS	C	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		868			715			9			247	
Approach Delay, s/veh		10.6			13.3			24.0			26.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	* 5.1	* 5.4	* 5.1	* 5.4
Max Green Setting (Gmax), s	* 55	* 25	* 55	* 25
Max Q Clear Time (g_c+I1), s	25.1	9.4	30.5	9.4
Green Ext Time (p_c), s	8.9	1.1	8.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	733	8	4	532	122	2	0	6	85	0	143
Future Volume (veh/h)	57	733	8	4	532	122	2	0	6	85	0	143
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.95	0.99		0.95	0.98		0.96	0.97		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	797	9	4	578	133	2	0	7	92	0	155
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	341	2194	25	415	887	204	110	26	305	424	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.27	0.00	0.27	0.27	0.00	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	21.7	9.7	9.7	11.4	0.0	13.3	24.0	0.0	0.0	26.4	0.0	27.0
Ln Grp LOS	C	A	A	B	A	B	C	A	A	C	A	C
Approach Vol, veh/h		868			715			9			247	
Approach Delay, s/veh		10.6			13.3			24.0			26.8	
Approach LOS		B			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		8.0
Phs Duration (G+Y+Rc), s		60.0		30.0		60.0		30.0
Change Period (Y+Rc), s		* 5.1		* 5.4		* 5.1		* 5.4
Max Green (Gmax), s		* 55		* 25		* 55		* 25
Max Allow Headway (MAH), s		6.5		5.1		6.4		5.8
Max Q Clear (g_c+I1), s		25.1		9.4		30.5		9.4
Green Ext Time (g_e), s		8.9		1.1		8.6		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.11		0.01		0.21		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		672		1372		739		223
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1455		0		3597		96
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		335		1522		41		1117
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	92	0	62	0	9
Grp Sat Flow (s), veh/h/ln	0	672	0	1372	0	739	0	1436
Q Serve Time (g_s), s	0.0	0.3	0.0	0.0	0.0	5.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	10.3	0.0	6.6	0.0	28.5	0.0	7.4
Perm LT Sat Flow (s_l), veh/h/ln	0	672	0	1372	0	739	0	1225
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1001	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	54.9	0.0	24.6	0.0	54.9	0.0	24.6
Perm LT Serve Time (g_u), s	0.0	44.9	0.0	17.2	0.0	31.8	0.0	17.2
Perm LT Q Serve Time (g_ps), s	0.0	0.3	0.0	0.0	0.0	5.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.22
Lane Grp Cap (c), veh/h	0	415	0	424	0	341	0	441
V/C Ratio (X)	0.00	0.01	0.00	0.22	0.00	0.18	0.00	0.02
Avail Cap (c_a), veh/h	0	415	0	424	0	341	0	441
Upstream Filter (I)	0.00	0.64	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.4	0.0	26.2	0.0	20.6	0.0	23.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	1.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.4	0.0	26.4	0.0	21.7	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.6	0.0	0.9	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	2.9	0.0	1.8	0.0	0.3
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	2.52	0.00	0.30	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment						T		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	394	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	1084	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1084	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	711	0	155	0	412	0	0
Grp Sat Flow (s), veh/h/ln	0	1789	0	1522	0	1861	0	0
Q Serve Time (g_s), s	0.0	23.1	0.0	7.4	0.0	10.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	23.1	0.0	7.4	0.0	10.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.19	0.00	1.00	0.00	0.02	0.00	0.78
Lane Grp Cap (c), veh/h	0	1091	0	416	0	1135	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.37	0.00	0.36	0.00	0.00
Avail Cap (c_a), veh/h	0	1091	0	416	0	1135	0	0
Upstream Filter (I)	0.00	0.64	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	11.4	0.0	26.5	0.0	8.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.6	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.3	0.0	27.0	0.0	9.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.5	0.0	2.7	0.0	3.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.1	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.46	0.00	1.80	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	11.9	0.0	4.9	0.0	6.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	4.32	0.00	0.78	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	531	260	213	1015	858	379
Future Volume (veh/h)	531	260	213	1015	858	379
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	577	283	232	1103	933	412
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	724	332	223	2486	1924	825
Arrive On Green	0.21	0.21	0.13	0.70	1.00	1.00
Sat Flow, veh/h	3456	1585	1781	3647	3647	1524
Grp Volume(v), veh/h	577	283	232	1103	933	412
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1524
Q Serve(g_s), s	19.0	20.6	15.0	16.2	0.0	0.0
Cycle Q Clear(g_c), s	19.0	20.6	15.0	16.2	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	724	332	223	2486	1924	825
V/C Ratio(X)	0.80	0.85	1.04	0.44	0.49	0.50
Avail Cap(c_a), veh/h	950	436	223	2486	1924	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	0.90	0.90	0.09	0.09	0.81	0.81
Uniform Delay (d), s/veh	45.0	45.6	52.5	7.8	0.0	0.0
Incr Delay (d2), s/veh	3.3	10.9	30.2	0.1	0.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.0	13.8	10.1	6.5	0.3	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.3	56.5	82.7	7.9	0.7	1.8
LnGrp LOS	D	E	F	A	A	A
Approach Vol, veh/h	860			1335	1345	
Approach Delay, s/veh	51.0			20.9	1.0	
Approach LOS	D			C	A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.0	69.9		31.1		88.9
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9
Max Green Setting (Gmax), s	15.0	25.1		33.0		25.1
Max Q Clear Time (g_c+I1), s	17.0	2.0		22.6		18.2
Green Ext Time (p_c), s	0.0	14.7		2.5		3.9

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	531	260	213	1015	858	379
Future Volume (veh/h)	531	260	213	1015	858	379
Number	7	14	1	6	2	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00	1.00			0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	577	283	232	1103	933	412
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Opposing Right Turn Influence	Yes		Yes			
Cap, veh/h	724	332	223	2486	1924	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Prop Arrive On Green	0.21	0.21	0.13	0.70	1.00	1.00
Unsig. Movement Delay						
Ln Grp Delay, s/veh	48.3	56.5	82.7	7.9	0.7	1.8
Ln Grp LOS	D	E	F	A	A	A
Approach Vol, veh/h	860			1335	1345	
Approach Delay, s/veh	51.0			20.9	1.0	
Approach LOS	D			C	A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	7.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	19.0	69.9		31.1		88.9		
Change Period (Y+Rc), s	4.0	4.9		6.0		4.9		
Max Green (Gmax), s	15.0	25.1		33.0		25.1		
Max Allow Headway (MAH), s	3.7	6.7		3.9		5.0		
Max Q Clear (g_c+I1), s	17.0	2.0		22.6		18.2		
Green Ext Time (g_e), s	0.0	14.7		2.5		3.9		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.57		0.16		0.81		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1781	0		3456				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		0		3647		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1524		1585		0		

Left Lane Group Data								
Assigned Mvmt	1	5	0	7	0	0	0	0
Lane Assignment	L (Prot)			L				

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	232	0	0	577	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1781	0	0	1728	0	0	0	0
Q Serve Time (g_s), s	15.0	0.0	0.0	19.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	15.0	0.0	0.0	19.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1728	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	65.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	223	0	0	724	0	0	0	0
V/C Ratio (X)	1.04	0.00	0.00	0.80	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	223	0	0	950	0	0	0	0
Upstream Filter (I)	0.09	0.00	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	52.5	0.0	0.0	45.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	30.2	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	82.7	0.0	0.0	48.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	6.6	0.0	0.0	8.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.20	1.00	0.00	1.54	0.00	0.00	0.00	0.00
%ile Back of Q (95%), veh/ln	10.1	0.0	0.0	13.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.22	0.00	0.00	3.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	933	0	0	0	1103	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	16.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1924	0	0	0	2486	0	0
V/C Ratio (X)	0.00	0.49	0.00	0.00	0.00	0.44	0.00	0.00
Avail Cap (c_a), veh/h	0	1924	0	0	0	2486	0	0
Upstream Filter (I)	0.00	0.81	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.7	0.0	0.0	0.0	7.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.21	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	6.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.15	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	412	0	283	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1524	0	1585	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	825	0	332	0	0	0	0
V/C Ratio (X)	0.00	0.50	0.00	0.85	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	825	0	436	0	0	0	0
Upstream Filter (I)	0.00	0.81	0.00	0.90	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	10.9	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	1.8	0.0	56.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	1.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.52	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.7	0.0	13.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.32	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		20.7						
HCM 6th LOS		C						

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	243	46	1320	245	41	951
Future Volume (veh/h)	243	46	1320	245	41	951
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	50	1435	266	45	1034
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	276	52	1928	351	58	2520
Arrive On Green	0.19	0.19	1.00	1.00	0.03	0.71
Sat Flow, veh/h	1439	272	3092	546	1781	3647
Grp Volume(v), veh/h	315	0	839	862	45	1034
Grp Sat Flow(s),veh/h/ln	1717	0	1777	1767	1781	1777
Q Serve(g_s), s	21.8	0.0	0.0	0.0	3.0	14.3
Cycle Q Clear(g_c), s	21.8	0.0	0.0	0.0	3.0	14.3
Prop In Lane	0.84	0.16		0.31	1.00	
Lane Grp Cap(c), veh/h	329	0	1143	1136	58	2520
V/C Ratio(X)	0.96	0.00	0.73	0.76	0.77	0.41
Avail Cap(c_a), veh/h	329	0	1143	1136	223	2520
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.62	0.62	0.58	0.58
Uniform Delay (d), s/veh	48.0	0.0	0.0	0.0	57.6	7.2
Incr Delay (d2), s/veh	38.3	0.0	2.6	3.0	11.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.6	0.0	1.5	1.7	2.7	7.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	86.3	0.0	2.6	3.0	69.4	7.4
LnGrp LOS	F	A	A	A	E	A
Approach Vol, veh/h	315		1701			1079
Approach Delay, s/veh	86.3		2.8			10.0
Approach LOS	F		A			B

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.0		28.0	7.9	84.1
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9
Max Green Setting (Gmax), s		* 25		* 23	15.0	66.1
Max Q Clear Time (g_c+I1), s		16.3		23.8	5.0	2.0
Green Ext Time (p_c), s		6.1		0.0	0.0	43.5

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	243	46	1320	245	41	951
Future Volume (veh/h)	243	46	1320	245	41	951
Number	7	14	6	16	5	2
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	0.91		0.99	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Lanes Open During Work Zone						
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	50	1435	266	45	1034
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	276	52	1928	351	58	2520
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Prop Arrive On Green	0.19	0.19	1.00	1.00	0.03	0.71
Unsig. Movement Delay						
Ln Grp Delay, s/veh	86.3	0.0	2.6	3.0	69.4	7.4
Ln Grp LOS	F	A	A	A	E	A
Approach Vol, veh/h	315		1701			1079
Approach Delay, s/veh	86.3		2.8			10.0
Approach LOS	F		A			B

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Case No		4.0		12.0	2.0	8.0		
Phs Duration (G+Y+Rc), s		92.0		28.0	7.9	84.1		
Change Period (Y+Rc), s		* 6.9		* 5	4.0	6.9		
Max Green (Gmax), s		* 25		* 23	15.0	66.1		
Max Allow Headway (MAH), s		7.0		3.9	3.7	7.1		
Max Q Clear (g_c+l1), s		16.3		23.8	5.0	2.0		
Green Ext Time (g_e), s		6.1		0.0	0.0	43.5		
Prob of Phs Call (p_c)		1.00		1.00	0.78	1.00		
Prob of Max Out (p_x)		0.91		1.00	0.00	0.56		
Left-Turn Movement Data								
Assigned Mvmt				7	5	1		
Mvmt Sat Flow, veh/h				1439	1781	0		
Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		5		3092		
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		272		546		
Left Lane Group Data								
Assigned Mvmt	0	0	0	7	5	1	0	0
Lane Assignment				L+T+R	L (Prot)			

Lanes in Grp	0	0	0	1	1	0	0	0
Grp Vol (v), veh/h	0	0	0	315	45	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1717	1781	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	21.8	3.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	21.8	3.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	77.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	0.84	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	329	58	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.96	0.77	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	329	223	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.58	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	48.0	57.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	38.3	11.8	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	86.3	69.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.3	1.3	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	3.5	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	0.00	1.46	1.80	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	18.6	2.7	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.37	0.52	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1034	0	0	0	839	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	2520	0	0	0	1143	0	0
V/C Ratio (X)	0.00	0.41	0.00	0.00	0.00	0.73	0.00	0.00
Avail Cap (c_a), veh/h	0	2520	0	0	0	1143	0	0
Upstream Filter (I)	0.00	0.58	0.00	0.00	0.00	0.62	0.00	0.00
Uniform Delay (d1), s/veh	0.0	7.2	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	2.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.4	0.0	0.0	0.0	2.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.8	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	7.4	0.0	0.0	0.0	1.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.00	0.00	0.39	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment						T+R		
Lanes in Grp	0	0	0	0	0	1	0	0
Grp Vol (v), veh/h	0	0	0	0	0	862	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	1767	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.16	0.00	0.31	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	0	0	1136	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	1136	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.80	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	132	12	47	128	21	26	60	31	79	30	191
Future Vol, veh/h	19	132	12	47	128	21	26	60	31	79	30	191
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	143	13	51	139	23	28	65	34	86	33	208
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Righ	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.5	10.9	9.7	11.7
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	22%	12%	24%	26%
Vol Thru, %	51%	81%	65%	10%
Vol Right, %	26%	7%	11%	64%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	117	163	196	300
LT Vol	26	19	47	79
Through Vol	60	132	128	30
RT Vol	31	12	21	191
Lane Flow Rate	127	177	213	326
Geometry Grp	1	1	1	1
Degree of Util (X)	0.19	0.268	0.318	0.442
Departure Headway (Hd)	5.386	5.436	5.382	4.881
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	665	661	667	737
Service Time	3.425	3.472	3.417	2.913
HCM Lane V/C Ratio	0.191	0.268	0.319	0.442
HCM Control Delay	9.7	10.5	10.9	11.7
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.7	1.1	1.4	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	27	63	86	60	114	72	1018	114	54	849	144
Future Volume (veh/h)	53	27	63	86	60	114	72	1018	114	54	849	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	1.00		0.84	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	29	68	93	65	124	78	1107	124	59	923	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	69	107	224	142	378	324	1999	223	276	1875	319
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	276	281	436	653	574	1533	522	3155	352	452	2960	503
Grp Volume(v), veh/h	155	0	0	158	0	124	78	622	609	59	554	526
Grp Sat Flow(s),veh/h/ln	993	0	0	1227	0	1533	522	1777	1730	452	1777	1686
Q Serve(g_s), s	5.1	0.0	0.0	0.0	0.0	6.0	8.4	17.8	17.9	7.6	14.9	15.0
Cycle Q Clear(g_c), s	15.8	0.0	0.0	10.6	0.0	6.0	23.4	17.8	17.9	25.5	14.9	15.0
Prop In Lane	0.37		0.44	0.59		1.00	1.00		0.20	1.00		0.30
Lane Grp Cap(c), veh/h	300	0	0	366	0	378	324	1126	1096	276	1126	1068
V/C Ratio(X)	0.52	0.00	0.00	0.43	0.00	0.33	0.24	0.55	0.56	0.21	0.49	0.49
Avail Cap(c_a), veh/h	394	0	0	464	0	480	324	1126	1096	276	1126	1068
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.26	0.26	0.26	0.84	0.84	0.84
Uniform Delay (d), s/veh	31.7	0.0	0.0	29.2	0.0	27.8	15.0	9.3	9.3	16.5	8.8	8.8
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.8	0.0	0.5	0.5	0.5	0.5	1.5	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	0.0	0.0	5.5	0.0	4.0	1.8	8.0	7.9	1.5	8.7	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	0.0	0.0	30.0	0.0	28.3	15.5	9.8	9.9	18.0	10.1	10.2
LnGrp LOS	C	A	A	C	A	C	B	A	A	B	B	B
Approach Vol, veh/h		155			282			1309			1139	
Approach Delay, s/veh		33.1			29.3			10.2			10.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	62.0	28.0	62.0	28.0
Change Period (Y+Rc), s	* 5	* 5.8	* 5	* 5.8
Max Green Setting (Gmax), s	* 51	* 28	* 51	* 28
Max Q Clear Time (g_c+I1), s	27.5	12.6	25.4	17.8
Green Ext Time (p_c), s	8.7	1.2	10.6	0.6

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	27	63	86	60	114	72	1018	114	54	849	144
Future Volume (veh/h)	53	27	63	86	60	114	72	1018	114	54	849	144
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	0.98		0.97	0.98		0.97	1.00		0.84	1.00		0.86
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	29	68	93	65	124	78	1107	124	59	923	157
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	123	69	107	224	142	378	324	1999	223	276	1875	319
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.63	0.63	0.63	0.63	0.63	0.63
Unsig. Movement Delay												
Ln Grp Delay, s/veh	33.1	0.0	0.0	30.0	0.0	28.3	15.5	9.8	9.9	18.0	10.1	10.2
Ln Grp LOS	C	A	A	C	A	C	B	A	A	B	B	B
Approach Vol, veh/h		155			282			1309			1139	
Approach Delay, s/veh		33.1			29.3			10.2			10.5	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		7.0		6.0		8.0
Phs Duration (G+Y+Rc), s		62.0		28.0		62.0		28.0
Change Period (Y+Rc), s		* 5		* 5.8		* 5		* 5.8
Max Green (Gmax), s		* 51		* 28		* 51		* 28
Max Allow Headway (MAH), s		5.4		4.9		5.3		5.8
Max Q Clear (g_c+I1), s		27.5		12.6		25.4		17.8
Green Ext Time (g_e), s		8.7		1.2		10.6		0.6
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.01		0.00		0.10

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		452		653		522		276

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2960		574		3155		281

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		503		1533		352		436

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L+T		L		L+T+R

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	59	0	158	0	78	0	155
Grp Sat Flow (s), veh/h/ln	0	452	0	1227	0	522	0	993
Q Serve Time (g_s), s	0.0	7.6	0.0	0.0	0.0	8.4	0.0	5.1
Cycle Q Clear Time (g_c), s	0.0	25.5	0.0	10.6	0.0	23.4	0.0	15.8
Perm LT Sat Flow (s_l), veh/h/ln	0	452	0	1295	0	522	0	1190
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	1058	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	57.0	0.0	22.2	0.0	57.0	0.0	22.2
Perm LT Serve Time (g_u), s	0.0	39.1	0.0	6.4	0.0	42.1	0.0	11.5
Perm LT Q Serve Time (g_ps), s	0.0	7.6	0.0	0.0	0.0	8.4	0.0	5.1
Time to First Blk (g_f), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	3.3
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	1.4	0.0	0.0	0.0	3.3
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	0.59	0.00	1.00	0.00	0.37
Lane Grp Cap (c), veh/h	0	276	0	366	0	324	0	300
V/C Ratio (X)	0.00	0.21	0.00	0.43	0.00	0.24	0.00	0.52
Avail Cap (c_a), veh/h	0	276	0	464	0	324	0	394
Upstream Filter (I)	0.00	0.84	0.00	1.00	0.00	0.26	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.5	0.0	29.2	0.0	15.0	0.0	31.7
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.8	0.0	0.5	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.0	0.0	30.0	0.0	15.5	0.0	33.1
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	2.9	0.0	0.9	0.0	3.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.5	0.0	5.5	0.0	1.8	0.0	5.9
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.30	0.00	0.37	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	554	0	0	0	622	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	14.9	0.0	0.0	0.0	17.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.9	0.0	0.0	0.0	17.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	1126	0	0	0	1126	0	0
V/C Ratio (X)	0.00	0.49	0.00	0.00	0.00	0.55	0.00	0.00
Avail Cap (c_a), veh/h	0	1126	0	0	0	1126	0	0
Upstream Filter (I)	0.00	0.84	0.00	0.00	0.00	0.26	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.8	0.0	0.0	0.0	9.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.1	0.0	0.0	0.0	9.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.9	0.0	0.0	0.0	5.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.66	0.00	1.00	0.00	1.34	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.7	0.0	0.0	0.0	8.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.00	0.00	0.28	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	526	0	124	0	609	0	0
Grp Sat Flow (s), veh/h/ln	0	1686	0	1533	0	1730	0	0
Q Serve Time (g_s), s	0.0	15.0	0.0	6.0	0.0	17.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	6.0	0.0	17.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.30	0.00	1.00	0.00	0.20	0.00	0.44
Lane Grp Cap (c), veh/h	0	1068	0	378	0	1096	0	0
V/C Ratio (X)	0.00	0.49	0.00	0.33	0.00	0.56	0.00	0.00
Avail Cap (c_a), veh/h	0	1068	0	480	0	1096	0	0
Upstream Filter (I)	0.00	0.84	0.00	1.00	0.00	0.26	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.8	0.0	27.8	0.0	9.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.5	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.2	0.0	28.3	0.0	9.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.6	0.0	2.2	0.0	5.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.1	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.67	0.00	1.80	0.00	1.35	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	8.4	0.0	4.0	0.0	7.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.22	0.00	0.27	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Future Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	916	605	500	1546	0				328	235	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1287	815	183	2220	0				477	277	188
Arrive On Green	0.00	0.62	0.62	0.62	0.62	0.00				0.27	0.27	0.27
Sat Flow, veh/h	0	2153	1304	343	3647	0				1781	1034	704
Grp Volume(v), veh/h	0	785	736	500	1546	0				328	0	395
Grp Sat Flow(s),veh/h/ln	0	1777	1587	343	1777	0				1781	0	1738
Q Serve(g_s), s	0.0	26.7	29.2	27.0	26.0	0.0				14.9	0.0	19.4
Cycle Q Clear(g_c), s	0.0	26.7	29.2	56.2	26.0	0.0				14.9	0.0	19.4
Prop In Lane	0.00		0.82	1.00		0.00				1.00		0.41
Lane Grp Cap(c), veh/h	0	1110	992	183	2220	0				477	0	465
V/C Ratio(X)	0.00	0.71	0.74	2.73	0.70	0.00				0.69	0.00	0.85
Avail Cap(c_a), veh/h	0	1110	992	183	2220	0				653	0	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.38	0.38	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.3	11.8	37.4	11.2	0.0				29.6	0.0	31.2
Incr Delay (d2), s/veh	0.0	3.8	5.0	786.2	0.7	0.0				1.8	0.0	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	15.2	15.2	75.3	11.8	0.0				10.4	0.0	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.2	16.8	823.6	11.9	0.0				31.4	0.0	39.2
LnGrp LOS	A	B	B	F	B	A				C	A	D
Approach Vol, veh/h		1521			2046						723	
Approach Delay, s/veh		16.0			210.3						35.6	
Approach LOS		B			F						D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	60.9	29.1	60.9
Change Period (Y+Rc), s	* 4.7	5.0	* 4.7
Max Green Setting (Gmax), s	* 47	33.0	* 47
Max Q Clear Time (g_c+I1), s	58.2	21.4	31.2
Green Ext Time (p_c), s	0.0	2.7	9.8

Intersection Summary	
HCM 6th Ctrl Delay	112.0
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Future Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Number	1	6	16	5	2	12				7	4	14
Initial Q, veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	916	605	500	1546	0				328	235	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Opposing Right Turn Influence	No			Yes						Yes		
Cap, veh/h	0	1287	815	183	2220	0				477	277	188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Prop Arrive On Green	0.00	0.62	0.62	0.62	0.62	0.00				0.27	0.27	0.27
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	15.2	16.8	823.6	11.9	0.0				31.4	0.0	39.2
Ln Grp LOS	A	B	B	F	B	A				C	A	D
Approach Vol, veh/h		1521			2046						723	
Approach Delay, s/veh		16.0			210.3						35.6	
Approach LOS		B			F						D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		60.9		29.1		60.9		
Change Period (Y+Rc), s		* 4.7		5.0		* 4.7		
Max Green (Gmax), s		* 47		33.0		* 47		
Max Allow Headway (MAH), s		6.7		4.5		5.3		
Max Q Clear (g_c+I1), s		58.2		21.4		31.2		
Green Ext Time (g_e), s		0.0		2.7		9.8		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		1.00		0.19		0.62		

Left-Turn Movement Data			
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		343		1781		0		

Through Movement Data			
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		1034		2153		

Right-Turn Movement Data			
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		704		1304		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	500	0	328	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	343	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	27.0	0.0	14.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	56.2	0.0	14.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	343	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	56.2	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	27.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	27.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	56.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	183	0	477	0	0	0	0
V/C Ratio (X)	0.00	2.73	0.00	0.69	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	183	0	653	0	0	0	0
Upstream Filter (I)	0.00	0.38	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	37.4	0.0	29.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	786.2	0.0	1.8	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	823.6	0.0	31.4	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	6.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	39.9	0.0	0.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.71	0.00	1.66	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	75.3	0.0	10.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	5.83	0.00	0.54	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	79.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	1546	0	0	0	785	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	0
Q Serve Time (g_s), s	0.0	26.0	0.0	0.0	0.0	26.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	26.0	0.0	0.0	0.0	26.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2220	0	0	0	1110	0	0
V/C Ratio (X)	0.00	0.70	0.00	0.00	0.00	0.71	0.00	0.00
Avail Cap (c_a), veh/h	0	2220	0	0	0	1110	0	0
Upstream Filter (I)	0.00	0.38	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	11.2	0.0	0.0	0.0	11.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	3.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.9	0.0	0.0	0.0	15.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	0.0	0.0	8.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	1.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.34	0.00	1.00	0.00	1.52	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	11.8	0.0	0.0	0.0	15.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.00	0.00	0.82	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	395	0	736	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1738	0	1587	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	19.4	0.0	29.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	19.4	0.0	29.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.41	0.00	0.82	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	465	0	992	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.85	0.00	0.74	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	637	0	992	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.2	0.0	11.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.9	0.0	5.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	39.2	0.0	16.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.6	0.0	8.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.0	0.0	1.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.56	0.00	1.52	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	13.5	0.0	15.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.71	0.00	0.82	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	112.0
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	1128	0	0	1372	626	510	4	539	0	0	0
Future Volume (veh/h)	159	1128	0	0	1372	626	510	4	539	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	173	1226	0	0	1491	680	554	4	586			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	108	2065	0	0	2009	882	523	3	460			
Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Sat Flow, veh/h	182	3647	0	0	3626	1518	1781	11	1570			
Grp Volume(v), veh/h	173	1226	0	0	1467	704	554	0	590			
Grp Sat Flow(s),veh/h/ln	182	1777	0	0	1702	1572	1781	0	1580			
Q Serve(g_s), s	14.1	0.0	0.0	0.0	36.5	38.2	26.4	0.0	26.4			
Cycle Q Clear(g_c), s	52.3	0.0	0.0	0.0	36.5	38.2	26.4	0.0	26.4			
Prop In Lane	1.00		0.00	0.00		0.97	1.00		0.99			
Lane Grp Cap(c), veh/h	108	2065	0	0	1978	914	523	0	464			
V/C Ratio(X)	1.60	0.59	0.00	0.00	0.74	0.77	1.06	0.00	1.27			
Avail Cap(c_a), veh/h	108	2065	0	0	1978	914	523	0	464			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Upstream Filter(I)	0.51	0.51	0.00	0.00	0.09	0.09	1.00	0.00	1.00			
Uniform Delay (d), s/veh	24.3	0.0	0.0	0.0	30.0	30.7	31.8	0.0	31.8			
Incr Delay (d2), s/veh	288.9	0.6	0.0	0.0	0.1	0.4	56.3	0.0	138.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	18.9	0.3	0.0	0.0	18.4	17.9	26.8	0.0	41.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	313.2	0.6	0.0	0.0	30.1	31.1	88.1	0.0	170.6			
LnGrp LOS	F	A	A	A	C	C	F	A	F			
Approach Vol, veh/h		1399			2171			1144				
Approach Delay, s/veh		39.3			30.4			130.6				
Approach LOS		D			C			F				

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	58.0	32.0	58.0
Change Period (Y+Rc), s	* 5.7	* 5.6	* 5.7
Max Green Setting (Gmax), s	* 52	* 26	* 52
Max Q Clear Time (g_c+I1), s	54.3	28.4	40.2
Green Ext Time (p_c), s	0.0	0.0	10.0

Intersection Summary	
HCM 6th Ctrl Delay	57.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	1128	0	0	1372	626	510	4	539	0	0	0
Future Volume (veh/h)	159	1128	0	0	1372	626	510	4	539	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q, veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	173	1226	0	0	1491	680	554	4	586			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Opposing Right Turn Influence	Yes			No			Yes					
Cap, veh/h	108	2065	0	0	2009	882	523	3	460			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00			
Prop Arrive On Green	1.00	1.00	0.00	0.00	0.19	0.19	0.29	0.29	0.29			
Unsig. Movement Delay												
Ln Grp Delay, s/veh	313.2	0.6	0.0	0.0	30.1	31.1	88.1	0.0	170.6			
Ln Grp LOS	F	A	A	A	C	C	F	A	F			
Approach Vol, veh/h		1399			2171			1144				
Approach Delay, s/veh		39.3			30.4			130.6				
Approach LOS		D			C			F				

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Case No		6.0		10.0		8.0		
Phs Duration (G+Y+Rc), s		58.0		32.0		58.0		
Change Period (Y+Rc), s		* 5.7		* 5.6		* 5.7		
Max Green (Gmax), s		* 52		* 26		* 52		
Max Allow Headway (MAH), s		7.0		4.6		5.2		
Max Q Clear (g_c+I1), s		54.3		28.4		40.2		
Green Ext Time (g_e), s		0.0		0.0		10.0		
Prob of Phs Call (p_c)		1.00		1.00		1.00		
Prob of Max Out (p_x)		0.00		1.00		0.87		

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		
Mvmt Sat Flow, veh/h		182		1781		0		

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3647		11		3626		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		0		1570		1518		

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	0
Lane Assignment		L		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	173	0	554	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	182	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	14.1	0.0	26.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	52.3	0.0	26.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	182	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	52.3	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	14.1	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	14.1	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	52.3	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	108	0	523	0	0	0	0
V/C Ratio (X)	0.00	1.60	0.00	1.06	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	108	0	523	0	0	0	0
Upstream Filter (I)	0.00	0.51	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.3	0.0	31.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	288.9	0.0	56.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	313.2	0.0	88.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	10.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	8.7	0.0	8.2	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.75	0.00	1.43	0.00	1.00	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	18.9	0.0	26.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.92	0.00	1.50	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	16.1	0.0	7.9	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1226	0	0	0	1467	0	0
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1702	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	36.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	36.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2065	0	0	0	1978	0	0
V/C Ratio (X)	0.00	0.59	0.00	0.00	0.00	0.74	0.00	0.00
Avail Cap (c_a), veh/h	0	2065	0	0	0	1978	0	0
Upstream Filter (I)	0.00	0.51	0.00	0.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.6	0.0	0.0	0.0	30.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	16.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.12	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.3	0.0	0.0	0.0	18.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.00	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment				T+R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	590	0	704	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1580	0	1572	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	26.4	0.0	38.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	26.4	0.0	38.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	0.99	0.00	0.97	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	464	0	914	0	0
V/C Ratio (X)	0.00	0.00	0.00	1.27	0.00	0.77	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	464	0	914	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.09	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	31.8	0.0	30.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	138.8	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	170.6	0.0	31.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.4	0.0	15.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	17.9	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.50	0.00	1.12	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	41.0	0.0	17.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	2.29	0.00	0.50	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	31.6	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	57.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1156	206	222	1466	11	161	316	161	48	359	360
Future Volume (veh/h)	306	1156	206	222	1466	11	161	316	161	48	359	360
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	333	1257	224	241	1593	12	175	343	175	52	390	391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1332	235	247	1540	658	179	603	632	229	603	491
Arrive On Green	0.03	0.15	0.15	0.18	0.87	0.87	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1781	2997	528	1781	3554	1518	688	1870	1525	876	1870	1525
Grp Volume(v), veh/h	333	740	741	241	1593	12	175	343	175	52	390	391
Grp Sat Flow(s),veh/h/ln	1781	1777	1748	1781	1777	1518	688	1870	1525	876	1870	1525
Q Serve(g_s), s	9.0	37.1	37.9	7.6	39.0	0.1	12.9	13.7	6.9	4.7	16.1	21.0
Cycle Q Clear(g_c), s	9.0	37.1	37.9	7.6	39.0	0.1	29.0	13.7	6.9	18.4	16.1	21.0
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	790	777	247	1540	658	179	603	632	229	603	491
V/C Ratio(X)	1.29	0.94	0.95	0.98	1.03	0.02	0.98	0.57	0.28	0.23	0.65	0.80
Avail Cap(c_a), veh/h	258	790	777	247	1540	658	179	603	632	229	603	491
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	37.2	37.5	19.6	6.0	3.4	41.3	25.3	17.6	33.0	26.1	27.8
Incr Delay (d2), s/veh	150.2	15.8	18.5	50.5	32.3	0.1	61.8	3.9	1.1	2.3	5.3	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.6	27.3	28.0	9.5	14.4	0.1	11.3	10.7	4.6	2.0	12.4	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	179.3	53.0	56.0	70.1	38.3	3.5	103.2	29.2	18.7	35.3	31.4	40.4
LnGrp LOS	F	D	E	E	F	A	F	C	B	D	C	D
Approach Vol, veh/h		1814			1846			693			833	
Approach Delay, s/veh		77.4			42.3			45.2			35.9	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	44.0		34.0	11.0	45.0		34.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green Setting (Gmax), s	9.0	* 39		* 29	8.0	* 40		* 29
Max Q Clear Time (g_c+I1), s	11.0	41.0		23.0	9.6	39.9		31.0
Green Ext Time (p_c), s	0.0	0.0		2.2	0.0	0.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	1156	206	222	1466	11	161	316	161	48	359	360
Future Volume (veh/h)	306	1156	206	222	1466	11	161	316	161	48	359	360
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	0.99		0.96
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	333	1257	224	241	1593	12	175	343	175	52	390	391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	258	1332	235	247	1540	658	179	603	632	229	603	491
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.03	0.15	0.15	0.18	0.87	0.87	0.32	0.32	0.32	0.32	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	179.3	53.0	56.0	70.1	38.3	3.5	103.2	29.2	18.7	35.3	31.4	40.4
Ln Grp LOS	F	D	E	E	F	A	F	C	B	D	C	D
Approach Vol, veh/h		1814			1846			693			833	
Approach Delay, s/veh		77.4			42.3			45.2			35.9	
Approach LOS		E			D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Case No	1.1	3.0		5.0	1.1	4.0		5.0
Phs Duration (G+Y+Rc), s	12.0	44.0		34.0	11.0	45.0		34.0
Change Period (Y+Rc), s	3.0	* 5		* 5	3.0	* 5		* 5
Max Green (Gmax), s	9.0	* 39		* 29	8.0	* 40		* 29
Max Allow Headway (MAH), s	3.8	5.1		4.7	3.8	5.2		5.3
Max Q Clear (g_c+I1), s	11.0	41.0		23.0	9.6	39.9		31.0
Green Ext Time (g_e), s	0.0	0.0		2.2	0.0	0.1		0.0
Prob of Phs Call (p_c)	1.00	1.00		1.00	1.00	1.00		1.00
Prob of Max Out (p_x)	1.00	0.00		0.00	1.00	0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt	1			7	5			3
Mvmt Sat Flow, veh/h	1781			876	1781			688

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		1870		2997		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1518		1525		528		1525

Left Lane Group Data								
Assigned Mvmt	1	0	0	7	5	0	0	3
Lane Assignment	L (Pr/Pm)			LL (Pr/Pm)				L

Lanes in Grp	1	0	0	1	1	0	0	1
Grp Vol (v), veh/h	333	0	0	52	241	0	0	175
Grp Sat Flow (s), veh/h/ln	1781	0	0	876	1781	0	0	688
Q Serve Time (g_s), s	9.0	0.0	0.0	4.7	7.6	0.0	0.0	12.9
Cycle Q Clear Time (g_c), s	9.0	0.0	0.0	18.4	7.6	0.0	0.0	29.0
Perm LT Sat Flow (s_l), veh/h/ln	316	0	0	876	356	0	0	688
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	39.0	0.0	0.0	29.0	39.0	0.0	0.0	29.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	15.3	2.1	0.0	0.0	12.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	4.7	2.1	0.0	0.0	12.9
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	258	0	0	229	247	0	0	179
V/C Ratio (X)	1.29	0.00	0.00	0.23	0.98	0.00	0.00	0.98
Avail Cap (c_a), veh/h	258	0	0	229	247	0	0	179
Upstream Filter (I)	0.73	0.00	0.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	29.1	0.0	0.0	33.0	19.6	0.0	0.0	41.3
Incr Delay (d2), s/veh	150.2	0.0	0.0	2.3	50.5	0.0	0.0	61.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	179.3	0.0	0.0	35.3	70.1	0.0	0.0	103.2
1st-Term Q (Q1), veh/ln	2.8	0.0	0.0	1.0	2.2	0.0	0.0	3.9
2nd-Term Q (Q2), veh/ln	10.8	0.0	0.0	0.1	3.5	0.0	0.0	3.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.52	0.00	0.00	1.80	1.69	0.00	0.00	1.62
%ile Back of Q (95%), veh/ln	20.6	0.0	0.0	2.0	9.5	0.0	0.0	11.3
%ile Storage Ratio (RQ%)	3.49	0.00	0.00	0.30	1.73	0.00	0.00	1.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	18.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	1	0	1
Grp Vol (v), veh/h	0	1593	0	390	0	740	0	343
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	39.0	0.0	16.1	0.0	37.1	0.0	13.7
Cycle Q Clear Time (g_c), s	0.0	39.0	0.0	16.1	0.0	37.1	0.0	13.7
Lane Grp Cap (c), veh/h	0	1540	0	603	0	790	0	603
V/C Ratio (X)	0.00	1.03	0.00	0.65	0.00	0.94	0.00	0.57
Avail Cap (c_a), veh/h	0	1540	0	603	0	790	0	603
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.73	0.00	1.00
Uniform Delay (d1), s/veh	0.0	6.0	0.0	26.1	0.0	37.2	0.0	25.3
Incr Delay (d2), s/veh	0.0	32.3	0.0	5.3	0.0	15.8	0.0	3.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	38.3	0.0	31.4	0.0	53.0	0.0	29.2
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	6.9	0.0	17.4	0.0	5.9
2nd-Term Q (Q2), veh/ln	0.0	6.9	0.0	0.9	0.0	3.5	0.0	0.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.58	0.00	1.59	0.00	1.31	0.00	1.64
%ile Back of Q (95%), veh/ln	0.0	14.4	0.0	12.4	0.0	27.3	0.0	10.7
%ile Storage Ratio (RQ%)	0.00	0.91	0.00	0.46	0.00	0.77	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	13.3	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	12	0	391	0	741	0	175
Grp Sat Flow (s), veh/h/ln	0	1518	0	1525	0	1748	0	1525
Q Serve Time (g_s), s	0.0	0.1	0.0	21.0	0.0	37.9	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	21.0	0.0	37.9	0.0	6.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1585.1
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	0.30	0.00	1.00
Lane Grp Cap (c), veh/h	0	658	0	491	0	777	0	632
V/C Ratio (X)	0.00	0.02	0.00	0.80	0.00	0.95	0.00	0.28
Avail Cap (c_a), veh/h	0	658	0	491	0	777	0	632
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.73	0.00	1.00
Uniform Delay (d1), s/veh	0.0	3.4	0.0	27.8	0.0	37.5	0.0	17.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	12.6	0.0	18.5	0.0	1.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	3.5	0.0	40.4	0.0	56.0	0.0	18.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.4	0.0	17.5	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.7	0.0	4.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.54	0.00	1.30	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	0.1	0.0	14.0	0.0	28.0	0.0	4.6
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	3.57	0.00	0.79	0.00	1.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.9
HCM 6th LOS	D

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	718	241	75	1228	162	181	741	85	125	582	306
Future Volume (veh/h)	262	718	241	75	1228	162	181	741	85	125	582	306
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.90	0.98		0.76	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	780	262	82	1335	176	197	805	92	136	633	333
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	862	679	101	1193	481	182	1031	118	239	958	504
Arrive On Green	0.08	0.46	0.46	0.34	0.34	0.34	0.33	0.33	0.33	0.07	0.45	0.45
Sat Flow, veh/h	1781	1870	1474	541	3554	1432	568	3095	354	1781	2149	1130
Grp Volume(v), veh/h	285	780	262	82	1335	176	197	462	435	136	523	443
Grp Sat Flow(s),veh/h/ln	1781	1870	1474	541	1777	1432	568	1777	1672	1781	1777	1503
Q Serve(g_s), s	9.6	46.3	14.0	9.0	40.3	11.2	25.7	28.1	28.1	5.8	27.8	27.8
Cycle Q Clear(g_c), s	9.6	46.3	14.0	40.3	40.3	11.2	40.0	28.1	28.1	5.8	27.8	27.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.75
Lane Grp Cap(c), veh/h	203	862	679	101	1193	481	182	592	557	239	792	670
V/C Ratio(X)	1.41	0.90	0.39	0.81	1.12	0.37	1.08	0.78	0.78	0.57	0.66	0.66
Avail Cap(c_a), veh/h	203	862	679	101	1193	481	182	592	557	240	792	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.29	0.29	0.29	0.40	0.40	0.40	0.85	0.85	0.85
Uniform Delay (d), s/veh	33.6	29.9	21.2	57.8	39.8	30.2	51.4	36.1	36.1	27.0	26.1	26.1
Incr Delay (d2), s/veh	210.1	13.0	0.4	13.8	57.2	0.1	66.5	4.1	4.4	2.7	3.7	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.0	31.2	8.5	4.4	34.0	5.6	12.6	16.3	15.5	4.6	17.5	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	243.7	42.9	21.6	71.6	97.1	30.3	117.8	40.2	40.5	29.7	29.8	30.4
LnGrp LOS	F	D	C	E	F	C	F	D	D	C	C	C
Approach Vol, veh/h		1327			1593			1094			1102	
Approach Delay, s/veh		81.8			88.4			54.3			30.0	
Approach LOS		F			F			D			C	

Timer - Assigned Phs	2	3	4	5	6	8
Phs Duration (G+Y+Rc), s	59.0	15.0	46.0	13.5	45.5	61.0
Change Period (Y+Rc), s	* 5.5	* 5.4	* 5.7	5.6	* 5.5	* 5.7
Max Green Setting (Gmax), s	* 54	* 9.6	* 40	8.0	* 40	* 55
Max Q Clear Time (g_c+I1), s	29.8	11.6	42.3	7.8	42.0	48.3
Green Ext Time (p_c), s	7.0	0.0	0.0	0.0	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	66.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	718	241	75	1228	162	181	741	85	125	582	306
Future Volume (veh/h)	262	718	241	75	1228	162	181	741	85	125	582	306
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.93	1.00		0.90	0.98		0.76	1.00		0.89
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	780	262	82	1335	176	197	805	92	136	633	333
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	203	862	679	101	1193	481	182	1031	118	239	958	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.46	0.46	0.34	0.34	0.34	0.33	0.33	0.33	0.07	0.45	0.45
Unsig. Movement Delay												
Ln Grp Delay, s/veh	243.7	42.9	21.6	71.6	97.1	30.3	117.8	40.2	40.5	29.7	29.8	30.4
Ln Grp LOS	F	D	C	E	F	C	F	D	D	C	C	C
Approach Vol, veh/h		1327			1593			1094			1102	
Approach Delay, s/veh		81.8			88.4			54.3			30.0	
Approach LOS		F			F			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6		8
Case No		4.0	1.2	5.3	1.2	6.3		3.0
Phs Duration (G+Y+Rc), s		59.0	15.0	46.0	13.5	45.5		61.0
Change Period (Y+Rc), s		* 5.5	* 5.4	* 5.7	5.6	* 5.5		* 5.7
Max Green (Gmax), s		* 54	* 9.6	* 40	8.0	* 40		* 55
Max Allow Headway (MAH), s		5.3	3.8	5.3	3.8	5.6		5.0
Max Q Clear (g_c+I1), s		29.8	11.6	42.3	7.8	42.0		48.3
Green Ext Time (g_e), s		7.0	0.0	0.0	0.0	0.0		3.6
Prob of Phs Call (p_c)		1.00	1.00	1.00	0.99	1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00		0.81

Left-Turn Movement Data								
Assigned Mvmt			3	7	5	1		
Mvmt Sat Flow, veh/h			1781	541	1781	568		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2149		3554		3095		1870

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1130		1432		354		1474

Left Lane Group Data								
Assigned Mvmt	0	0	3	7	5	1	0	0
Lane Assignment		L (Pr/Pm)		LL (Pr/Pm)		L		

Lanes in Grp	0	0	1	1	1	1	0	0
Grp Vol (v), veh/h	0	0	285	82	136	197	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1781	541	1781	568	0	0
Q Serve Time (g_s), s	0.0	0.0	9.6	9.0	5.8	25.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	9.6	40.3	5.8	40.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	346	541	621	568	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	42.3	40.3	42.0	40.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	9.0	11.8	25.7	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	9.0	8.5	25.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	1.00	1.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	203	101	239	182	0	0
V/C Ratio (X)	0.00	0.00	1.41	0.81	0.57	1.08	0.00	0.00
Avail Cap (c_a), veh/h	0	0	203	101	240	182	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.29	0.85	0.40	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	33.6	57.8	27.0	51.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	210.1	13.8	2.7	66.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	243.7	71.6	29.7	117.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	4.1	2.5	2.4	5.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	11.8	0.4	0.2	3.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.57	1.52	1.80	1.42	0.00	0.00
%ile Back of Q (95%), veh/ln	0.0	0.0	25.0	4.4	4.6	12.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	4.24	0.56	1.31	1.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	20.6	0.0	0.0	3.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	1
Grp Vol (v), veh/h	0	523	0	1335	0	462	0	780
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1870
Q Serve Time (g_s), s	0.0	27.8	0.0	40.3	0.0	28.1	0.0	46.3
Cycle Q Clear Time (g_c), s	0.0	27.8	0.0	40.3	0.0	28.1	0.0	46.3
Lane Grp Cap (c), veh/h	0	792	0	1193	0	592	0	862
V/C Ratio (X)	0.00	0.66	0.00	1.12	0.00	0.78	0.00	0.90
Avail Cap (c_a), veh/h	0	792	0	1193	0	592	0	862
Upstream Filter (I)	0.00	0.85	0.00	0.29	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.1	0.0	39.8	0.0	36.1	0.0	29.9
Incr Delay (d2), s/veh	0.0	3.7	0.0	57.2	0.0	4.1	0.0	13.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.8	0.0	97.1	0.0	40.2	0.0	42.9
1st-Term Q (Q1), veh/ln	0.0	11.4	0.0	17.3	0.0	11.9	0.0	20.2
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	9.5	0.0	0.7	0.0	3.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.43	0.00	1.27	0.00	1.29	0.00	1.34
%ile Back of Q (95%), veh/ln	0.0	17.5	0.0	34.0	0.0	16.3	0.0	31.2
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.73	0.00	0.15	0.00	1.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	35.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	443	0	176	0	435	0	262
Grp Sat Flow (s), veh/h/ln	0	1503	0	1432	0	1672	0	1474
Q Serve Time (g_s), s	0.0	27.8	0.0	11.2	0.0	28.1	0.0	14.0
Cycle Q Clear Time (g_c), s	0.0	27.8	0.0	11.2	0.0	28.1	0.0	14.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.75	0.00	1.00	0.00	0.21	0.00	1.00
Lane Grp Cap (c), veh/h	0	670	0	481	0	557	0	679
V/C Ratio (X)	0.00	0.66	0.00	0.37	0.00	0.78	0.00	0.39
Avail Cap (c_a), veh/h	0	670	0	481	0	557	0	679
Upstream Filter (I)	0.00	0.85	0.00	0.29	0.00	0.40	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.1	0.0	30.2	0.0	36.1	0.0	21.2
Incr Delay (d2), s/veh	0.0	4.3	0.0	0.1	0.0	4.4	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.4	0.0	30.3	0.0	40.5	0.0	21.6
1st-Term Q (Q1), veh/ln	0.0	9.6	0.0	3.9	0.0	11.2	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.7	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.47	0.00	1.45	0.00	1.30	0.00	1.74
%ile Back of Q (95%), veh/ln	0.0	15.3	0.0	5.6	0.0	15.5	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.53	0.00	1.19	0.00	0.15	0.00	1.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.8
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	719	60	119	1036	177	213	855	149	310	698	181
Future Volume (veh/h)	74	719	60	119	1036	177	213	855	149	310	698	181
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.90	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	782	65	129	1126	192	232	929	162	337	759	197
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	827	648	107	1326	225	206	869	348	220	908	340
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.12	0.24	0.24	0.12	0.26	0.26
Sat Flow, veh/h	416	1870	1465	650	2998	508	1781	3554	1426	1781	3554	1331
Grp Volume(v), veh/h	80	782	65	129	665	653	232	929	162	337	759	197
Grp Sat Flow(s),veh/h/ln	416	1870	1465	650	1777	1730	1781	1777	1426	1781	1777	1331
Q Serve(g_s), s	9.3	36.1	2.3	3.7	30.0	30.5	10.4	22.0	8.7	11.1	18.2	11.6
Cycle Q Clear(g_c), s	39.8	36.1	2.3	39.8	30.0	30.5	10.4	22.0	8.7	11.1	18.2	11.6
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	123	827	648	107	786	765	206	869	348	220	908	340
V/C Ratio(X)	0.65	0.95	0.10	1.21	0.85	0.85	1.13	1.07	0.46	1.53	0.84	0.58
Avail Cap(c_a), veh/h	123	827	648	107	786	765	206	869	348	220	908	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.24	0.24	0.24	1.00	1.00	1.00	0.47	0.47	0.47	0.23	0.23	0.23
Uniform Delay (d), s/veh	42.5	24.1	14.7	44.5	22.4	22.5	39.8	34.0	29.0	39.4	31.7	29.3
Incr Delay (d2), s/veh	6.3	7.0	0.1	152.6	10.9	11.7	82.5	42.3	0.5	245.6	1.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.1	19.4	1.3	12.4	20.0	19.9	13.1	19.0	4.8	27.5	9.7	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	31.1	14.7	197.1	33.2	34.2	122.3	76.3	29.4	285.0	33.4	29.8
LnGrp LOS	D	C	B	F	C	C	F	F	C	F	C	C
Approach Vol, veh/h		927			1447			1323			1293	
Approach Delay, s/veh		31.5			48.3			78.6			98.4	
Approach LOS		C			D			E			F	

Timer - Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.8	16.0	28.2		45.8	17.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green Setting (Gmax), s		* 40	10.4	* 23		* 40	11.1	* 22
Max Q Clear Time (g_c+I1), s		41.8	12.4	20.2		41.8	13.1	24.0
Green Ext Time (p_c), s		0.0	0.0	1.5		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	719	60	119	1036	177	213	855	149	310	698	181
Future Volume (veh/h)	74	719	60	119	1036	177	213	855	149	310	698	181
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.92	1.00		0.92	1.00		0.90	1.00		0.84
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	782	65	129	1126	192	232	929	162	337	759	197
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	123	827	648	107	1326	225	206	869	348	220	908	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.12	0.24	0.24	0.12	0.26	0.26
Unsig. Movement Delay												
Ln Grp Delay, s/veh	48.8	31.1	14.7	197.1	33.2	34.2	122.3	76.3	29.4	285.0	33.4	29.8
Ln Grp LOS	D	C	B	F	C	C	F	F	C	F	C	C
Approach Vol, veh/h		927			1447			1323			1293	
Approach Delay, s/veh		31.5			48.3			78.6			98.4	
Approach LOS		C			D			E			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Case No		6.0	2.0	3.0		5.0	2.0	3.0
Phs Duration (G+Y+Rc), s		45.8	16.0	28.2		45.8	17.0	27.2
Change Period (Y+Rc), s		* 6	5.6	* 5.2		* 6	5.9	* 5.2
Max Green (Gmax), s		* 40	10.4	* 23		* 40	11.1	* 22
Max Allow Headway (MAH), s		5.3	3.7	4.9		5.4	3.7	4.9
Max Q Clear (g_c+I1), s		41.8	12.4	20.2		41.8	13.1	24.0
Green Ext Time (g_e), s		0.0	0.0	1.5		0.0	0.0	0.0
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00	1.00	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt		5	3			1	7	
Mvmt Sat Flow, veh/h		650	1781			416	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2998		3554		1870		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		508		1331		1465		1426

Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	7	0
Lane Assignment		L	L (Prot)			L	L (Prot)	

Lanes in Grp	0	1	1	0	0	1	1	0
Grp Vol (v), veh/h	0	129	232	0	0	80	337	0
Grp Sat Flow (s), veh/h/ln	0	650	1781	0	0	416	1781	0
Q Serve Time (g_s), s	0.0	3.7	10.4	0.0	0.0	9.3	11.1	0.0
Cycle Q Clear Time (g_c), s	0.0	39.8	10.4	0.0	0.0	39.8	11.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	650	0	0	0	416	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	39.8	0.0	0.0	0.0	39.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	3.7	0.0	0.0	0.0	9.3	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	3.7	0.0	0.0	0.0	9.3	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	107	206	0	0	123	220	0
V/C Ratio (X)	0.00	1.21	1.13	0.00	0.00	0.65	1.53	0.00
Avail Cap (c_a), veh/h	0	107	206	0	0	123	220	0
Upstream Filter (I)	0.00	1.00	0.47	0.00	0.00	0.24	0.23	0.00
Uniform Delay (d1), s/veh	0.0	44.5	39.8	0.0	0.0	42.5	39.4	0.0
Incr Delay (d2), s/veh	0.0	152.6	82.5	0.0	0.0	6.3	245.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	197.1	122.3	0.0	0.0	48.8	285.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.3	4.4	0.0	0.0	1.7	4.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	4.5	4.7	0.0	0.0	0.2	15.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	1.45	0.00	0.00	1.57	1.40	0.00
%ile Back of Q (95%), veh/ln	0.0	12.4	13.1	0.0	0.0	3.1	27.5	0.0
%ile Storage Ratio (RQ%)	0.00	1.80	3.34	0.00	0.00	0.45	4.65	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	5.5	6.5	0.0	0.0	0.0	29.3	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.3	0.0	0.0	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	2	0	1	0	2
Grp Vol (v), veh/h	0	665	0	759	0	782	0	929
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1870	0	1777
Q Serve Time (g_s), s	0.0	30.0	0.0	18.2	0.0	36.1	0.0	22.0
Cycle Q Clear Time (g_c), s	0.0	30.0	0.0	18.2	0.0	36.1	0.0	22.0
Lane Grp Cap (c), veh/h	0	786	0	908	0	827	0	869
V/C Ratio (X)	0.00	0.85	0.00	0.84	0.00	0.95	0.00	1.07
Avail Cap (c_a), veh/h	0	786	0	908	0	827	0	869
Upstream Filter (I)	0.00	1.00	0.00	0.23	0.00	0.24	0.00	0.47
Uniform Delay (d1), s/veh	0.0	22.4	0.0	31.7	0.0	24.1	0.0	34.0
Incr Delay (d2), s/veh	0.0	10.9	0.0	1.7	0.0	7.0	0.0	42.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.2	0.0	33.4	0.0	31.1	0.0	76.3
1st-Term Q (Q1), veh/ln	0.0	11.5	0.0	7.4	0.0	14.6	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	2.4	0.0	0.2	0.0	1.6	0.0	5.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.44	0.00	1.29	0.00	1.20	0.00	1.36
%ile Back of Q (95%), veh/ln	0.0	20.0	0.0	9.7	0.0	19.4	0.0	19.0
%ile Storage Ratio (RQ%)	0.00	0.57	0.00	0.22	0.00	0.42	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	653	0	197	0	65	0	162
Grp Sat Flow (s), veh/h/ln	0	1730	0	1331	0	1465	0	1426
Q Serve Time (g_s), s	0.0	30.5	0.0	11.6	0.0	2.3	0.0	8.7
Cycle Q Clear Time (g_c), s	0.0	30.5	0.0	11.6	0.0	2.3	0.0	8.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	765	0	340	0	648	0	348
V/C Ratio (X)	0.00	0.85	0.00	0.58	0.00	0.10	0.00	0.46
Avail Cap (c_a), veh/h	0	765	0	340	0	648	0	348
Upstream Filter (I)	0.00	1.00	0.00	0.23	0.00	0.24	0.00	0.47
Uniform Delay (d1), s/veh	0.0	22.5	0.0	29.3	0.0	14.7	0.0	29.0
Incr Delay (d2), s/veh	0.0	11.7	0.0	0.6	0.0	0.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	34.2	0.0	29.8	0.0	14.7	0.0	29.4
1st-Term Q (Q1), veh/ln	0.0	11.4	0.0	3.5	0.0	0.7	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	2.5	0.0	0.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.44	0.00	1.42	0.00	1.80	0.00	1.66
%ile Back of Q (95%), veh/ln	0.0	19.9	0.0	5.1	0.0	1.3	0.0	4.8
%ile Storage Ratio (RQ%)	0.00	0.57	0.00	0.86	0.00	0.34	0.00	0.97
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.2
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	274	613	0	0	438
Future Vol, veh/h	74	274	613	0	0	438
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	298	666	0	0	476

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	904	666	0	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	238	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	-	-
Pot Cap-1 Maneuver	292	458	-	0	0	-
Stage 1	510	-	-	0	0	-
Stage 2	780	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	292	458	-	-	-	-
Mov Cap-2 Maneuver	404	-	-	-	-	-
Stage 1	510	-	-	-	-	-
Stage 2	780	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	404	458	-
HCM Lane V/C Ratio	-	0.199	0.65	-
HCM Control Delay (s)	-	16.1	26.3	-
HCM Lane LOS	-	C	D	-
HCM 95th %tile Q(veh)	-	0.7	4.5	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	364	110	520	596	451	87	921	333	124	799	32
Future Volume (veh/h)	160	364	110	520	596	451	87	921	333	124	799	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	396	120	565	648	490	95	1001	362	135	868	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	679	203	470	1214	539	246	1114	493	210	1122	497
Arrive On Green	0.08	0.25	0.25	0.17	0.34	0.34	0.07	0.31	0.31	0.07	0.32	0.32
Sat Flow, veh/h	1781	2691	806	1781	3554	1578	1781	3554	1573	1781	3554	1573
Grp Volume(v), veh/h	174	260	256	565	648	490	95	1001	362	135	868	35
Grp Sat Flow(s),veh/h/ln	1781	1777	1720	1781	1777	1578	1781	1777	1573	1781	1777	1573
Q Serve(g_s), s	8.7	15.4	15.7	20.4	17.6	35.6	4.2	32.3	24.6	6.0	26.5	1.9
Cycle Q Clear(g_c), s	8.7	15.4	15.7	20.4	17.6	35.6	4.2	32.3	24.6	6.0	26.5	1.9
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	449	434	470	1214	539	246	1114	493	210	1122	497
V/C Ratio(X)	0.58	0.58	0.59	1.20	0.53	0.91	0.39	0.90	0.73	0.64	0.77	0.07
Avail Cap(c_a), veh/h	300	503	487	470	1324	588	252	1114	493	211	1122	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.63	0.09	0.09	0.09	1.00	1.00	1.00	0.71	0.71	0.71
Uniform Delay (d), s/veh	29.9	39.3	39.4	31.0	31.8	37.7	27.4	39.4	36.7	29.9	37.2	28.7
Incr Delay (d2), s/veh	1.8	0.8	1.0	92.6	0.0	2.1	1.0	11.5	9.4	4.6	3.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	10.0	10.0	27.0	8.7	15.3	3.2	21.8	15.8	5.0	16.5	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.6	40.1	40.4	123.6	31.8	39.8	28.3	50.9	46.1	34.5	40.9	28.9
LnGrp LOS	C	D	D	F	C	D	C	D	D	C	D	C
Approach Vol, veh/h		690			1703			1458			1038	
Approach Delay, s/veh		38.1			64.6			48.2			39.7	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	43.3	15.3	46.9	14.8	43.0	26.0	36.2
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green Setting (Gmax), s	9.0	33.8	9.7	44.7	9.0	33.8	20.4	34.0
Max Q Clear Time (g_c+I1), s	6.2	28.5	10.7	37.6	8.0	34.3	22.4	17.7
Green Ext Time (p_c), s	0.0	2.6	0.0	3.4	0.0	0.0	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	364	110	520	596	451	87	921	333	124	799	32
Future Volume (veh/h)	160	364	110	520	596	451	87	921	333	124	799	32
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	396	120	565	648	490	95	1001	362	135	868	35
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	300	679	203	470	1214	539	246	1114	493	210	1122	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.25	0.25	0.17	0.34	0.34	0.07	0.31	0.31	0.07	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.6	40.1	40.4	123.6	31.8	39.8	28.3	50.9	46.1	34.5	40.9	28.9
Ln Grp LOS	C	D	D	F	C	D	C	D	D	C	D	C
Approach Vol, veh/h		690			1703			1458			1038	
Approach Delay, s/veh		38.1			64.6			48.2			39.7	
Approach LOS		D			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	3.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	14.5	43.3	15.3	46.9	14.8	43.0	26.0	36.2
Change Period (Y+Rc), s	5.9	5.4	5.6	5.9	5.9	5.4	5.6	5.9
Max Green (Gmax), s	9.0	33.8	9.7	44.7	9.0	33.8	20.4	34.0
Max Allow Headway (MAH), s	3.7	5.0	3.7	4.6	3.7	4.7	3.7	5.1
Max Q Clear (g_c+l1), s	6.2	28.5	10.7	37.6	8.0	34.3	22.4	17.7
Green Ext Time (g_e), s	0.0	2.6	0.0	3.4	0.0	0.0	0.0	2.6
Prob of Phs Call (p_c)	0.96	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.70	1.00	0.00	1.00	0.05

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		3554		3554		2691

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1573		1578		1573		806

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	95	0	174	0	135	0	565	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	4.2	0.0	8.7	0.0	6.0	0.0	20.4	0.0
Cycle Q Clear Time (g_c), s	4.2	0.0	8.7	0.0	6.0	0.0	20.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	617	0	494	0	399	0	883	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	37.6	0.0	30.3	0.0	37.6	0.0	32.3	0.0
Perm LT Serve Time (g_u), s	11.3	0.0	23.4	0.0	5.3	0.0	14.6	0.0
Perm LT Q Serve Time (g_ps), s	4.8	0.0	3.8	0.0	5.3	0.0	14.6	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	246	0	300	0	210	0	470	0
V/C Ratio (X)	0.39	0.00	0.58	0.00	0.64	0.00	1.20	0.00
Avail Cap (c_a), veh/h	252	0	300	0	211	0	470	0
Upstream Filter (I)	1.00	0.00	0.63	0.00	0.71	0.00	0.09	0.00
Uniform Delay (d1), s/veh	27.4	0.0	29.9	0.0	29.9	0.0	31.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	1.8	0.0	4.6	0.0	92.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	28.3	0.0	31.6	0.0	34.5	0.0	123.6	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	3.6	0.0	2.5	0.0	9.8	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	0.0	0.3	0.0	12.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.67	0.00	1.80	0.00	1.23	0.00
%ile Back of Q (95%), veh/ln	3.2	0.0	6.3	0.0	5.0	0.0	27.0	0.0
%ile Storage Ratio (RQ%)	0.39	0.00	2.00	0.00	0.56	0.00	5.70	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	23.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	2	0	2	0	1
Grp Vol (v), veh/h	0	868	0	648	0	1001	0	260
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	26.5	0.0	17.6	0.0	32.3	0.0	15.4
Cycle Q Clear Time (g_c), s	0.0	26.5	0.0	17.6	0.0	32.3	0.0	15.4
Lane Grp Cap (c), veh/h	0	1122	0	1214	0	1114	0	449
V/C Ratio (X)	0.00	0.77	0.00	0.53	0.00	0.90	0.00	0.58
Avail Cap (c_a), veh/h	0	1122	0	1324	0	1114	0	503
Upstream Filter (I)	0.00	0.71	0.00	0.09	0.00	1.00	0.00	0.63
Uniform Delay (d1), s/veh	0.0	37.2	0.0	31.8	0.0	39.4	0.0	39.3
Incr Delay (d2), s/veh	0.0	3.8	0.0	0.0	0.0	11.5	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.9	0.0	31.8	0.0	50.9	0.0	40.1
1st-Term Q (Q1), veh/ln	0.0	11.2	0.0	7.4	0.0	13.6	0.0	6.6
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	0.0	0.0	1.8	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.40	0.00	1.18	0.00	1.42	0.00	1.50
%ile Back of Q (95%), veh/ln	0.0	16.5	0.0	8.7	0.0	21.8	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.26	0.00	1.74	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	35	0	490	0	362	0	256
Grp Sat Flow (s), veh/h/ln	0	1573	0	1578	0	1573	0	1720
Q Serve Time (g_s), s	0.0	1.9	0.0	35.6	0.0	24.6	0.0	15.7
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	35.6	0.0	24.6	0.0	15.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.47
Lane Grp Cap (c), veh/h	0	497	0	539	0	493	0	434
V/C Ratio (X)	0.00	0.07	0.00	0.91	0.00	0.73	0.00	0.59
Avail Cap (c_a), veh/h	0	497	0	588	0	493	0	487
Upstream Filter (I)	0.00	0.71	0.00	0.09	0.00	1.00	0.00	0.63
Uniform Delay (d1), s/veh	0.0	28.7	0.0	37.7	0.0	36.7	0.0	39.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.1	0.0	9.4	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.9	0.0	39.8	0.0	46.1	0.0	40.4
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	13.2	0.0	9.2	0.0	6.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.3	0.0	1.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.13	0.00	1.51	0.00	1.51
%ile Back of Q (95%), veh/ln	0.0	1.3	0.0	15.3	0.0	15.8	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	3.25	0.00	2.51	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	457	0	418	1	1001	0	0	894	0
Future Volume (veh/h)	0	0	0	457	0	418	1	1001	0	0	894	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	497	0	454	1	1088	0	0	972	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Cap, veh/h	0	649	0	738	0	547	60	1731	0	0	1764	0
Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.50	0.50	0.00	0.00	0.50	0.00
Sat Flow, veh/h	0	1870	0	1781	0	1578	0	3571	0	0	3741	0
Grp Volume(v), veh/h	0	0	0	497	0	454	584	505	0	0	972	0
Grp Sat Flow(s),veh/h/ln	0	1870	0	1781	0	1578	1870	1617	0	0	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	15.2	0.0	15.8	0.0	13.7	0.0	0.0	11.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	15.2	0.0	15.8	13.7	13.7	0.0	0.0	11.4	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	649	0	738	0	547	988	803	0	0	1764	0
V/C Ratio(X)	0.00	0.00	0.00	0.67	0.00	0.83	0.59	0.63	0.00	0.00	0.55	0.00
Avail Cap(c_a), veh/h	0	795	0	877	0	671	988	803	0	0	1764	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.52	0.52	0.00	0.00	0.69	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	17.7	0.0	18.0	11.1	11.1	0.0	0.0	10.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.6	0.0	7.2	1.4	2.0	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.0	9.8	0.0	10.3	7.5	6.8	0.0	0.0	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	19.3	0.0	25.2	12.4	13.0	0.0	0.0	11.3	0.0
LnGrp LOS	A	A	A	B	A	C	B	B	A	A	B	A
Approach Vol, veh/h		0			951			1089			972	
Approach Delay, s/veh		0.0			22.1			12.7			11.3	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	34.7	25.3	34.7	25.3
Change Period (Y+Rc), s	4.9	4.5	4.9	4.5
Max Green Setting (Gmax), s	25.1	25.5	25.1	25.5
Max Q Clear Time (g_c+I1), s	15.7	17.8	13.4	0.0
Green Ext Time (p_c), s	4.6	3.0	5.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	457	0	418	1	1001	0	0	894	0
Future Volume (veh/h)	0	0	0	457	0	418	1	1001	0	0	894	0
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	1870	1870	1870	0	0	1870	0
Adj Flow Rate, veh/h	0	0	0	497	0	454	1	1088	0	0	972	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	0	0	2	0
Opposing Right Turn Influence	No			Yes			Yes			No		
Cap, veh/h	0	649	0	738	0	547	60	1731	0	0	1764	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.50	0.50	0.00	0.00	0.50	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	0.0	0.0	19.3	0.0	25.2	12.4	13.0	0.0	0.0	11.3	0.0
Ln Grp LOS	A	A	A	B	A	C	B	B	A	A	B	A
Approach Vol, veh/h		0			951			1089			972	
Approach Delay, s/veh		0.0			22.1			12.7			11.3	
Approach LOS					C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		8.0		6.0		8.0		8.0
Phs Duration (G+Y+Rc), s		34.7		25.3		34.7		25.3
Change Period (Y+Rc), s		4.9		4.5		4.9		4.5
Max Green (Gmax), s		25.1		25.5		25.1		25.5
Max Allow Headway (MAH), s		5.1		4.6		5.1		0.0
Max Q Clear (g_c+I1), s		15.7		17.8		13.4		0.0
Green Ext Time (g_e), s		4.6		3.0		5.1		0.0
Prob of Phs Call (p_c)		1.00		1.00		1.00		0.00
Prob of Max Out (p_x)		0.00		0.61		0.00		0.00

Left-Turn Movement Data				
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		0		1781		0		0

Through Movement Data				
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3571		0		3741		1870

Right-Turn Movement Data				
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		0		1578		0		0

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L+T		L				

Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	584	0	497	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1870	0	1781	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	15.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	15.2	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	588	0	1781	0	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	29.8	0.0	20.8	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	18.4	0.0	20.8	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	15.2	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	26.4	0.0	0.0	0.0	29.8	0.0	20.8
Serve Time pre Blk (g_fs), s	0.0	13.7	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	988	0	738	0	0	0	0
V/C Ratio (X)	0.00	0.59	0.00	0.67	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	988	0	877	0	0	0	0
Upstream Filter (I)	0.00	0.52	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	11.1	0.0	17.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	1.6	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.4	0.0	19.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	4.5	0.0	5.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.54	0.00	1.68	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	7.5	0.0	9.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.54	0.00	0.52	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	2	0	1
Grp Vol (v), veh/h	0	505	0	0	0	972	0	0
Grp Sat Flow (s), veh/h/ln	0	1617	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	13.7	0.0	0.0	0.0	11.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	0.0	0.0	11.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	803	0	0	0	1764	0	649
V/C Ratio (X)	0.00	0.63	0.00	0.00	0.00	0.55	0.00	0.00
Avail Cap (c_a), veh/h	0	803	0	0	0	1764	0	795
Upstream Filter (I)	0.00	0.52	0.00	0.00	0.00	0.69	0.00	0.00
Uniform Delay (d1), s/veh	0.0	11.1	0.0	0.0	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.0	0.0	0.9	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.0	0.0	0.0	0.0	11.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.9	0.0	0.0	0.0	3.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.57	0.00	1.00	0.00	1.70	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	6.8	0.0	0.0	0.0	6.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.49	0.00	0.00	0.00	0.11	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	454	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1578	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	547	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	671	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	18.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.2	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	25.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	5.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.66	0.00	1.00	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	364	88	101	998	179	260	783	115	182	667	507
Future Volume (veh/h)	55	364	88	101	998	179	260	783	115	182	667	507
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	396	96	110	1085	195	283	851	125	198	725	551
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	892	214	391	983	176	287	1171	514	287	1171	514
Arrive On Green	0.06	0.32	0.32	0.07	0.33	0.33	0.08	0.33	0.33	0.08	0.33	0.33
Sat Flow, veh/h	1781	2829	678	1781	2999	537	1781	3554	1561	1781	3554	1561
Grp Volume(v), veh/h	60	247	245	110	641	639	283	851	125	198	725	551
Grp Sat Flow(s),veh/h/ln	1781	1777	1730	1781	1777	1759	1781	1777	1561	1781	1777	1561
Q Serve(g_s), s	2.0	9.9	10.2	3.6	29.5	29.5	7.0	19.0	5.3	6.7	15.5	29.7
Cycle Q Clear(g_c), s	2.0	9.9	10.2	3.6	29.5	29.5	7.0	19.0	5.3	6.7	15.5	29.7
Prop In Lane	1.00		0.39	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	560	546	391	582	577	287	1171	514	287	1171	514
V/C Ratio(X)	0.32	0.44	0.45	0.28	1.10	1.11	0.99	0.73	0.24	0.69	0.62	1.07
Avail Cap(c_a), veh/h	219	582	567	400	582	577	287	1171	514	287	1171	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	1.00	1.00	1.00	0.56	0.56	0.56	0.56	0.56	0.56
Uniform Delay (d), s/veh	22.6	24.5	24.6	18.6	30.3	30.3	27.1	26.6	22.0	20.8	25.4	30.2
Incr Delay (d2), s/veh	0.7	0.4	0.4	0.4	68.0	70.5	36.2	2.2	0.6	3.9	1.4	50.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	6.9	6.8	2.6	32.4	32.7	8.5	11.5	3.4	5.0	9.6	23.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	24.9	25.0	19.0	98.2	100.7	63.3	28.8	22.6	24.8	26.8	80.9
LnGrp LOS	C	C	C	B	F	F	E	C	C	C	C	F
Approach Vol, veh/h		552			1390			1259			1474	
Approach Delay, s/veh		24.8			93.1			36.0			46.7	
Approach LOS		C			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	35.1	9.4	34.5	11.0	35.1	10.6	33.4
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green Setting (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Q Clear Time (g_c+I1), s	9.0	31.7	4.0	31.5	8.7	21.0	5.6	12.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.4	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	55.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	364	88	101	998	179	260	783	115	182	667	507
Future Volume (veh/h)	55	364	88	101	998	179	260	783	115	182	667	507
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	396	96	110	1085	195	283	851	125	198	725	551
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	188	892	214	391	983	176	287	1171	514	287	1171	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.32	0.32	0.07	0.33	0.33	0.08	0.33	0.33	0.08	0.33	0.33
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.3	24.9	25.0	19.0	98.2	100.7	63.3	28.8	22.6	24.8	26.8	80.9
Ln Grp LOS	C	C	C	B	F	F	E	C	C	C	C	F
Approach Vol, veh/h		552			1390			1259			1474	
Approach Delay, s/veh		24.8			93.1			36.0			46.7	
Approach LOS		C			F			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	11.0	35.1	9.4	34.5	11.0	35.1	10.6	33.4
Change Period (Y+Rc), s	4.0	5.4	4.0	* 5	4.0	5.4	4.0	* 5
Max Green (Gmax), s	7.0	28.1	7.0	* 30	7.0	28.1	7.0	* 30
Max Allow Headway (MAH), s	3.8	4.6	3.7	5.1	3.8	5.0	3.7	5.1
Max Q Clear (g_c+l1), s	9.0	31.7	4.0	31.5	8.7	21.0	5.6	12.2
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	3.4	0.0	2.5
Prob of Phs Call (p_c)	1.00	1.00	0.78	1.00	0.99	1.00	0.94	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.03

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3554		2999		3554		2829

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1561		537		1561		678

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	283	0	60	0	198	0	110	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	7.0	0.0	2.0	0.0	6.7	0.0	3.6	0.0
Cycle Q Clear Time (g_c), s	7.0	0.0	2.0	0.0	6.7	0.0	3.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	433	0	432	0	576	0	898	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	29.7	0.0	28.4	0.0	29.7	0.0	28.4	0.0
Perm LT Serve Time (g_u), s	14.2	0.0	0.0	0.0	10.7	0.0	18.2	0.0
Perm LT Q Serve Time (g_ps), s	14.2	0.0	0.0	0.0	10.0	0.0	1.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	287	0	188	0	287	0	391	0
V/C Ratio (X)	0.99	0.00	0.32	0.00	0.69	0.00	0.28	0.00
Avail Cap (c_a), veh/h	287	0	219	0	287	0	400	0
Upstream Filter (I)	0.56	0.00	0.75	0.00	0.56	0.00	1.00	0.00
Uniform Delay (d1), s/veh	27.1	0.0	22.6	0.0	20.8	0.0	18.6	0.0
Incr Delay (d2), s/veh	36.2	0.0	0.7	0.0	3.9	0.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.3	0.0	23.3	0.0	24.8	0.0	19.0	0.0
1st-Term Q (Q1), veh/ln	2.7	0.0	0.8	0.0	2.6	0.0	1.4	0.0
2nd-Term Q (Q2), veh/ln	2.9	0.0	0.0	0.0	0.3	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.52	0.00	1.80	0.00	1.72	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	8.5	0.0	1.4	0.0	5.0	0.0	2.6	0.0
%ile Storage Ratio (RQ%)	1.24	0.00	0.30	0.00	0.73	0.00	0.66	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	725	0	641	0	851	0	247
Grp Sat Flow (s), veh/h/ln	0	1777	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	15.5	0.0	29.5	0.0	19.0	0.0	9.9
Cycle Q Clear Time (g_c), s	0.0	15.5	0.0	29.5	0.0	19.0	0.0	9.9
Lane Grp Cap (c), veh/h	0	1171	0	582	0	1171	0	560
V/C Ratio (X)	0.00	0.62	0.00	1.10	0.00	0.73	0.00	0.44
Avail Cap (c_a), veh/h	0	1171	0	582	0	1171	0	582
Upstream Filter (I)	0.00	0.56	0.00	1.00	0.00	0.56	0.00	0.75
Uniform Delay (d1), s/veh	0.0	25.4	0.0	30.3	0.0	26.6	0.0	24.5
Incr Delay (d2), s/veh	0.0	1.4	0.0	68.0	0.0	2.2	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.8	0.0	98.2	0.0	28.8	0.0	24.9
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	11.7	0.0	7.6	0.0	4.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	11.0	0.0	0.4	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.48	0.00	1.43	0.00	1.43	0.00	1.71
%ile Back of Q (95%), veh/ln	0.0	9.6	0.0	32.4	0.0	11.5	0.0	6.9
%ile Storage Ratio (RQ%)	0.00	0.69	0.00	0.65	0.00	0.44	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	551	0	639	0	125	0	245
Grp Sat Flow (s), veh/h/ln	0	1561	0	1759	0	1561	0	1730
Q Serve Time (g_s), s	0.0	29.7	0.0	29.5	0.0	5.3	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	29.7	0.0	29.5	0.0	5.3	0.0	10.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.31	0.00	1.00	0.00	0.39
Lane Grp Cap (c), veh/h	0	514	0	577	0	514	0	546
V/C Ratio (X)	0.00	1.07	0.00	1.11	0.00	0.24	0.00	0.45
Avail Cap (c_a), veh/h	0	514	0	577	0	514	0	567
Upstream Filter (I)	0.00	0.56	0.00	1.00	0.00	0.56	0.00	0.75
Uniform Delay (d1), s/veh	0.0	30.2	0.0	30.3	0.0	22.0	0.0	24.6
Incr Delay (d2), s/veh	0.0	50.7	0.0	70.5	0.0	0.6	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	80.9	0.0	100.7	0.0	22.6	0.0	25.0
1st-Term Q (Q1), veh/ln	0.0	10.3	0.0	11.6	0.0	1.8	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	7.2	0.0	11.3	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.36	0.00	1.43	0.00	1.80	0.00	1.71
%ile Back of Q (95%), veh/ln	0.0	23.8	0.0	32.7	0.0	3.4	0.0	6.8
%ile Storage Ratio (RQ%)	0.00	4.64	0.00	0.66	0.00	0.67	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	9.2	0.0	15.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.0
HCM 6th LOS	E

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	372	98	63	515	85	188	995	41	36	680	149
Future Volume (veh/h)	78	372	98	63	515	85	188	995	41	36	680	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	404	107	68	560	92	204	1082	45	39	739	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	574	152	268	755	633	258	1468	61	201	1218	267
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	778	1421	376	886	1870	1567	616	3472	144	499	2881	631
Grp Volume(v), veh/h	85	0	511	68	560	92	204	554	573	39	456	445
Grp Sat Flow(s),veh/h/ln	778	0	1798	886	1870	1567	616	1777	1840	499	1777	1736
Q Serve(g_s), s	6.3	0.0	14.2	4.2	15.3	2.2	13.4	15.7	15.7	4.3	11.9	11.9
Cycle Q Clear(g_c), s	21.6	0.0	14.2	18.4	15.3	2.2	25.4	15.7	15.7	19.9	11.9	11.9
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.08	1.00		0.36
Lane Grp Cap(c), veh/h	236	0	726	268	755	633	258	751	778	201	751	734
V/C Ratio(X)	0.36	0.00	0.70	0.25	0.74	0.15	0.79	0.74	0.74	0.19	0.61	0.61
Avail Cap(c_a), veh/h	246	0	749	279	779	653	258	751	778	201	751	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.71	0.71	0.71
Uniform Delay (d), s/veh	24.4	0.0	14.9	22.5	15.2	11.3	25.5	14.5	14.5	22.9	13.4	13.4
Incr Delay (d2), s/veh	0.9	0.0	2.9	0.5	3.7	0.1	21.6	6.4	6.2	1.5	2.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	0.0	9.3	1.5	10.3	1.2	7.7	10.8	11.0	1.0	7.5	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	17.8	23.0	18.9	11.4	47.0	20.9	20.7	24.4	16.0	16.1
LnGrp LOS	C	A	B	C	B	B	D	C	C	C	B	B
Approach Vol, veh/h		596			720			1331			940	
Approach Delay, s/veh		18.9			18.4			24.8			16.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	30.4	29.6	30.4	29.6
Change Period (Y+Rc), s	* 5	* 5.4	* 5	* 5.4
Max Green Setting (Gmax), s	* 25	* 25	* 25	* 25
Max Q Clear Time (g_c+I1), s	27.4	23.6	21.9	20.4
Green Ext Time (p_c), s	0.0	0.6	1.5	1.8

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	372	98	63	515	85	188	995	41	36	680	149
Future Volume (veh/h)	78	372	98	63	515	85	188	995	41	36	680	149
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	404	107	68	560	92	204	1082	45	39	739	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	236	574	152	268	755	633	258	1468	61	201	1218	267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.42
Unsig. Movement Delay												
Ln Grp Delay, s/veh	25.3	0.0	17.8	23.0	18.9	11.4	47.0	20.9	20.7	24.4	16.0	16.1
Ln Grp LOS	C	A	B	C	B	B	D	C	C	C	B	B
Approach Vol, veh/h		596			720			1331			940	
Approach Delay, s/veh		18.9			18.4			24.8			16.4	
Approach LOS		B			B			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		6.0		6.0		5.0
Phs Duration (G+Y+Rc), s		30.4		29.6		30.4		29.6
Change Period (Y+Rc), s		* 5		* 5.4		* 5		* 5.4
Max Green (Gmax), s		* 25		* 25		* 25		* 25
Max Allow Headway (MAH), s		5.4		5.3		5.3		5.0
Max Q Clear (g_c+l1), s		27.4		23.6		21.9		20.4
Green Ext Time (g_e), s		0.0		0.6		1.5		1.8
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		1.00		0.00		1.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		616		778		499		886
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3472		1421		2881		1870
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		144		376		631		1567
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	204	0	85	0	39	0	68
Grp Sat Flow (s), veh/h/ln	0	616	0	778	0	499	0	886
Q Serve Time (g_s), s	0.0	13.4	0.0	6.3	0.0	4.3	0.0	4.2
Cycle Q Clear Time (g_c), s	0.0	25.4	0.0	21.6	0.0	19.9	0.0	18.4
Perm LT Sat Flow (s_l), veh/h/ln	0	616	0	778	0	499	0	886
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	25.4	0.0	24.2	0.0	25.4	0.0	24.2
Perm LT Serve Time (g_u), s	0.0	13.4	0.0	8.9	0.0	9.7	0.0	10.0
Perm LT Q Serve Time (g_ps), s	0.0	13.4	0.0	6.3	0.0	4.3	0.0	4.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	258	0	236	0	201	0	268
V/C Ratio (X)	0.00	0.79	0.00	0.36	0.00	0.19	0.00	0.25
Avail Cap (c_a), veh/h	0	258	0	246	0	201	0	279
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.71	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	24.4	0.0	22.9	0.0	22.5
Incr Delay (d2), s/veh	0.0	21.6	0.0	0.9	0.0	1.5	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.0	0.0	25.3	0.0	24.4	0.0	23.0
1st-Term Q (Q1), veh/ln	0.0	2.8	0.0	1.1	0.0	0.5	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.1	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.79	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	7.7	0.0	2.0	0.0	1.0	0.0	1.5
%ile Storage Ratio (RQ%)	0.00	1.96	0.00	0.51	0.00	0.25	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	554	0	0	0	456	0	560
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	15.7	0.0	0.0	0.0	11.9	0.0	15.3
Cycle Q Clear Time (g_c), s	0.0	15.7	0.0	0.0	0.0	11.9	0.0	15.3
Lane Grp Cap (c), veh/h	0	751	0	0	0	751	0	755
V/C Ratio (X)	0.00	0.74	0.00	0.00	0.00	0.61	0.00	0.74
Avail Cap (c_a), veh/h	0	751	0	0	0	751	0	779
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.71	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.5	0.0	0.0	0.0	13.4	0.0	15.2
Incr Delay (d2), s/veh	0.0	6.4	0.0	0.0	0.0	2.6	0.0	3.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.9	0.0	0.0	0.0	16.0	0.0	18.9
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	0.0	0.0	4.0	0.0	5.5
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.5	0.0	0.8

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.64	0.00	1.00	0.00	1.65	0.00	1.66
%ile Back of Q (95%), veh/ln	0.0	10.8	0.0	0.0	0.0	7.5	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.42	0.00	0.00	0.00	0.29	0.00	0.25
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	573	0	511	0	445	0	92
Grp Sat Flow (s), veh/h/ln	0	1840	0	1798	0	1736	0	1567
Q Serve Time (g_s), s	0.0	15.7	0.0	14.2	0.0	11.9	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	15.7	0.0	14.2	0.0	11.9	0.0	2.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.08	0.00	0.21	0.00	0.36	0.00	1.00
Lane Grp Cap (c), veh/h	0	778	0	726	0	734	0	633
V/C Ratio (X)	0.00	0.74	0.00	0.70	0.00	0.61	0.00	0.15
Avail Cap (c_a), veh/h	0	778	0	749	0	734	0	653
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.71	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.5	0.0	14.9	0.0	13.4	0.0	11.3
Incr Delay (d2), s/veh	0.0	6.2	0.0	2.9	0.0	2.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.7	0.0	17.8	0.0	16.1	0.0	11.4
1st-Term Q (Q1), veh/ln	0.0	5.4	0.0	4.9	0.0	3.9	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.6	0.0	0.5	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.63	0.00	1.70	0.00	1.66	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	11.0	0.0	9.3	0.0	7.4	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.43	0.00	0.27	0.00	0.29	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
32: Tujunga Ave & Riverside Dr & Camarillo St

02/11/2021

Movement	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	182	238	454	149	12	144	404	133	23	585	21	104
Future Volume (vph)	182	238	454	149	12	144	404	133	23	585	21	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Lane Util. Factor	1.00	0.91	0.91			1.00	0.95		1.00	0.95		
Frpb, ped/bikes	1.00	0.98	0.96			1.00	0.99		1.00	0.99		
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00		0.99	1.00		
Frt	1.00	0.92	0.85			1.00	0.96		1.00	0.97		
Flt Protected	0.95	1.00	1.00			0.95	1.00		0.95	1.00		
Satd. Flow (prot)	1650	2851	1287			1650	3160		1643	3192		
Flt Permitted	0.20	1.00	1.00			0.18	1.00		0.38	1.00		
Satd. Flow (perm)	349	2851	1287			311	3160		663	3192		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	198	259	493	162	13	157	439	145	25	636	23	113
RTOR Reduction (vph)	0	0	146	0	0	0	23	0	0	10	0	0
Lane Group Flow (vph)	198	584	184	0	0	170	561	0	25	762	0	0
Confl. Peds. (#/hr)	9		11	8	11	8		9	9		7	11
Turn Type	pm+pt	NA	Perm		Perm	pm+pt	NA		Perm	NA		
Protected Phases	1	6				5	2			8		
Permitted Phases	6		6		2	2			8			
Actuated Green, G (s)	40.1	29.9	29.9			39.0	29.9		28.7	28.7		
Effective Green, g (s)	40.1	29.9	29.9			39.0	29.9		28.7	28.7		
Actuated g/C Ratio	0.29	0.21	0.21			0.28	0.21		0.20	0.20		
Clearance Time (s)	5.5	6.7	6.7			6.6	6.7		6.3	6.3		
Vehicle Extension (s)	3.0	3.9	3.9			3.0	4.6		4.7	4.7		
Lane Grp Cap (vph)	194	608	274			173	674		135	654		
v/s Ratio Prot	c0.07	0.20				0.06	0.18			c0.24		
v/s Ratio Perm	c0.22		0.14			0.21			0.04			
v/c Ratio	1.02	1.11dr	0.67			0.98	0.83		0.19	1.17		
Uniform Delay, d1	45.6	54.5	50.5			45.8	52.7		46.0	55.6		
Progression Factor	1.00	1.00	1.00			1.00	1.00		1.00	1.00		
Incremental Delay, d2	70.1	28.0	12.3			62.9	11.5		3.0	90.6		
Delay (s)	115.7	82.4	62.9			108.7	64.2		49.0	146.2		
Level of Service	F	F	E			F	E		D	F		
Approach Delay (s)		82.6					74.2			143.2		
Approach LOS		F					E			F		

Intersection Summary			
HCM 2000 Control Delay	81.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	33.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	SBL2	SBL	SBT	SBR	NWL2	NWL	NWR	NWR2
Lane Configurations								
Traffic Volume (vph)	22	62	532	117	46	437	174	16
Future Volume (vph)	22	62	532	117	46	437	174	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.9			6.6	6.6	
Lane Util. Factor		1.00	0.95			0.97	0.91	
Frpb, ped/bikes		1.00	1.00			1.00	1.00	
Flpb, ped/bikes		1.00	1.00			1.00	1.00	
Frt		1.00	0.97			0.99	0.85	
Flt Protected		0.95	1.00			0.95	1.00	
Satd. Flow (prot)		1652	3199			3196	1345	
Flt Permitted		0.11	1.00			0.95	1.00	
Satd. Flow (perm)		199	3199			3196	1345	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	67	578	127	50	475	189	17
RTOR Reduction (vph)	0	0	13	0	0	0	151	0
Lane Group Flow (vph)	0	91	692	0	0	544	36	0
Confl. Peds. (#/hr)	7	11		9	8	9	9	7
Turn Type	Perm	pm+pt	NA		Prot	Prot	Prot	
Protected Phases		7	4		10	10	10	
Permitted Phases	4	4						
Actuated Green, G (s)		46.9	46.9			27.3	27.3	
Effective Green, g (s)		46.9	46.9			27.3	27.3	
Actuated g/C Ratio		0.33	0.33			0.20	0.20	
Clearance Time (s)		6.8	6.9			6.6	6.6	
Vehicle Extension (s)		3.0	4.9			4.6	4.6	
Lane Grp Cap (vph)		191	1071			623	262	
v/s Ratio Prot		0.04	c0.22			c0.17	0.03	
v/s Ratio Perm		0.12						
v/c Ratio		0.48	0.65			0.87	0.14	
Uniform Delay, d1		36.4	39.5			54.7	46.6	
Progression Factor		1.00	1.00			1.00	1.00	
Incremental Delay, d2		1.9	3.0			13.6	0.4	
Delay (s)		38.2	42.5			68.3	47.1	
Level of Service		D	D			E	D	
Approach Delay (s)			42.0			62.9		
Approach LOS			D			E		

Intersection Summary

Movement	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2	NBL2	NBL
Lane Configurations												
Traffic Volume (vph)	21	60	251	75	68	21	49	330	61	44	74	137
Future Volume (vph)	21	60	251	75	68	21	49	330	61	44	74	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Lane Util. Factor		1.00	0.95				1.00	0.95			1.00	1.00
Frpb, ped/bikes		1.00	0.98				1.00	0.98			1.00	1.00
Flpb, ped/bikes		0.98	1.00				0.98	1.00			1.00	1.00
Frt		1.00	0.95				1.00	0.96			1.00	1.00
Flt Protected		0.95	1.00				0.95	1.00			0.95	0.95
Satd. Flow (prot)		1616	3065				1622	3136			1652	1652
Flt Permitted		0.26	1.00				0.31	1.00			0.95	0.95
Satd. Flow (perm)		445	3065				525	3136			1652	1652
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	65	273	82	74	23	53	359	66	48	80	149
RTOR Reduction (vph)	0	0	10	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	88	419	0	0	0	76	468	0	0	80	149
Confl. Peds. (#/hr)	12	27		17	13	17	13		12	27	24	12
Turn Type	Perm	Perm	NA			Perm	Perm	NA			Prot	Prot
Protected Phases			8					4			1	1
Permitted Phases	8	8				4	4					
Actuated Green, G (s)		35.8	35.8				35.8	35.8			20.0	20.0
Effective Green, g (s)		35.8	35.8				35.8	35.8			20.0	20.0
Actuated g/C Ratio		0.20	0.20				0.20	0.20			0.11	0.11
Clearance Time (s)		6.8	6.8				6.8	6.8			5.6	5.6
Vehicle Extension (s)		3.0	3.0				3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		88	609				104	623			183	183
v/s Ratio Prot			0.14					0.15			0.05	0.09
v/s Ratio Perm		c0.20					0.14					
v/c Ratio		1.00	0.69				0.73	0.75			0.44	0.81
Uniform Delay, d1		72.1	66.9				67.6	67.9			74.7	78.2
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		95.9	3.2				23.0	5.1			1.7	23.4
Delay (s)		168.0	70.1				90.6	73.0			76.4	101.6
Level of Service		F	E				F	E			E	F
Approach Delay (s)			86.8					75.4				
Approach LOS			F					E				

Intersection Summary			
HCM 2000 Control Delay	74.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	161.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	SEL2	SEL	SET	SER
Lane Configurations												
Traffic Volume (vph)	558	47	23	32	129	513	68	7	7	66	503	178
Future Volume (vph)	558	47	23	32	129	513	68	7	7	66	503	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Lane Util. Factor	0.95	1.00			1.00	0.95	1.00			1.00	0.91	0.91
Frpb, ped/bikes	1.00	0.88			1.00	1.00	0.95			1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00			0.99	1.00	1.00
Frt	1.00	0.85			1.00	1.00	0.85			1.00	0.99	0.85
Flt Protected	1.00	1.00			0.95	1.00	1.00			0.95	1.00	1.00
Satd. Flow (prot)	3303	1300			1652	3303	1400			1632	3146	1311
Flt Permitted	1.00	1.00			0.95	1.00	1.00			0.13	1.00	1.00
Satd. Flow (perm)	3303	1300			1652	3303	1400			219	3146	1311
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	607	51	25	35	140	558	74	8	8	72	547	193
RTOR Reduction (vph)	0	59	0	0	0	0	62	0	0	0	0	0
Lane Group Flow (vph)	607	17	0	0	175	558	20	0	0	80	566	174
Confl. Peds. (#/hr)		24	17	24	17		24	12	27	24		13
Turn Type	NA	Perm		Prot	Prot	NA	Perm		Perm	Perm	NA	Perm
Protected Phases	6			5	5	2					10	
Permitted Phases		6					2		10	10		10
Actuated Green, G (s)	40.8	40.8			22.6	43.6	43.6			52.9	52.9	52.9
Effective Green, g (s)	40.8	40.8			22.6	43.6	43.6			52.9	52.9	52.9
Actuated g/C Ratio	0.23	0.23			0.13	0.24	0.24			0.29	0.29	0.29
Clearance Time (s)	7.2	7.2			6.3	7.7	7.7			7.6	7.6	7.6
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	748	294			207	800	339			64	924	385
v/s Ratio Prot	c0.18				c0.11	c0.17					0.18	
v/s Ratio Perm		0.01					0.01			c0.37		0.13
v/c Ratio	0.81	0.06			0.85	0.70	0.06			1.25	0.61	0.45
Uniform Delay, d1	66.0	54.5			77.0	62.2	52.4			63.5	54.7	51.7
Progression Factor	1.00	1.00			1.24	0.79	3.14			1.00	1.00	1.00
Incremental Delay, d2	9.3	0.4			10.0	1.7	0.1			194.0	1.2	0.8
Delay (s)	75.3	54.9			105.3	50.6	164.7			257.6	55.9	52.6
Level of Service	E	D			F	D	F			F	E	D
Approach Delay (s)	78.0					73.8					74.6	
Approach LOS	E					E					E	

Intersection Summary

Movement	SER2	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	7	72	700	299	45
Future Volume (vph)	7	72	700	299	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	7.6	7.6	7.6	7.6	
Lane Util. Factor	1.00	1.00	0.91	0.91	
Frpb, ped/bikes	0.94	1.00	1.00	0.94	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	
Frt	0.85	1.00	0.99	0.85	
Flt Protected	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1389	1650	3139	1260	
Flt Permitted	1.00	0.28	1.00	1.00	
Satd. Flow (perm)	1389	478	3139	1260	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	78	761	325	49
RTOR Reduction (vph)	6	0	0	73	0
Lane Group Flow (vph)	2	78	794	268	0
Confl. Peds. (#/hr)	24	2		27	24
Turn Type	Perm	Perm	NA	Perm	
Protected Phases			14		
Permitted Phases	10	14		14	
Actuated Green, G (s)	52.9	52.9	52.9	52.9	
Effective Green, g (s)	52.9	52.9	52.9	52.9	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	
Clearance Time (s)	7.6	7.6	7.6	7.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	408	140	922	370	
v/s Ratio Prot			0.25		
v/s Ratio Perm	0.00	0.16		0.21	
v/c Ratio	0.01	0.56	0.86	0.72	
Uniform Delay, d1	44.9	53.7	60.1	57.0	
Progression Factor	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	4.7	8.3	6.8	
Delay (s)	45.0	58.4	68.4	63.8	
Level of Service	D	E	E	E	
Approach Delay (s)			66.5		
Approach LOS			E		

Intersection Summary

Appendix F

Memorandum of Understanding

Transportation Assessment Memorandum of Understanding (MOU)

This MOU acknowledges that the Transportation Assessment for the following Project will be prepared in accordance with the latest version of LADOT's Transportation Assessment Guidelines:

I. PROJECT INFORMATION

Project Name: District NoHo

Project Address: Various addresses at and around Metro North Hollywood Station - see Figures 1-6 for the Site Plan and location

Project Description: The Project would develop 9 "Blocks" on 4 parcels with a mix of residential, office, and commercial space, along with a new bus transit center. In total it would include 1,527 residential units, 580,374 sf office, and 30,125 sf of retail and 75,000 sf of restaurant along with Project and Metro parking spaces. An alternative land use plan would convert 75,000 of the retail/restaurant space to office.

LADOT Project Case Number: _____ Project Site Plan attached? *(Required)* ■ Yes ☐ No

II. TRANSPORTATION DEMAND MANAGEMENT (TDM) MEASURES

Select any of the following TDM measures, which may be eligible as a Project Design Feature[1], that are being considered for this project:

✓	Reduced Parking Supply[2]	✓	Bicycle Parking and Amenities		Parking Cash Out

List any other TDM measures (e.g. bike share kiosks, unbundled parking, microtransit service, etc.) below that are also being considered and would require LADOT staff's determination of its eligibility as a TDM measure. LADOT staff will make the final determination of the TDM measure's eligibility for this project.

1 Promotions and marketing
2 Traffic calming improvements
3 Pedestrian network improvements
4 _____
5 _____
6 _____

III. TRIP GENERATION

Trip Generation Rate(s) Source: ITE 10th Edition / Other ITE 10th Edition and LADOT affordable housing rates - See Table 2

Trip Generation Adjustment *(Exact amount of credit subject to approval by LADOT)*	**Yes**	**No**
Transit Usage	☑	☐
Existing Active or Previous Land Use	☐	☑
Internal Trip	☑	☐
Pass-By Trip	☑	☐
Transportation Demand Management (See above)	☑	☐

Trip generation table including a description of the existing and proposed land uses, rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. attached? *(Required)* ■ Yes ☐ No

	IN	OUT	TOTAL
AM Trips	737	617	1354
PM Trips	665	767	1432

NET Daily Vehicle Trips (DVT)
_____ DVT (ITE ___ ed.)
14,823 DVT (VMT Calculator ver. 1.3)

[1] At this time Project Design Features are only those measures that are also shown to be needed to comply with a local ordinance, affordable housing incentive program, or State law.
[2] Select if reduced parking supply is pursued as a result of a parking incentive as permitted by the City's Bicycle Parking Ordinance, State Density Bonus Law, or the City's Transit Oriented Community Guidelines.

IV. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2037 Ambient Growth Rate: 1 % Per Yr.

Related Projects List, researched by the consultant and approved by LADOT, attached? *(Required)* ■ Yes ☐ No

STUDY INTERSECTIONS and/or STREET SEGMENTS:
(May be subject to LADOT revision after access, safety, and circulation evaluation.)

1 See Table 7, Figure 7, and Figure 8 4 _____
2 _____ 5 _____
3 _____ 6 _____

Provide a separate list if more than six study intersections and/or street segments.

Is this Project located on a street within the High Injury Network? ■ Yes ☐ No

If a study intersection is located within a ¼-mile of an adjacent municipality's jurisdiction, signature approval from said municipality is required prior to MOU approval.

V. ACCESS ASSESSMENT

a. Does the project exceed 1,000 net DVT? ■ Yes ☐ No
b. Is the project's frontage 250 linear feet or more along an Avenue or Boulevard as classified by the City's General Plan? ■ Yes ☐ No
c. Is the project's building frontage encompassing an entire block along an Avenue or Boulevard as classified by the City's General Plan? ■ Yes ☐ No

VI. ACCESS ASSESSMENT CRITERIA

If Yes to any of the above questions a., b., or c., complete **Attachment C.1: Access Assessment Criteria**.

VII. SITE PLAN AND MAP OF STUDY AREA

Please note that the site plan should also be submitted to the Department of City Planning for cursory review.

Does the attached site plan and/or map of study area show	Yes	No	Not Applicable
Each study intersection and/or street segment	☑	☐	☐
*Project Vehicle Peak Hour trips at each study intersection	☑	☐	☐
*Project Vehicle Peak Hour trips at each project access point	☑	☐	☐
*Project trip distribution percentages at each study intersection	☑	☐	☐
Project driveways designed per LADOT MPP 321 (show widths and directions or lane assignment)	☑	☐	☐
Pedestrian access points and any pedestrian paths	☑	☐	☐
Pedestrian loading zones	☑	☐	☐
Delivery loading zone or area	☑	☐	☐
Bicycle parking onsite	☑	☐	☐
Bicycle parking offsite (in public right-of-way)	☑	☐	☐

*For mixed-use projects, also show the project trips and project trip distribution by land use category.

VIII. FREEWAY SAFETY ANALYSIS SCREENING

See Figure 13 for Traffic Volumes

Will the project add 25 or more trips to any freeway off-ramp in either the AM or PM peak hour? ■ **YES** ☐ **NO**

Provide a brief explanation or graphic identifying the number of project trips expected to be added to the nearby freeway off-ramps serving the project site. If Yes to the question above, a freeway ramp analysis is required.

IX. CONTACT INFORMATION

	CONSULTANT	DEVELOPER
Name:	Jonathan Chambers - Gibson Transportation Consulting	Karen Shorr, Trammell Crow Company
Address:	555 W. 5th Street #3375, Los Angeles, CA 90013	2221 Rosecrans Ave #200, El Segundo, 90245
Phone Number:	(213) 683-0088	(310) 363-4718
E-Mail:	jchambers@gibsontrans.com	kshorr@trammellcrow.com

Approved by:	x _____ Consultant's Representative	_____ Date	x _____ LADOT Representative	_____ **Date
Adjacent Municipality:	_____	Approved by: (if applicable)	_____ Representative	_____ Date

**MOUs are generally valid for two years after signing. If after two years a transportation assessment has not been submitted to LADOT, the developer's representative shall check with the appropriate LADOT office to determine if the terms of this MOU are still valid or if a new MOU is needed.

Access Assessment Criteria

This Criteria acknowledges that the Transportation Assessment for the following Project will be prepared in accordance with the latest version of LADOT's Transportation Assessment Guidelines:

I. PROJECT INFORMATION

Project Name: District NoHo

Project Address: Various addresses at and around Metro North Hollywood Station - see Figures 1-6 for the Site Plan and location

Project Description: The Project would develop 9 "Blocks" on 4 parcels with a mix of residential, office, and commercial space, along with a new bus transit center. In total it would include 1,527 residential units, 580,374 sf office, and 30,125 sf of retail and 75,000 sf of restaurant along with Project and Metro parking spaces. An alternative land use plan would convert 75,000 of the retail/restaurant space to office.

LADOT Project Case Number: _____

II. PEDESTRIAN/ PERSON TRIP GENERATION

Source of Pedestrian/Person Trip Generation Rate(s)? ☐ VMT Calculator ☑ ITE 10th Edition ☐ Other:

	Land Use	Size/Unit	Daily Person Trips
Proposed	See Table 8 and Figures 15 and 16		
	Total new trips:		

Pedestrian/Person trip generation table including a description of the proposed land uses, trip credits, person trip assumptions, comparison studies used for reference, etc. attached? ☑ Yes ☐ No

III. PEDESTRIAN ATTRACTORS INVENTORY

Attach Pedestrian Map for the area (1,320 foot radius from edge of the project site) depicting:

- site pedestrian entrance(s)
- Existing or proposed passenger loading zones
- pedestrian generation/distribution values

  See Figures 15 and 16

  - Geographic Distribution: N ____ % S ____ % E ____ % W ____ %
- Ā transit boarding and alighting of transit stops (should include Metro rail stations; Metro, DASH, and

other municipal bus stops)

- Key pedestrian destinations with hours of operation:
  - schools (school times)
  - government offices with a public counter or meeting room
  - senior citizen centers
  - recreation centers or playgrounds
  - public libraries
  - medical centers or clinics
  - child care facilities
  - post offices
  - places of worship
  - grocery stores
  - other facilities that attract pedestrian trips
- pedestrian walking routes to key destinations from project site

Note: Pedestrian Count Summary, Bicycle Count Summary, Manual Traffic Count Summary will need to be attached to the Transportation Assessment

IV. FACILITIES INVENTORY

Is a High Injury Network street located within 1,320 foot radius from the edge of the project site? ☑ Yes ☐ No

If yes, list streets and include distance from the project:

Lankershim Boulevard at 0 (feet)

Burbank Boulevard at 800 (feet)

Vineland Avenue at 1200 (feet)

_____ at _____ (feet)

Attach Radius Map for the area (1,320 foot radius from edge of the project site) depicting the following existing and proposed facilities:

- transit stops
- bike facilities
- traffic control devices for controlled crossings
- uncontrolled crosswalks
- location of any missing, damaged or substandard sidewalks

For a reference of planned facilities, see the Transportation Assessment Support Map

Crossing Distances

Does the project property have frontage along an arterial street (designated as either an Avenue or Boulevard?)

☑ Yes ☐ No

If yes, provide the distance between the crossing control devices (e.g. signalized crosswalk, or controlled mid-block crossing) along any arterial within 1,320 feet of the property.

_____(feet) at See Table 9 _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

_____(feet) at _____ _____(feet) at _____

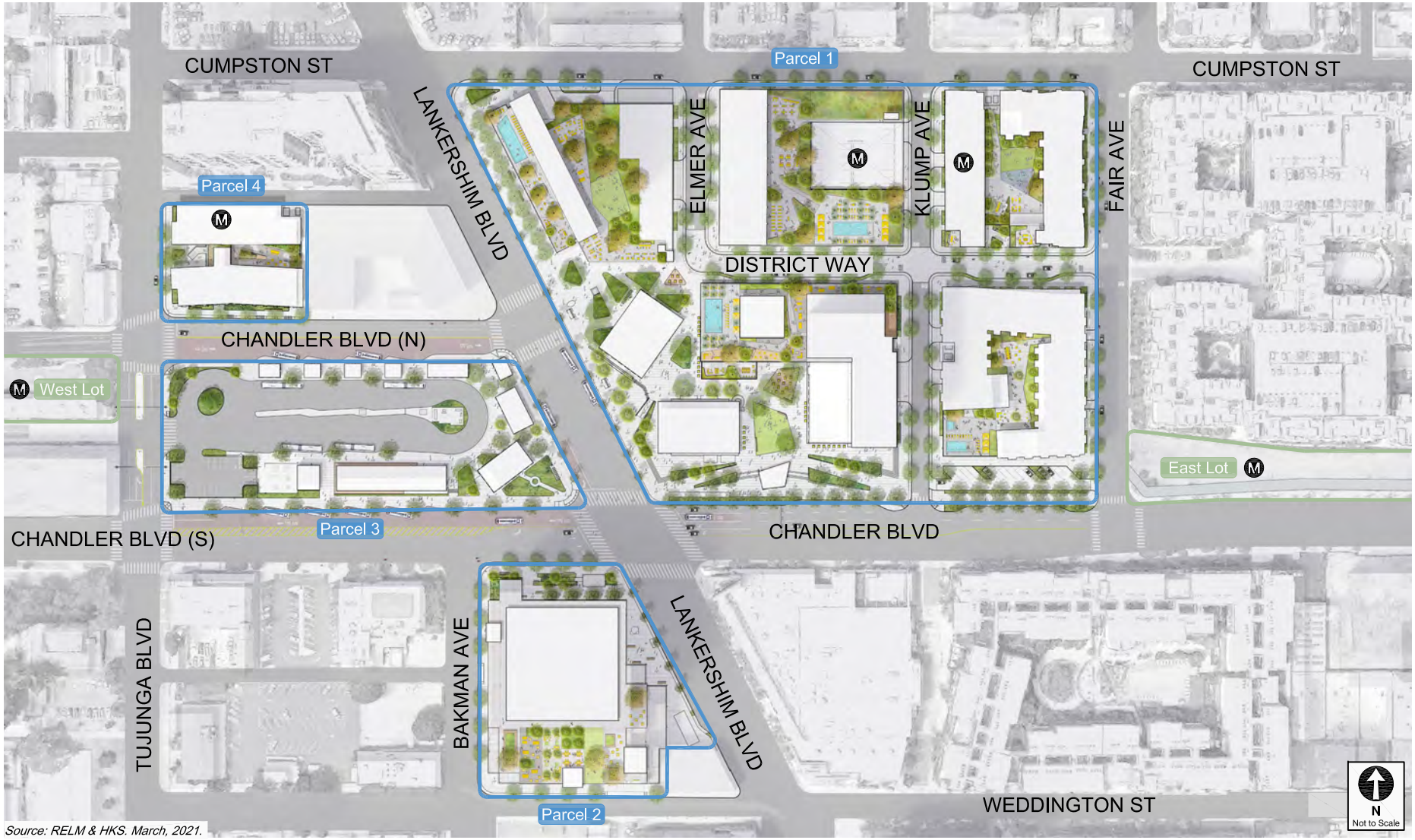
V. Project Construction

Will the project require any construction activity within the city right-of-way? ☑ Yes ☐ No

If yes, will the project require temporary closure of any of the following city facilities?

- ✓ sidewalk
- ✓ bike lane
- ✓ parking lane
- ✓ travel lane
- ✓ bus stop
- bicycle parking (racks or corrals)
- bike share or other micro-mobility station
- car share station
- parklet
- other: See Figure 18

Gibson transportation consulting, inc.



Source: RELM & HKS. March, 2021.

LEGEND

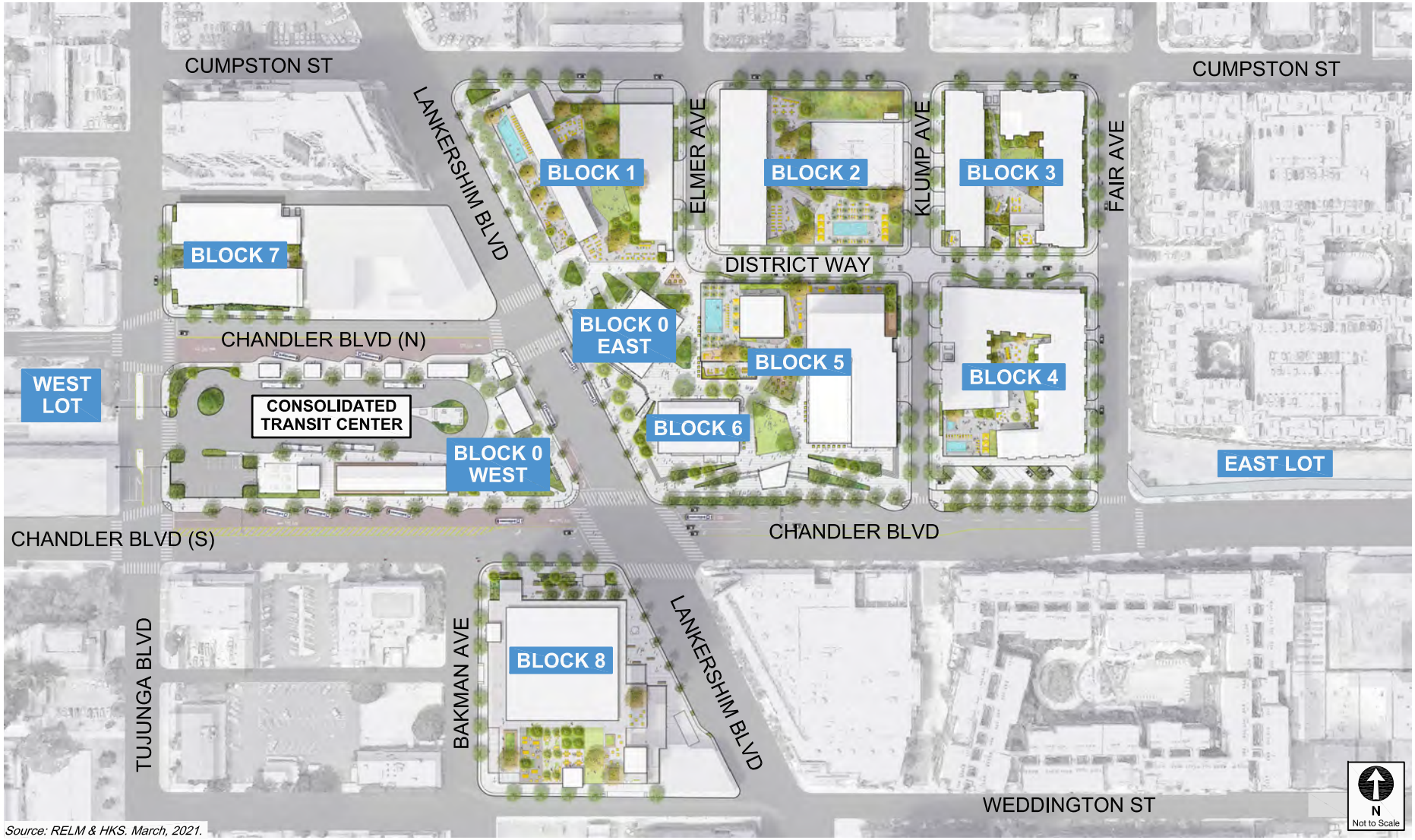
Project Site Parcels

Potential Off-Site Metro Parking Areas

Proposed Metro Parking

PROJECT SITE PLAN OVERVIEW

FIGURE 1



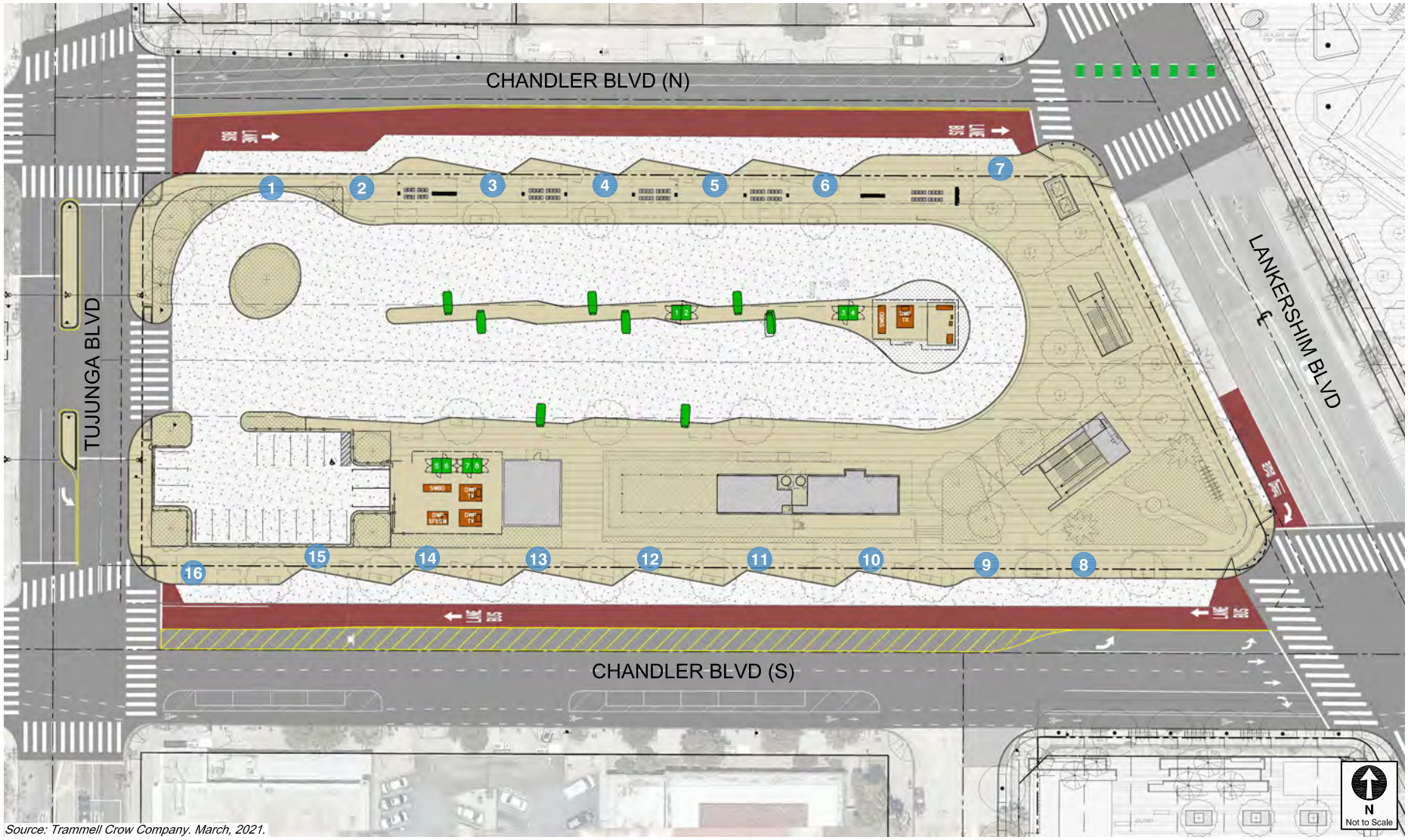
Source: RELM & HKS. March, 2021.

LEGEND

Block Number

CONCEPTUAL GROUND-LEVEL PROJECT SITE PLAN

FIGURE 2



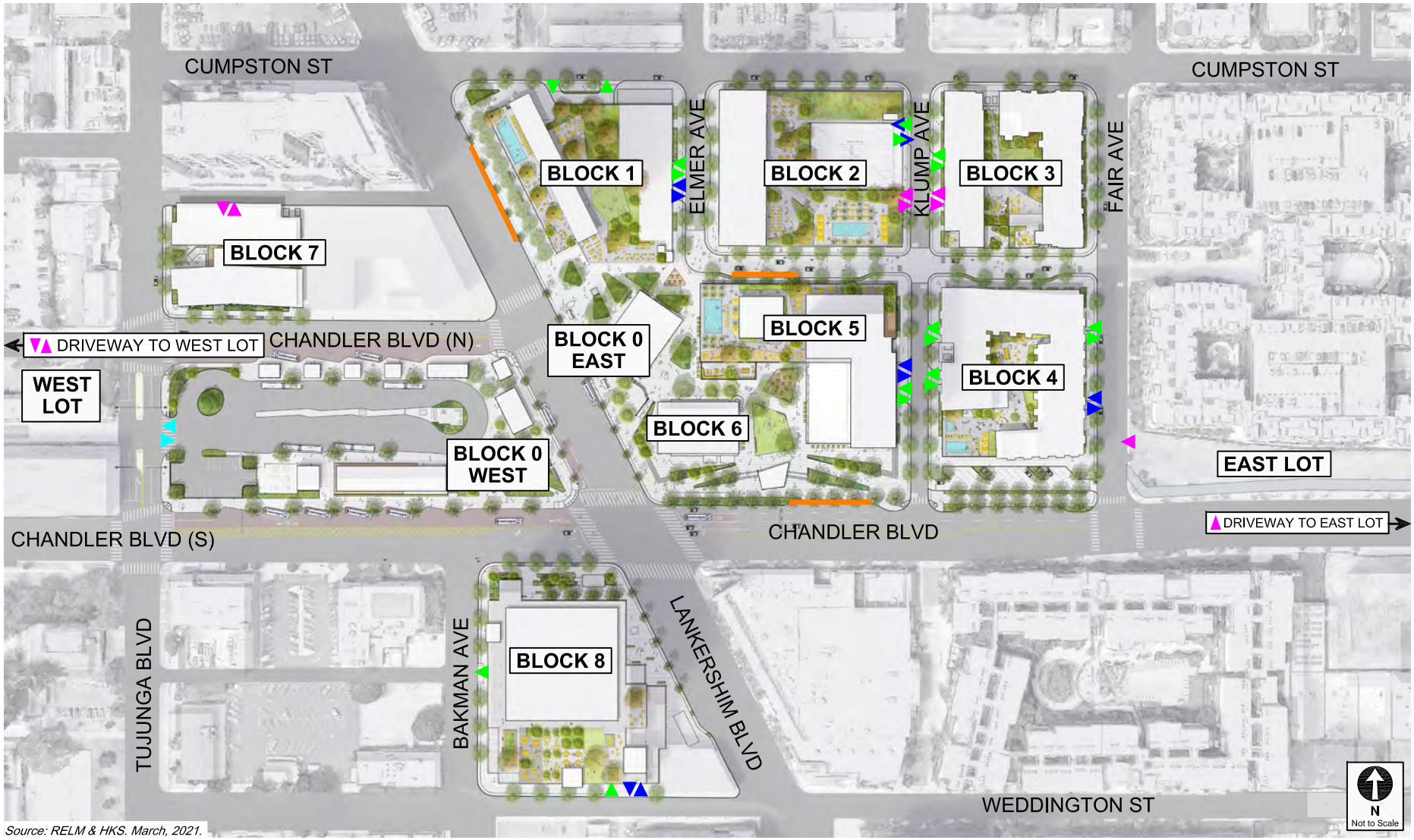
Source: Trammell Crow Company. March, 2021.

LEGEND

Local Bus Loading Area

CONCEPTUAL PLAN FOR CONSOLIDATED TRANSIT CENTER

FIGURE 3



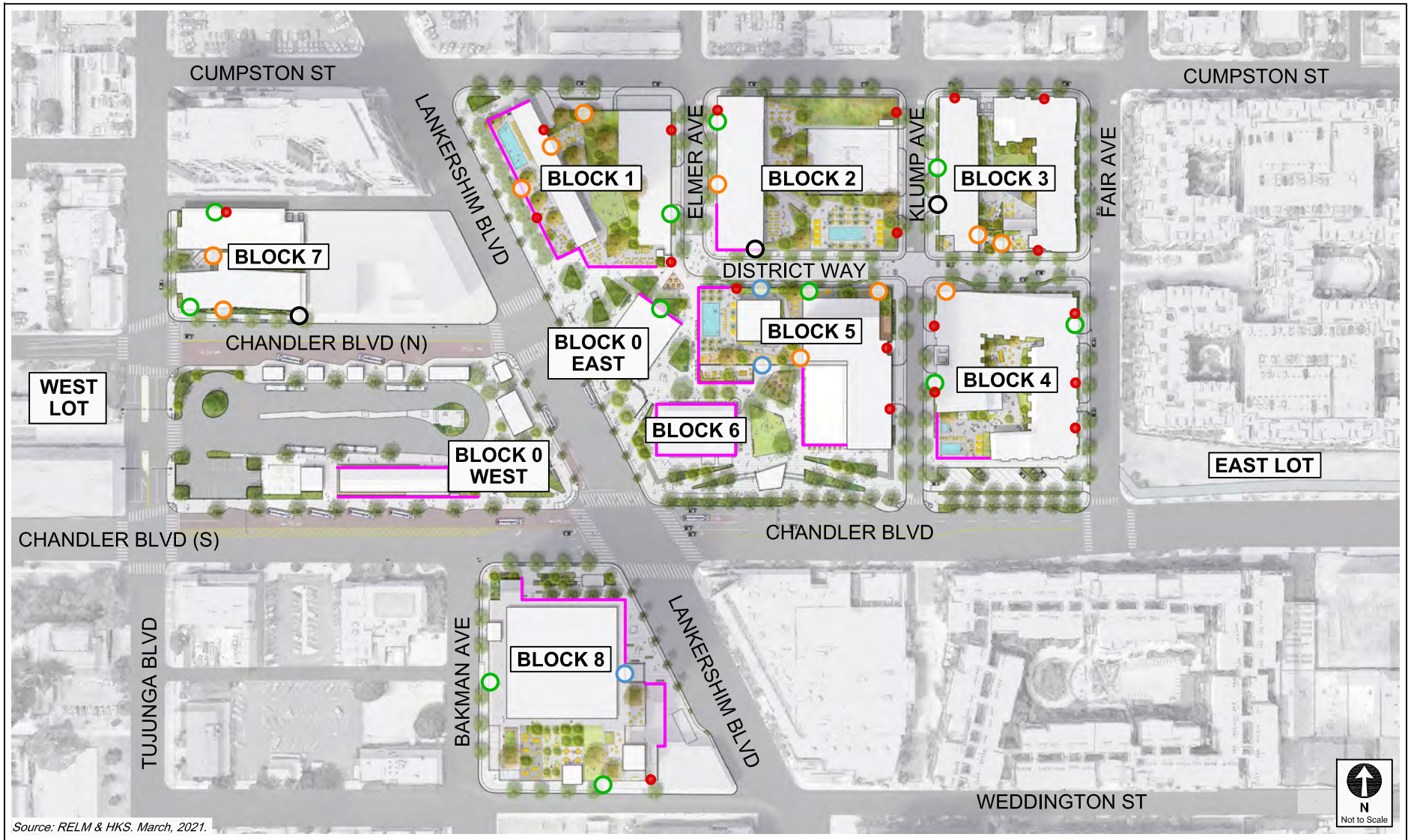
Source: RELM & HKS. March, 2021.

LEGEND

Transit | Metro Parking | Residential, Retail, Office | Commercial Loading | Proposed Passenger Loading

VEHICULAR SITE ACCESS

FIGURE 4



Source: RELM & HKS. March, 2021.

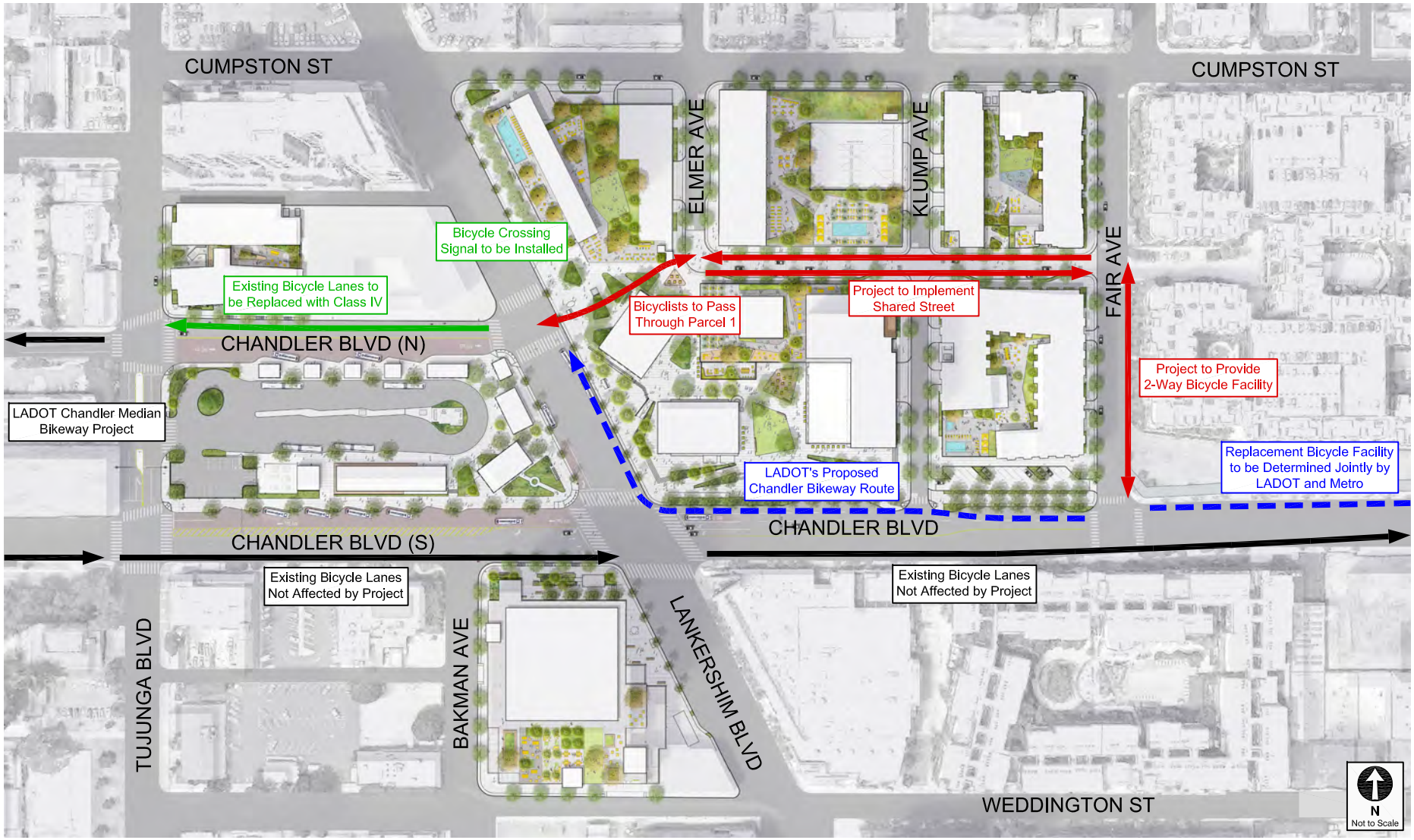
LEGEND

- Residential Lobby Access
- Office Lobby Access
- Bicycle Parking Access
- Metro Parking Access
- Subway Elevator/Escalator
- Secondary and/or Emergency Access
- Retail/Restaurant Access

PEDESTRIAN SITE ACCESS

FIGURE 5

Gibson transportation consulting, inc.



LEGEND

Project to Provide | Project or LADOT to Provide | Proposed by LADOT | Existing Facility Not Affected by Project

PROPOSED BICYCLE FACILITIES

FIGURE 6

TABLE 1
PROJECT DEVELOPMENT SUMMARY

Description	Block 0 West	Block 0 East	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8 [a]	West Lot	East Lot	Total
Land Uses													
Affordable Housing *(units)*	-	-	-	-	160	-	-	-	151	-	-	-	**311**
Market-Rate Housing *Mid-Rise (units)*	-	-	-	-	-	194	-	-	-	-	-	-	**194**
Market-Rate Housing *High-Rise (units)*	-	-	313	309	-	-	400	-	-	-	-	-	**1,022**
Office [b, c] *(square feet)*	709	-	-	-	-	-	91,345	-	-	488,320	-	-	**580,374**
Retail [c] *(square feet)*	1,643	-	10,507	2,975	-	12,425	2,575	-	-	0	-	-	**30,125**
Restaurant [c] *(square feet)*	2,839	3,658	7,985	-	-	13,325	15,227	13,024	-	18,942	-	-	**75,000**
Parking													
Project Parking Spaces	2	-	532	389	90	323	798	-	5	1,174	-	-	**3,313**
Metro Parking Spaces	-	-	-	145	40	-	-	-	89	-	520	395	**1,189**
Project Bicycle Parking Spaces	-	-	264	172	78	152	260	-	110	122	-	-	**1,158**
Metro Bike Hub Spaces [d]	-	40	-	-	-	-	-	-	66	-	-	-	**106**

Notes:
[a] For future flexibility, 10,734 sf of retail space was analyzed as restaurant (a higher trip generator) in Blocks 4 and 8.
[b] Block 8 office space includes potential future conversion of 124 parking spaces into 87,300 sf of office space.
[c] The Project may exchange up to 75,000 sf of retail and restaurant uses for 75,000 sf of office uses.
[d] Metro Bike Hubs provide secure bicycle parking for transit riders.

TABLE 2
PROJECT TRIP GENERATION RATES

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Affordable Family Housing	[a]	per du	37%	63%	0.49	56%	44%	0.35
Multi-Family Housing (Mid-Rise) [b]	221	per du	26%	74%	0.34	61%	39%	0.43
Multi-Family Housing (High-Rise) [c]	222	per du	24%	76%	0.29	61%	39%	0.35
Office [d]	710	per 1,000 sf	86%	14%	0.99	16%	84%	1.04
Shopping Center	820	per 1,000 sf	62%	38%	0.94	48%	52%	3.81
High-Turnover (Sit-Down) Restaurant	932	per 1,000 sf	55%	45%	9.94	62%	38%	9.77

Notes:

du = dwelling unit; sf = square feet.

Trip generation rates are from *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, 2017), except as noted below.

[a] Affordable family housing trip generation rates from Table 3.3-2 of LADOT's Transportation Assessment Guidelines for projects within a Transit Priority Area.

[b] Multi-family housing (Mid-Rise) trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 194 apartment units on Block 4.

Daily: $T = 5.45(X) - 1.75$ T = Average Vehicle Trips X = 1,000 sf

Morning Peak Hour: $Ln(T) = 0.98\ Ln(X) - 0.98$

Afternoon Peak Hour: $Ln(T) = 0.96\ Ln(X) - 0.63$

[c] Multi-family housing (High-Rise) morning and afternoon peak hour trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 1,022 apartment units between Blocks 1, 2, and 5:

Morning Peak Hour: $T = 0.28(X) + 12.86$ T = Average Vehicle Trips X = 1,000 sf

Daily trip generation rate is the average rate provided in *Trip Generation Manual, 10th Edition*.

[d] Office trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 580,374 sf of office between Blocks 0, 5, and 8:

Daily: $Ln(T) = 0.97\ Ln(X) + 2.50$ T = Average Vehicle Trips X = 1,000 sf

Morning Peak Hour: $T = 0.94\ (X) + 26.49$

Afternoon Peak Hour: $Ln(T) = 0.95\ Ln(X) + 0.36$

TABLE 3
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 0								
Office	710	709 sf	1	0	1	0	1	1
Transit/Walk Adjustment - 25%			*0*	*0*	*0*	*0*	*0*	*0*
Retail	820	1,643 sf	1	1	2	3	3	6
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*0*	*(1)*	*(1)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(1)*	*(1)*	*(2)*
Restaurant	932	6,497 sf	36	29	65	39	24	63
Internal Capture - 10%			*(4)*	*(3)*	*(7)*	*(4)*	*(2)*	*(6)*
Transit/Walk Adjustment - 25%			*(8)*	*(7)*	*(15)*	*(9)*	*(5)*	*(14)*
Pass-By Adjustment - 20%			*(5)*	*(4)*	*(9)*	*(6)*	*(3)*	*(9)*
Block 0 Subtotal			**19**	**16**	**35**	**22**	**15**	**37**
Block 1								
Multi-Family Housing (High-Rise)	222	313 du	22	69	91	67	43	110
Retail	820	10,507 sf	6	4	10	19	21	40
Internal Capture - 10%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Transit/Walk Adjustment - 25%			*(1)*	*(1)*	*(2)*	*(4)*	*(5)*	*(9)*
Pass-By Adjustment - 50%			*(2)*	*(2)*	*(4)*	*(7)*	*(7)*	*(14)*
Restaurant	932	7,985 sf	43	36	79	48	30	78
Internal Capture - 10%			*(4)*	*(4)*	*(8)*	*(5)*	*(3)*	*(8)*
Transit/Walk Adjustment - 25%			*(10)*	*(8)*	*(18)*	*(11)*	*(7)*	*(18)*
Pass-By Adjustment - 20%			*(6)*	*(5)*	*(11)*	*(6)*	*(4)*	*(10)*
Block 1 Subtotal			**47**	**89**	**136**	**99**	**66**	**165**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 2.

TABLE 3 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 2								
Multi-Family Housing (High-Rise)	222	309 du	22	68	90	66	42	108
Retail	820	2,975 sf	2	1	3	5	6	11
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*(1)*	*(2)*	*(3)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Block 2 Subtotal			**22**	**69**	**91**	**68**	**43**	**111**
Block 3								
Affordable Family Housing	n/a	160 du	29	49	78	31	25	56
Block 3 Subtotal			**29**	**49**	**78**	**31**	**25**	**56**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 2.

TABLE 3 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 4								
Multi-Family Housing (Mid-Rise)	221	194 du	17	49	66	51	32	83
Retail [a]	820	12,425 sf	7	5	12	23	24	47
Internal Capture - 10%			*(1)*	*0*	*(1)*	*(2)*	*(3)*	*(5)*
Transit/Walk Adjustment - 25%			*(2)*	*(1)*	*(3)*	*(5)*	*(6)*	*(11)*
Pass-By Adjustment - 50%			*(2)*	*(2)*	*(4)*	*(8)*	*(8)*	*(16)*
Restaurant	932	13,325 sf	73	59	132	81	49	130
Internal Capture - 10%			*(7)*	*(6)*	*(13)*	*(8)*	*(5)*	*(13)*
Transit/Walk Adjustment - 25%			*(17)*	*(13)*	*(30)*	*(18)*	*(11)*	*(29)*
Pass-By Adjustment - 20%			*(10)*	*(8)*	*(18)*	*(11)*	*(7)*	*(18)*
Block 4 Subtotal			**58**	**83**	**141**	**103**	**65**	**168**

Notes:

du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 2.

[a] For future flexibility, 450 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 4.

TABLE 3 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 5								
Multi-Family Housing (High-Rise)	222	400 du	28	88	116	85	55	140
Office	710	91,345 sf	77	13	90	15	80	95
Transit/Walk Adjustment - 25%			*(20)*	*(3)*	*(23)*	*(4)*	*(20)*	*(24)*
Retail	820	2,575 sf	1	1	2	5	5	10
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*(1)*	*(1)*	*(2)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Restaurant	932	15,227 sf	83	68	151	92	57	149
Internal Capture - 10%			*(8)*	*(7)*	*(15)*	*(9)*	*(6)*	*(15)*
Transit/Walk Adjustment - 25%			*(19)*	*(15)*	*(34)*	*(21)*	*(13)*	*(34)*
Pass-By Adjustment - 20%			*(11)*	*(9)*	*(20)*	*(12)*	*(8)*	*(20)*
Block 5 Subtotal			**129**	**136**	**265**	**148**	**146**	**294**
Block 6								
Restaurant	932	13,024 sf	71	58	129	79	48	127
Internal Capture - 10%			*(7)*	*(6)*	*(13)*	*(8)*	*(5)*	*(13)*
Transit/Walk Adjustment - 25%			*(16)*	*(13)*	*(29)*	*(18)*	*(11)*	*(29)*
Pass-By Adjustment - 20%			*(9)*	*(8)*	*(17)*	*(11)*	*(6)*	*(17)*
Block 6 Subtotal			**39**	**31**	**70**	**42**	**26**	**68**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 2.

TABLE 3 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 7								
Affordable Family Housing	n/a	151 du	27	47	74	30	23	53
Block 7 Subtotal			**27**	**47**	**74**	**30**	**23**	**53**
Block 8								
Office	710	488,320 sf	415	68	483	81	427	508
Transit/Walk Adjustment - 25%			*(104)*	*(17)*	*(121)*	*(20)*	*(107)*	*(127)*
Retail [a]	820	0 sf	0	0	0	0	0	0
Restaurant	932	18,942 sf	103	85	188	115	70	185
Internal Capture - 10%			*(10)*	*(9)*	*(19)*	*(12)*	*(7)*	*(19)*
Transit/Walk Adjustment - 25%			*(23)*	*(19)*	*(42)*	*(26)*	*(16)*	*(42)*
Pass-By Adjustment - 20%			*(14)*	*(11)*	*(25)*	*(16)*	*(9)*	*(25)*
Block 8 Subtotal			**367**	**97**	**464**	**122**	**358**	**480**
TOTAL - PROPOSED PROJECT			**737**	**617**	**1,354**	**665**	**767**	**1,432**

Notes:

du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 2.

[a] For future flexibility, 10,284 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 8.

TABLE 4
PROJECT TRIP GENERATION SUMMARY

Block Number and Primary Land Use	Phase	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Block 0 *Transit Center*	1	19	16	35	22	15	37
Block 1 *Market-Rate Housing*	2	47	89	136	99	66	165
Block 2 *Market-Rate Housing*	2	22	69	91	68	43	111
Block 3 *Affordable Housing*	2	29	49	78	31	25	56
Block 4 *Market-Rate Housing*	2	58	83	141	103	65	168
Block 5 *Market-Rate Housing / Office*	1	129	136	265	148	146	294
Block 6 *Retail and Restaurant*	1	39	31	70	42	26	68
Block 7 *Affordable Housing*	1	27	47	74	30	23	53
Block 8 *Office*	1	367	97	464	122	358	480
Phase 1 Trip Generation		**581**	**327**	**908**	**364**	**568**	**932**
Full Buildout Trip Generation		**737**	**617**	**1,354**	**665**	**767**	**1,432**

Notes:

Trip generation estimates from Table 3.

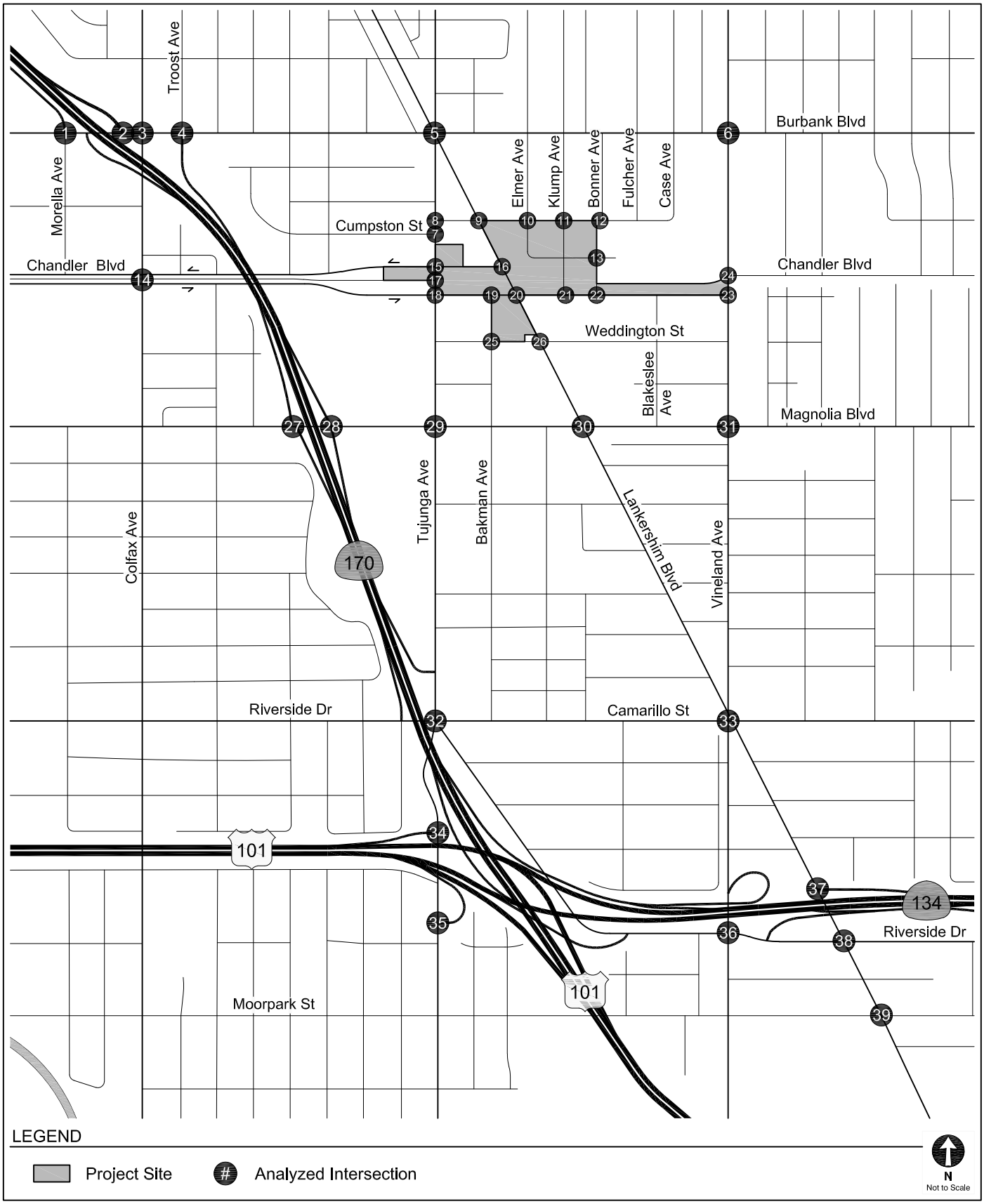
TABLE 5
PROJECT TRIP GENERATION WITH LAND USE EXCHANGE

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Affordable Family Housing	220	311 du	56	96	152	61	48	109
Multi-Family Housing (Mid-Rise)	221	194 du	17	49	66	51	33	84
Multi-Family Housing (High-Rise)	222	1,022 du	72	227	299	217	139	356
Office	710	655,374 sf	553	90	643	109	570	679
Transit/Walk Adjustment - 25%			*(138)*	*(23)*	*(161)*	*(27)*	*(143)*	*(170)*
Retail	820	0 sf [a]	0	0	0	0	0	0
Restaurant	932	30,125 sf [a]	164	135	299	182	112	294
Internal Capture - 10%			*(17)*	*(13)*	*(30)*	*(18)*	*(11)*	*(29)*
Transit/Walk Adjustment - 25%			*(37)*	*(30)*	*(67)*	*(41)*	*(25)*	*(66)*
Pass-By Adjustment - 20%			*(22)*	*(18)*	*(40)*	*(25)*	*(15)*	*(40)*
TOTAL - PROPOSED PROJECT WITH LAND USE EXCHANGE			**648**	**513**	**1,161**	**509**	**708**	**1,217**

Notes:

du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 3.

[a] With the land use exchange, all of the retail space was assumed to become office space.



STUDY AREA & ANALYZED INTERSECTIONS

FIGURE 7

TABLE 6
RELATED PROJECTS

No.	Project Name and Address	Description	Trip Generation Estimates						
			Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
				In	Out	Total	In	Out	Total
1.	NoHo Lankershim Station 5401 Lankershim Boulevard	127 apartment units, 14,500 sf retail and 1,918 sf office	882	11	34	45	35	28	63
2.	New NoHo Artwalk Project 11126 Chandler Boulevard	73 apartment units and 2,900 sf retail	903	(27)	67	40	61	2	63
3.	The Weddington 11120 Chandler Boulevard	324 apartment units	2,082	38	119	157	114	61	175
4. [a]	Apartments 5508 Fulcher Avenue	46 apartment units	250	4	13	17	12	8	20
5. [a]	Apartments 5513 Case Avenue	90 apartment units	490	8	24	32	24	16	40
6. [a]	Apartments 11112 Burbank Boulevard	12 apartment units	65	1	3	4	3	2	5
7.	Apartments 11433 Albers Street	59 apartment units	392	24	6	30	24	13	37
8. [a]	Mixed-Use 5553 N Tujunga Avenue	30 apartment units with office and retail	409	6	13	19	20	16	36
9. [a]	Apartments 11410 W Burbank Boulevard	84 apartment units	615	9	30	39	30	17	47
10. [a]	Mixed-Use 5444 N Vineland Avenue	96,444 sf self-storage space, 10,000 sf office	161	16	6	22	10	18	28
11. [a]	Fitness Studio 5200 N Lankershim Boulevard	2,690 sf health/fitness club	93	2	2	4	5	4	9
12.	Condominiums 11525 Chandler Boulevard	60 condominium units	349	4	22	26	21	10	31

Notes:
Related project information provided by LADOT and collected from the Department of City Planning website (http://planning.lacity.org). Trip generation data provided by LADOT except where noted.
[a] Trip generation estimates based on rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, 2017).

TABLE 6 (CONTINUED)
RELATED PROJECTS

No.	Project Name and Address	Description	Trip Generation Estimates						
			Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
				In	Out	Total	In	Out	Total
13. [c]	Apartments 5633 Farmdale Avenue	26 apartment units	141	2	7	9	7	4	11
14.	Camellia Court Apartments 5610 Camellia Avenue	62 apartment units	396	7	25	32	24	13	37
15. [a]	Self Storage 5260 N Vineland Avenue	81,300 sf self-storage space	123	5	3	8	7	7	14
16. [a]	Apartments 5147 Bakman Avenue	33 apartment units	180	3	9	12	9	6	15
17. [a]	Apartments 5110 N Bakman Avenue	51 apartment units	373	5	18	23	18	11	29
18. [a]	Apartments 11246 W Otsego Street	70 apartment units	512	7	25	32	25	14	39
19.	NoHo Millennium 5107 Lankershim Boulevard	297 apartment units, 23,733 sf market and 1,267 sf office	1,606	9	100	109	122	51	173
20.	Apartments 11106 Hartsook Street	61 apartment units	361	5	22	27	22	12	34
21. [a]	Apartments 11029-11035 Hartsook Street	53 apartment units	223	4	11	15	11	7	18
22. [a]	Apartments 5050 N Bakman Avenue	40 apartment units	249	4	12	16	12	7	19
23.	Mixed Use 10821 Magnolia Boulevard	40 apartment units and 4,075 sf retail	527	4	16	36	16	20	36
24.	School 11600 Magnolia Boulevard	78 additional students	164	38	23	61	17	25	42

Notes:
Related project information provided by LADOT and collected from the Department of City Planning website (http://planning.lacity.org). Trip generation data provided by LADOT except where noted.
[a] Trip generation estimates based on rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, 2017).

TABLE 6 (CONTINUED)
RELATED PROJECTS

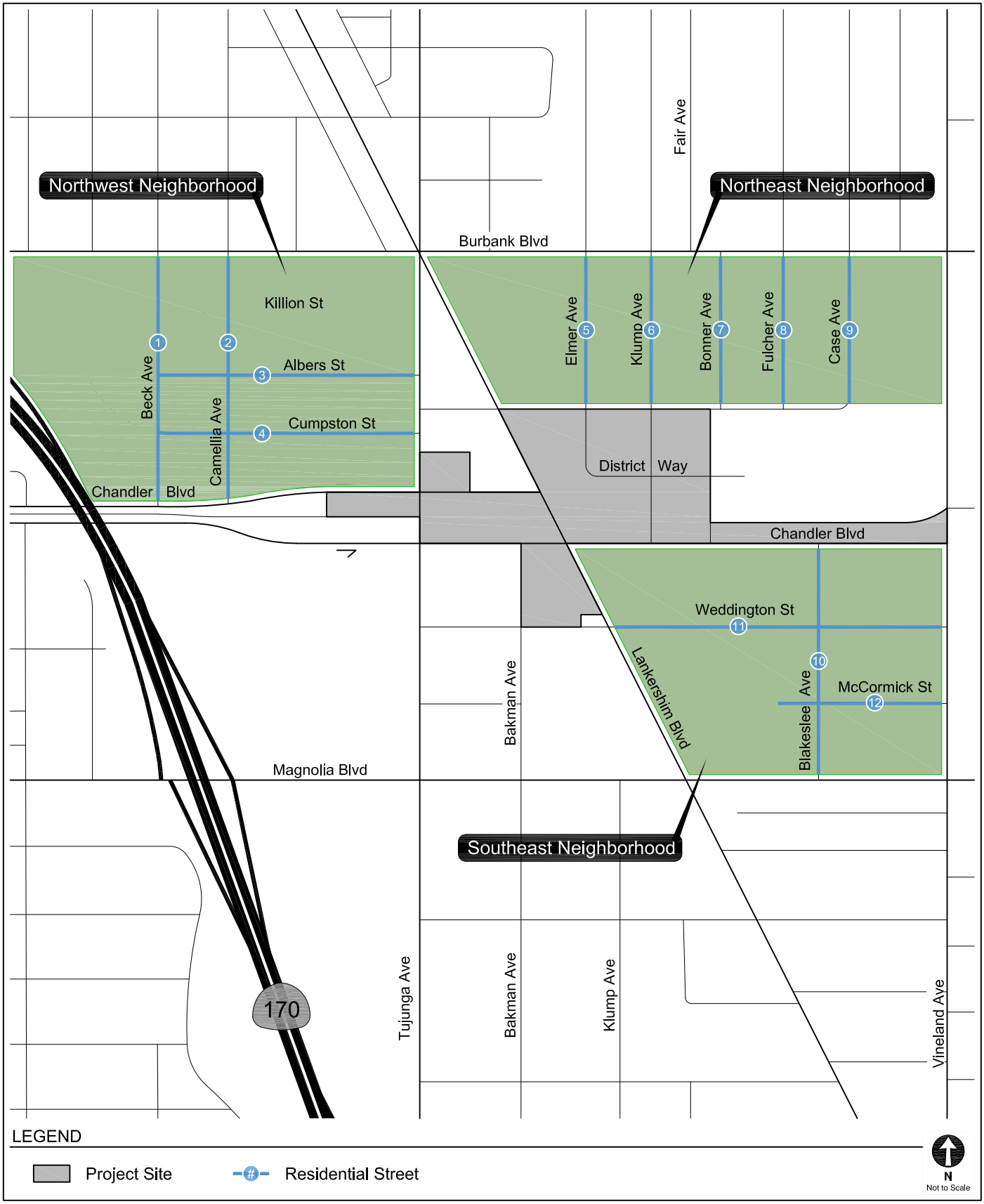
No.	Project Name and Address	Description	Trip Generation Estimates						
			Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
				In	Out	Total	In	Out	Total
25. [a]	Apartments 5755 N Tujunga Avenue	33 apartment units	242	3	12	15	11	7	18
26. [a]	Apartments 11155 W Huston Street	24 apartment units	161	2	8	10	8	4	12
27.	Wesley School 4832 Tujunga Avenue	91 additional students	244	45	37	82	13	15	28
28.	Apartments 11443 Riverside Drive	29 apartment units	171	3	10	13	10	6	16
29. [a]	Mixed Use 11311 Camarillo Street	60 apartment units and 3,000 sf retail	439	8	17	25	21	16	37
30. [a]	Apartments 10804 W Blix Street	21 apartment units	139	2	7	9	7	4	11
31.	Mixed Use 10850 Riverside Drive	179 apartment units and 5,684 sf retail	1,246	10	73	83	75	38	113
32.	Cohen Apartments 10601 Riverside Drive	82 apartment units and 13,327 sf retail	1,083	17	39	56	47	36	83
33.	Apartments 11036 Moorpark Street	96 apartment units	506	7	32	39	31	16	47
34.	Gas Station 4377 Vineland Avenue	Expansion of existing facilities	645	21	22	43	20	21	41

Notes:
Related project information provided by LADOT and collected from the Department of City Planning website (http://planning.lacity.org). Trip generation data provided by LADOT except where noted.
[a] Trip generation estimates based on rates from *Trip Generation, 10th Edition* (Institute of Transportation Engineers, 2017).

TABLE 7
INTERSECTIONS PROPOSED FOR ANALYSIS

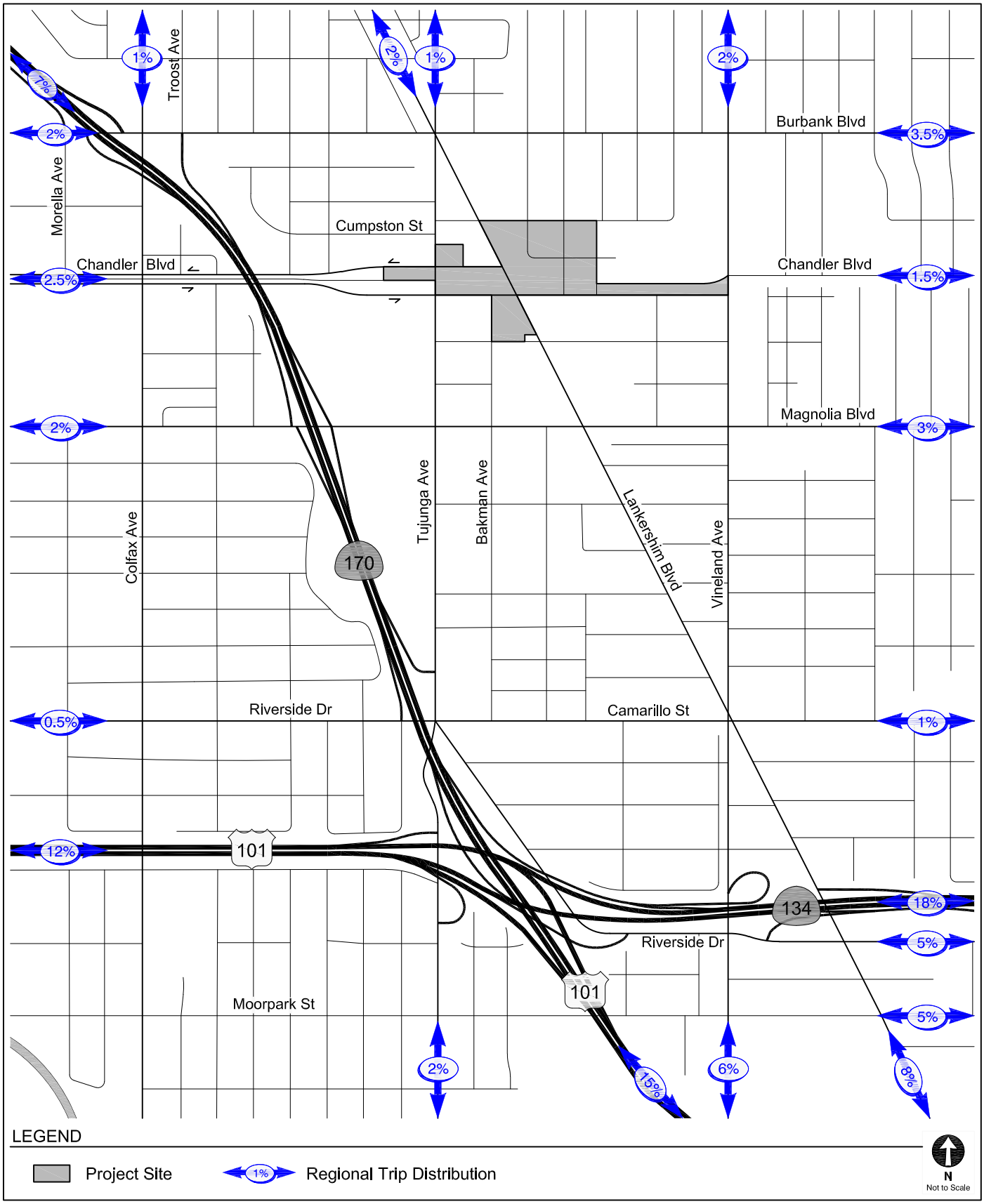
No.	N/S Street	E/W Street	Type
1	SR 170 Southbound Off-ramp	Burbank Boulevard	Signalized
2	SR 170 Northbound On-ramp	Burbank Boulevard	Unsignalized
3	Colfax Avenue	Burbank Boulevard	Signalized
4	Troost Avenue / SR 170 Northbound Off-ramp	Burbank Boulevard	Signalized
5	Lankershim Boulevard / Tujunga Avenue	Burbank Boulevard	Signalized
6	Vineland Avenue	Burbank Boulevard	Signalized
7	Tujunga Avenue	Cumpston Street (West)	2-way Stop
8	Tujunga Avenue	Cumpston Street (East)	2-way Stop
9	Lankershim Boulevard	Cumpston Street	Signalized
10 [a]	Elmer Avenue	Cumpston Street	All-way Stop
11 [a]	Klump Avenue	Cumpston Street	All-way Stop
12	Bonner Avenue / Fair Avenue	Cumpston Street	2-way Stop
13 [a]	Fair Avenue	District Way	All-way Stop
14	Colfax Avenue	Chandler Boulevard	Signalized
15	Tujunga Avenue	Chandler Boulevard (North)	Signalized
16	Lankershim Boulevard	Chandler Boulevard (North)	Signalized
17	Tujunga Avenue	Metro G (Orange) Line Busway	Signalized
18	Tujunga Avenue	Chandler Boulevard (South)	Signalized
19	Bakman Avenue	Chandler Boulevard (South)	2-way Stop
20	Lankershim Boulevard	Chandler Boulevard	Signalized
21 [a]	Klump Avenue	Chandler Boulevard	2-way Stop
22	Fair Avenue	Chandler Boulevard	Signalized
23	Vineland Avenue	Chandler Boulevard (West Leg)	Signalized
24	Vineland Avenue	Chandler Boulevard (East Leg)	Signalized
25	Bakman Avenue	Weddington Street	All-way Stop
26	Lankershim Boulevard	Weddington Street	Signalized
27	SR 170 Southbound Ramps	Magnolia Boulevard	Signalized
28	SR 170 Northbound Ramps	Magnolia Boulevard	Signalized
29	Tujunga Avenue	Magnolia Boulevard	Signalized
30	Lankershim Boulevard	Magnolia Boulevard	Signalized
31	Vineland Avenue	Magnolia Boulevard	Signalized
32	Tujunga Avenue / Riverside Drive	Camarillo Street	Signalized
33	Lankershim Boulevard / Vineland Avenue	Camarillo Street	Signalized
34	Tujunga Avenue	US 101 Westbound On-ramp	Unsignalized
35	Tujunga Avenue	US 101 Eastbound Off-ramp	2-way Stop
36	Vineland Avenue	Riverside Drive	Signalized
37	Lankershim Boulevard	SR 134 Westbound Off-ramp	Signalized
38	Lankershim Boulevard	Riverside Drive	Signalized
39	Lankershim Boulevard	Moorpark Street	Signalized

Notes:
[a] Project would add a new leg to existing intersection or create a new intersection.



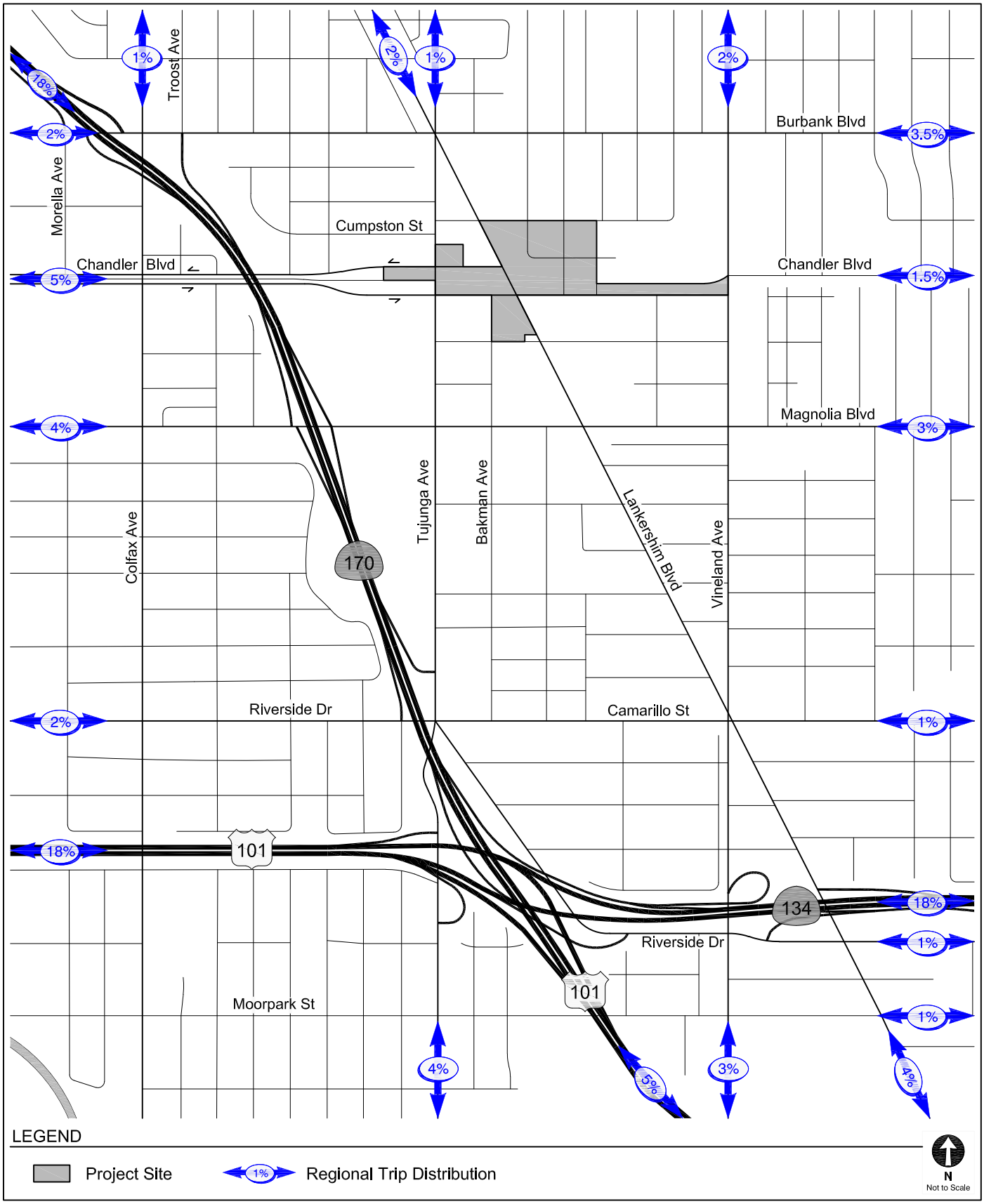
RESIDENTIAL NEIGHBORHOODS AND STREET SEGMENTS

FIGURE 8



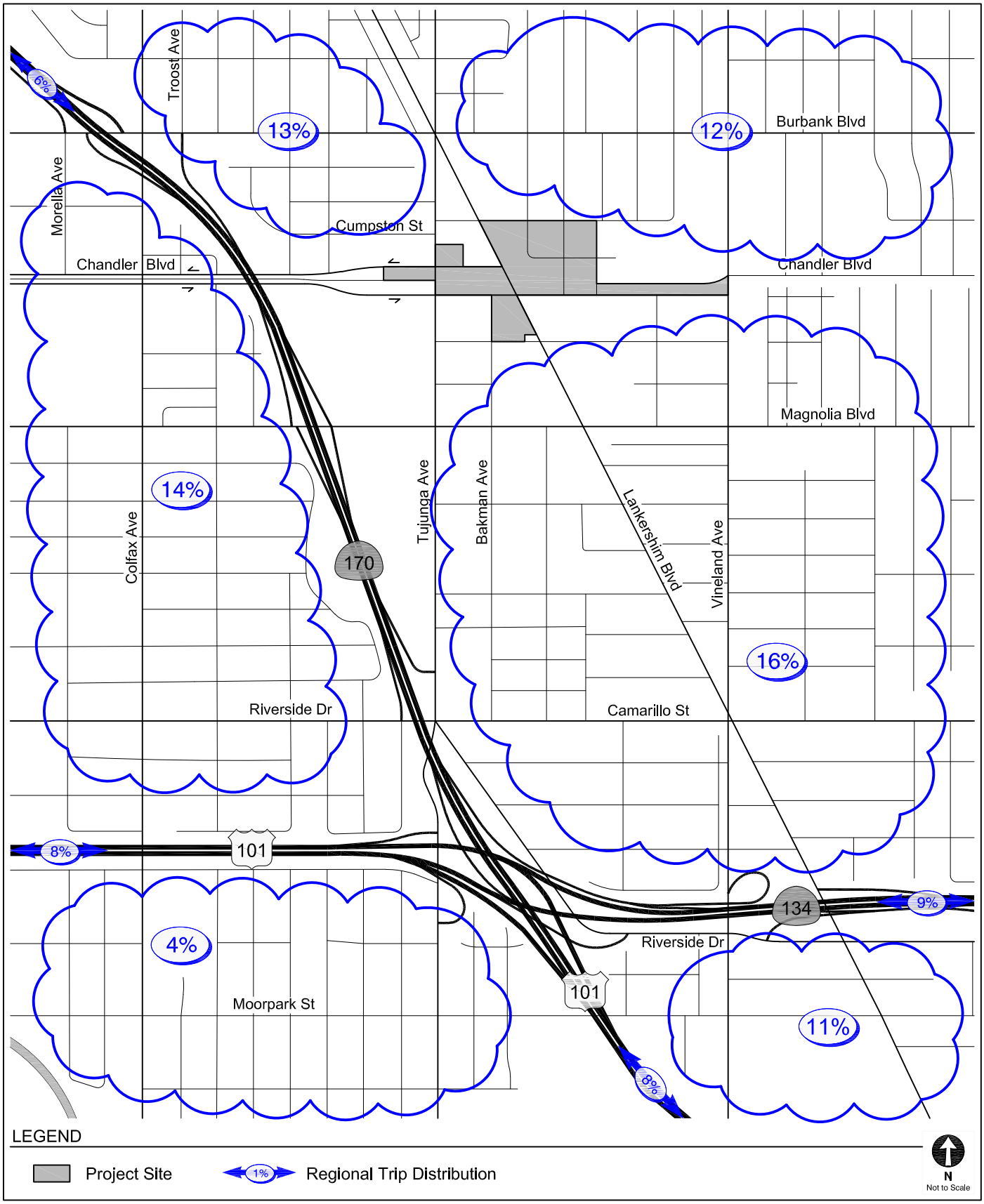
REGIONAL PROJECT TRIP DISTRIBUTION
RESIDENTIAL TRIPS

FIGURE
9



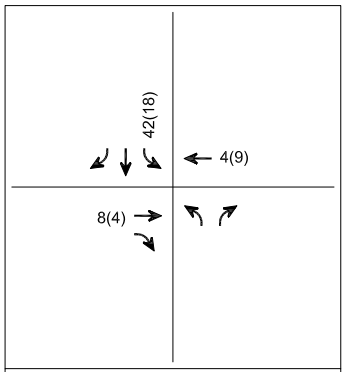
REGIONAL PROJECT TRIP DISTRIBUTION
OFFICE TRIPS

FIGURE
10

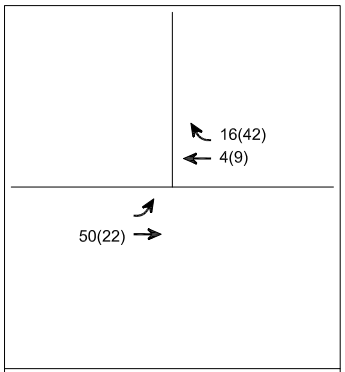


REGIONAL PROJECT TRIP DISTRIBUTION
RETAIL AND RESTAURANT TRIPS

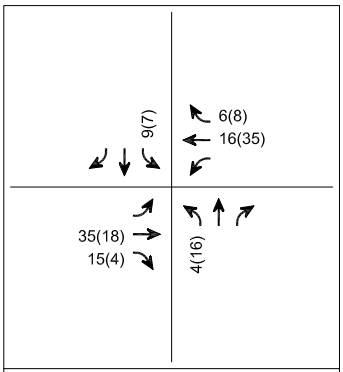
FIGURE
11



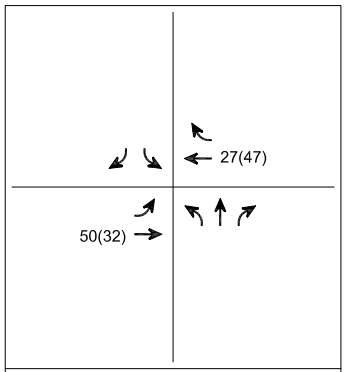
1. SR-170 SB Off-Ramp & Burbank Boulevard



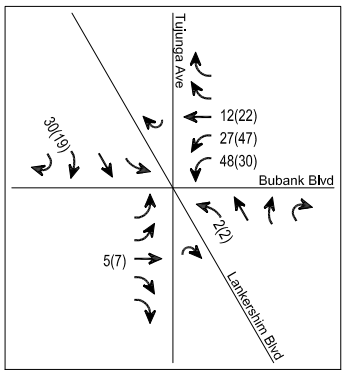
2. SR-170 NB On-Ramp & Burbank Boulevard



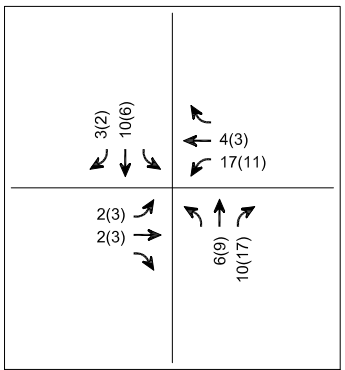
3. Colfax Avenue & Burbank Boulevard



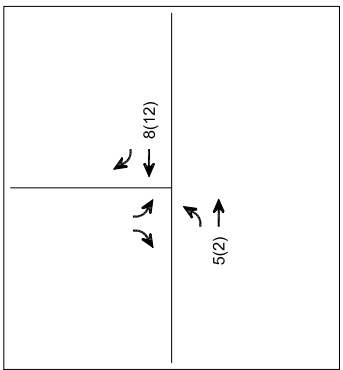
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



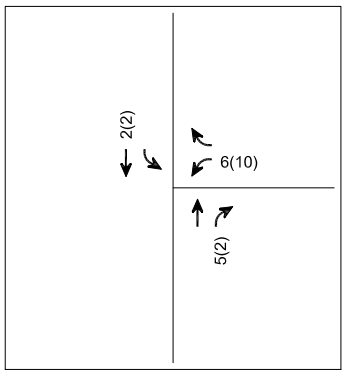
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



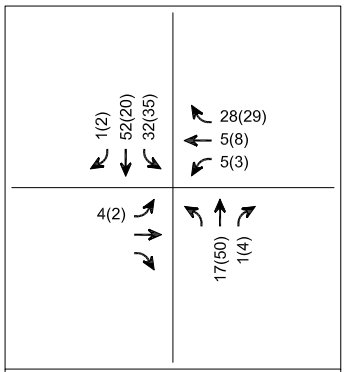
6. Vineland Avenue & Burbank Boulevard



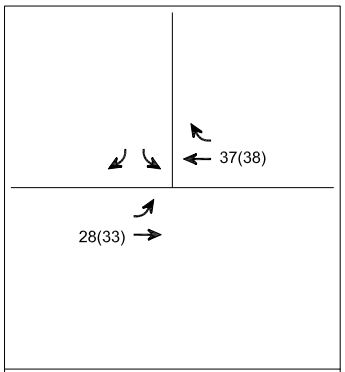
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street

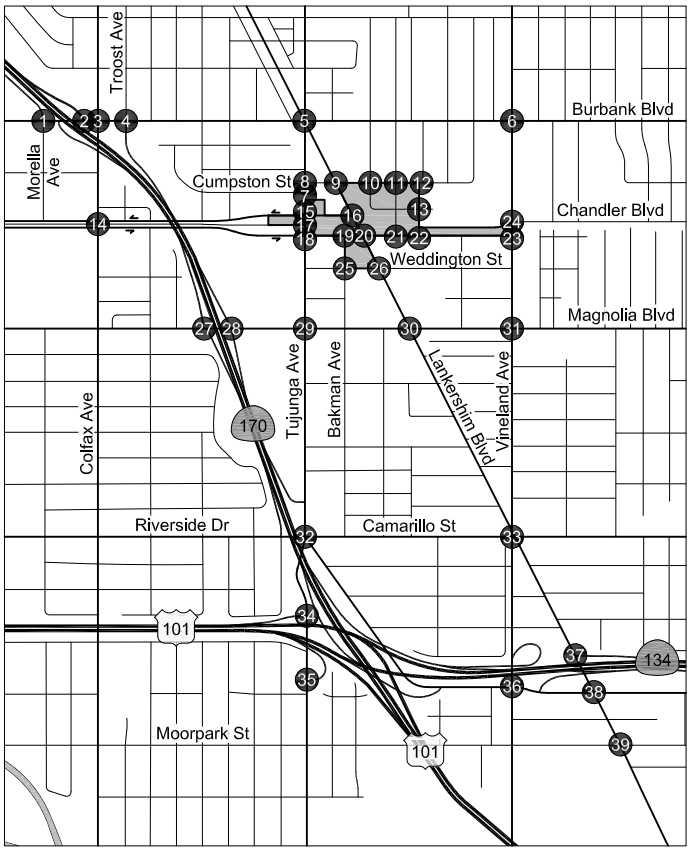
LEGEND

Project Site

Analyzed Intersection

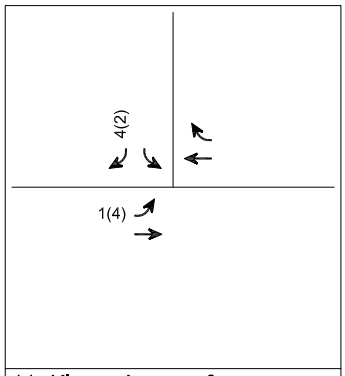
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

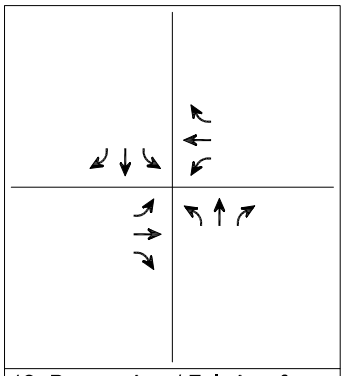


PROJECT PHASE 1 ONLY
PEAK HOUR TRAFFIC VOLUMES

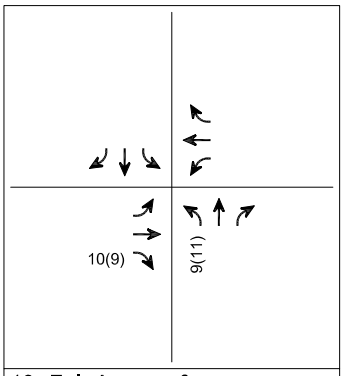
FIGURE 12



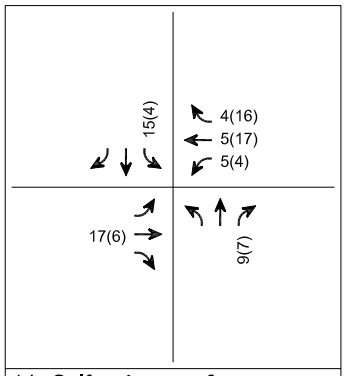
11. Klump Avenue & Cumpston Street



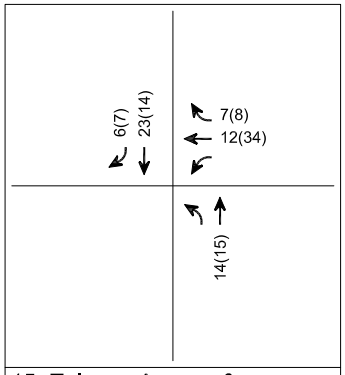
12. Bonner Ave / Fair Ave & Cumpston Street



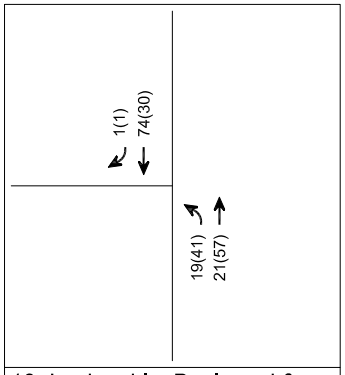
13. Fair Avenue & District Way



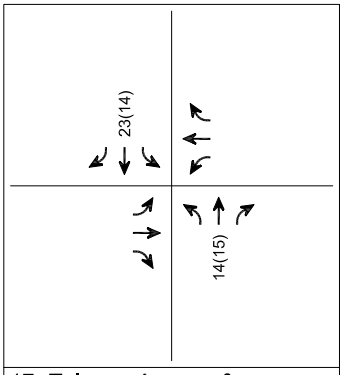
14. Colfax Avenue & Chandler Boulevard



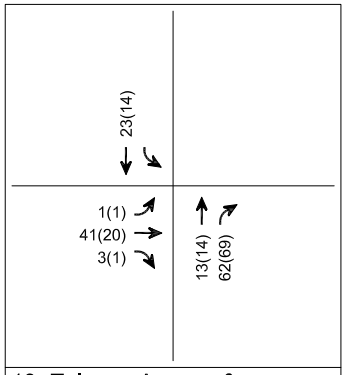
15. Tujunga Avenue & Chandler Boulevard WB



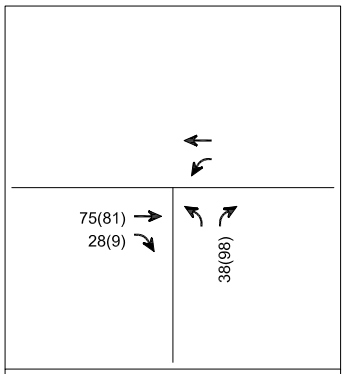
16. Lankershim Boulevard & Chandler Boulevard WB



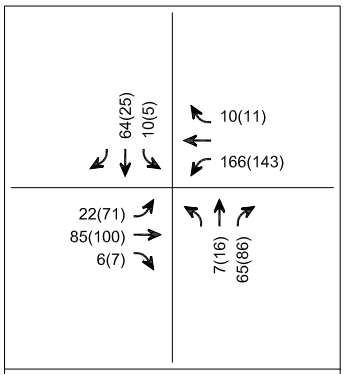
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

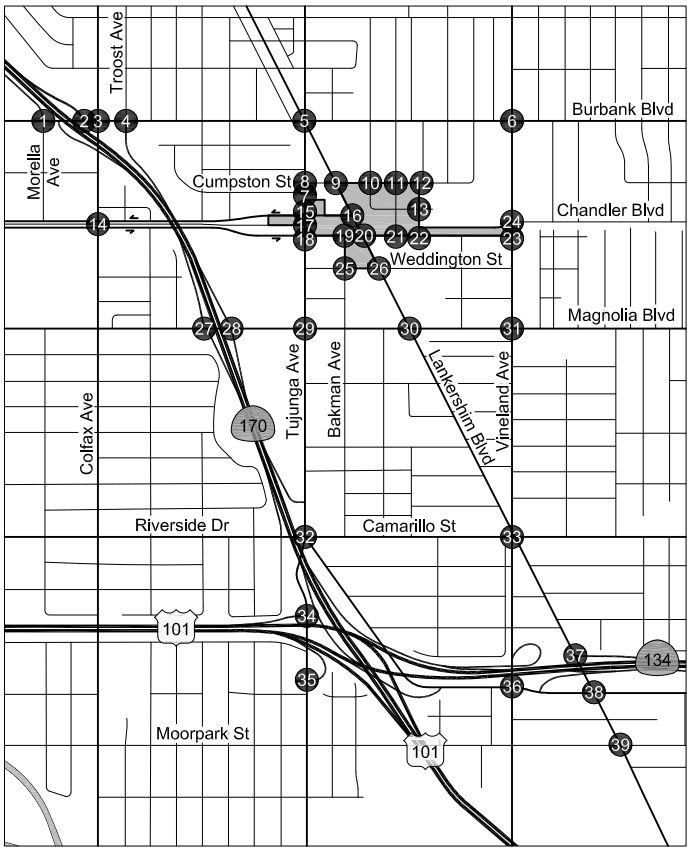
LEGEND

Project Site

Analyzed Intersection

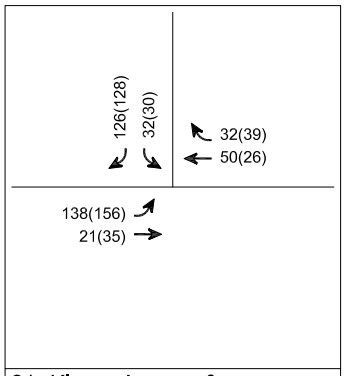
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

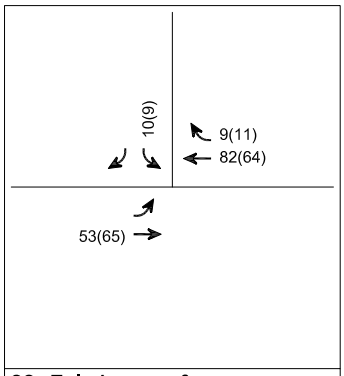


PROJECT PHASE 1 ONLY
PEAK HOUR TRAFFIC VOLUMES

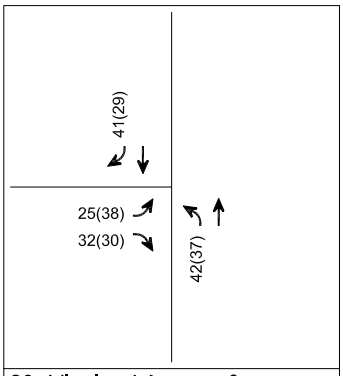
FIGURE
12 (CONT.)



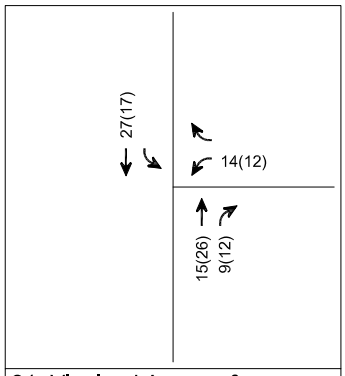
21. Klump Avenue & Chandler Boulevard



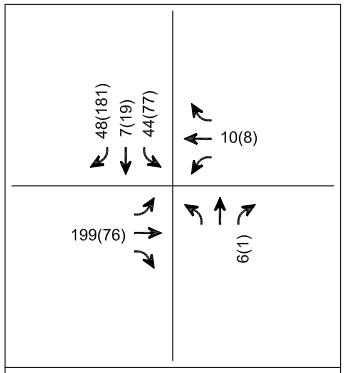
22. Fair Avenue & Chandler Boulevard



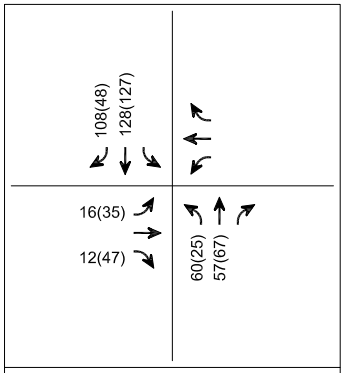
23. Vineland Avenue & Chandler Boulevard (West)



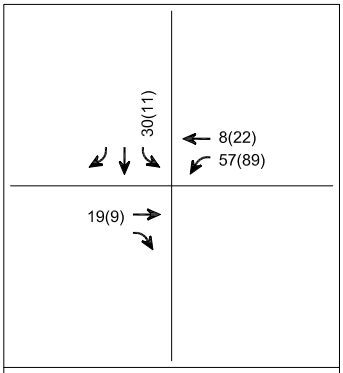
24. Vineland Avenue & Chandler Boulevard (East)



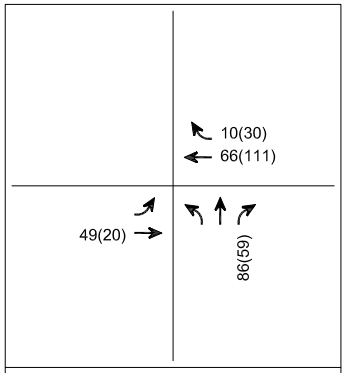
25. Bakman Avenue & Weddington Street



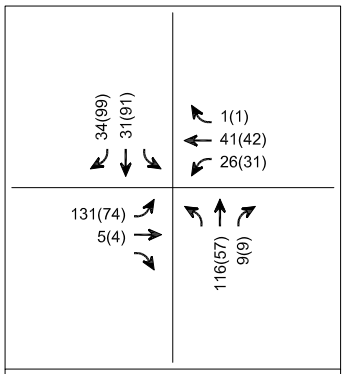
26. Lankershim Boulevard & Weddington Street



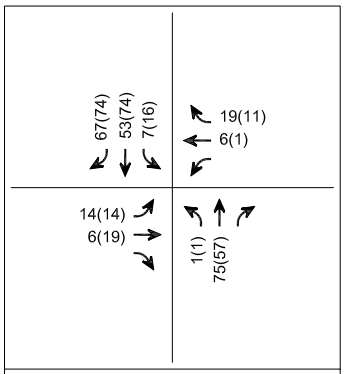
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard

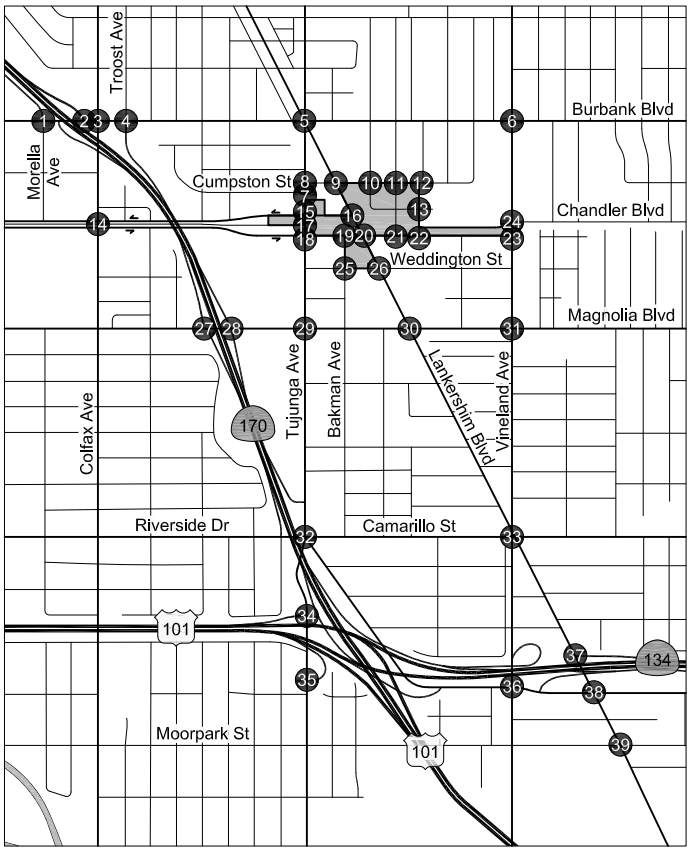
LEGEND

Project Site

Analyzed Intersection

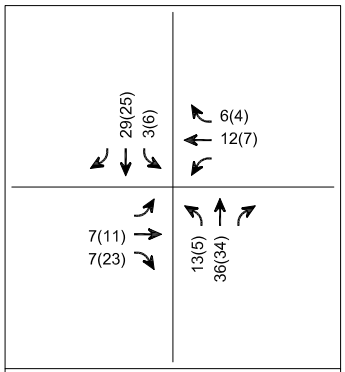
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

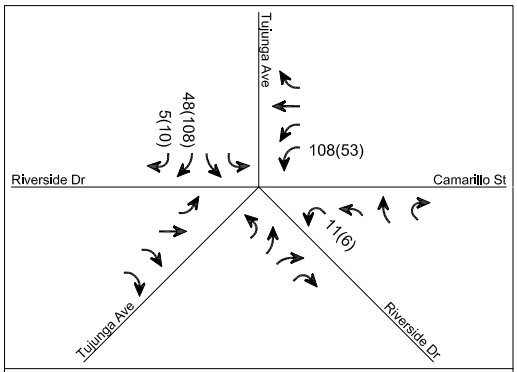


PROJECT PHASE 1 ONLY
PEAK HOUR TRAFFIC VOLUMES

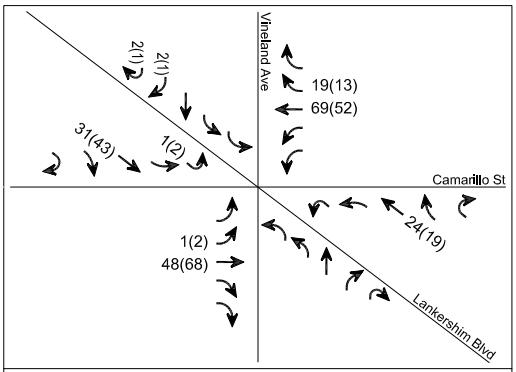
FIGURE
12 (CONT.)



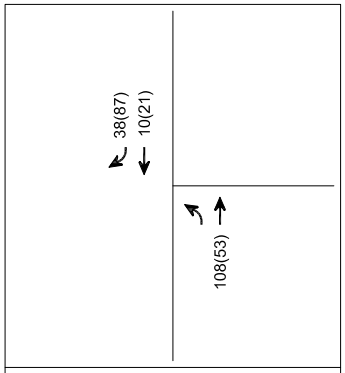
31. Vineland Avenue & Magnolia Boulevard



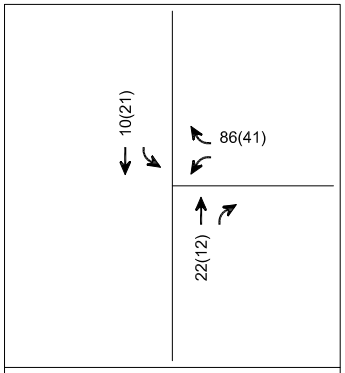
32. Tujunga Avenue / Riverside Drive & Camarillo Street



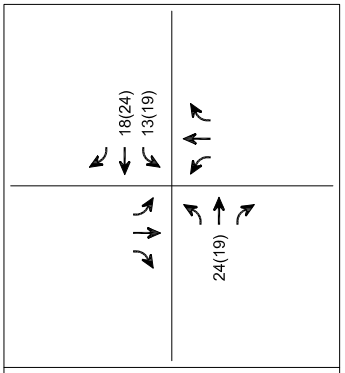
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



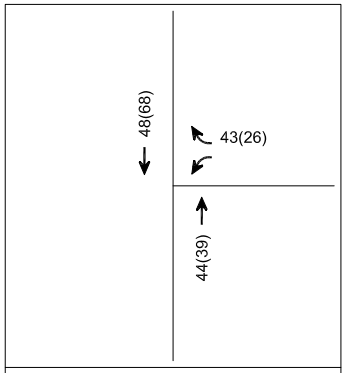
34. Tujunga Avenue & US 101 WB On-Ramp



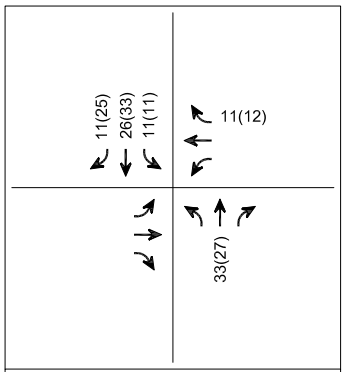
35. Tujunga Avenue & US 101 EB Off-Ramp



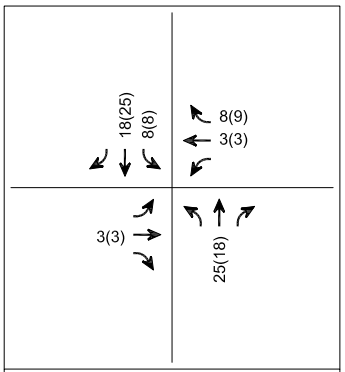
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

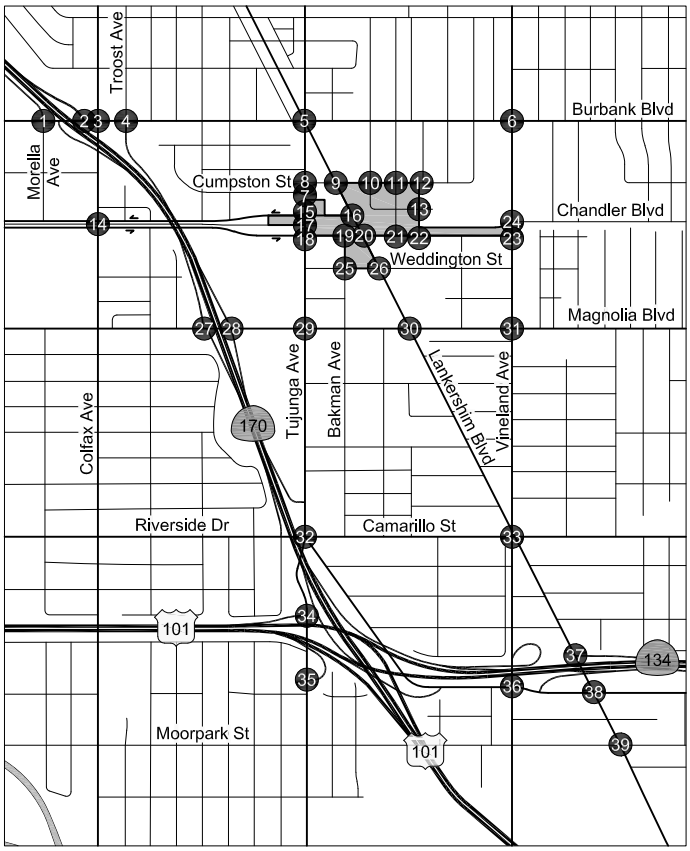
LEGEND

Project Site

Analyzed Intersection

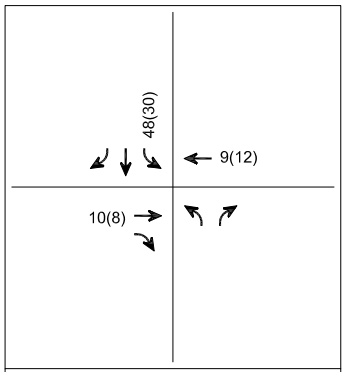
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

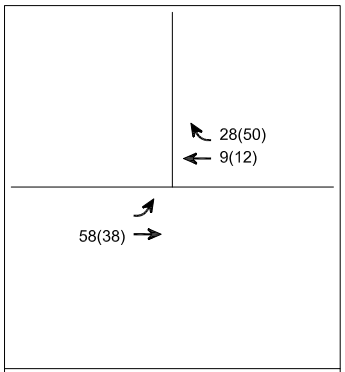


PROJECT PHASE 1 ONLY
PEAK HOUR TRAFFIC VOLUMES

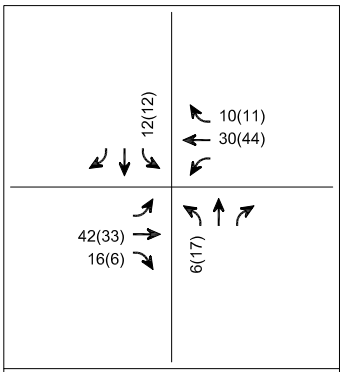
FIGURE
12 (CONT.)



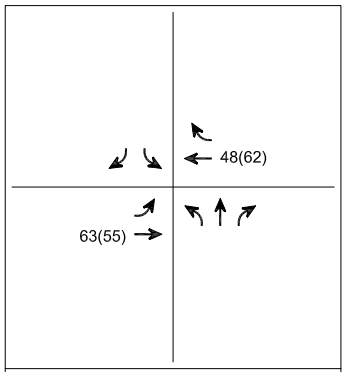
1. SR-170 SB Off-Ramp & Burbank Boulevard



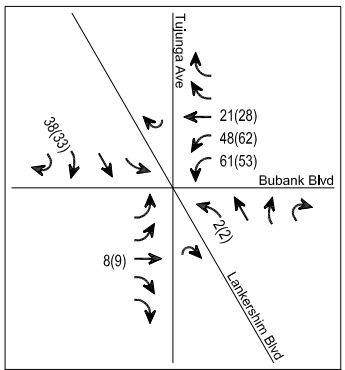
2. SR-170 NB On-Ramp & Burbank Boulevard



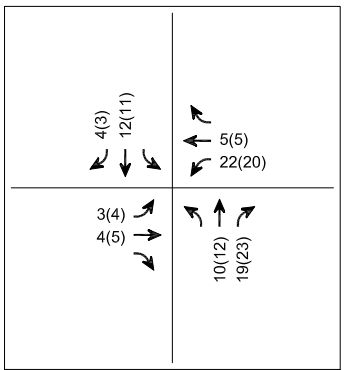
3. Colfax Avenue & Burbank Boulevard



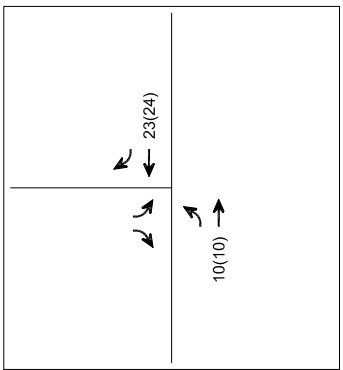
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



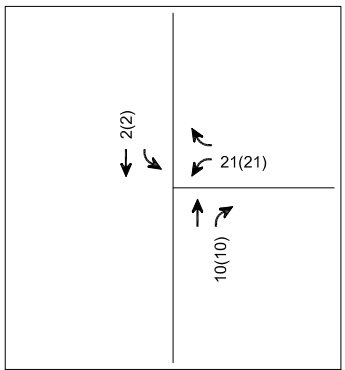
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



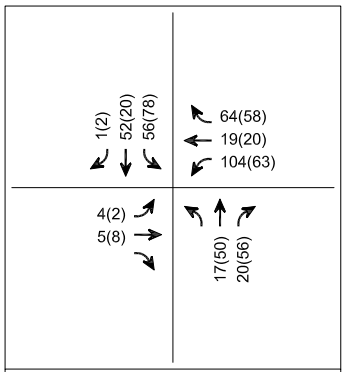
6. Vineland Avenue & Burbank Boulevard



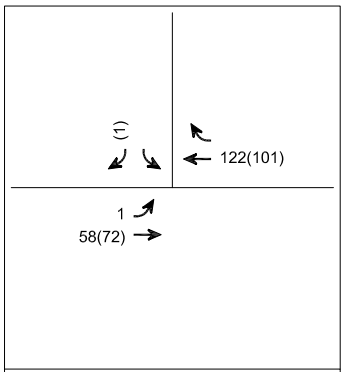
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street

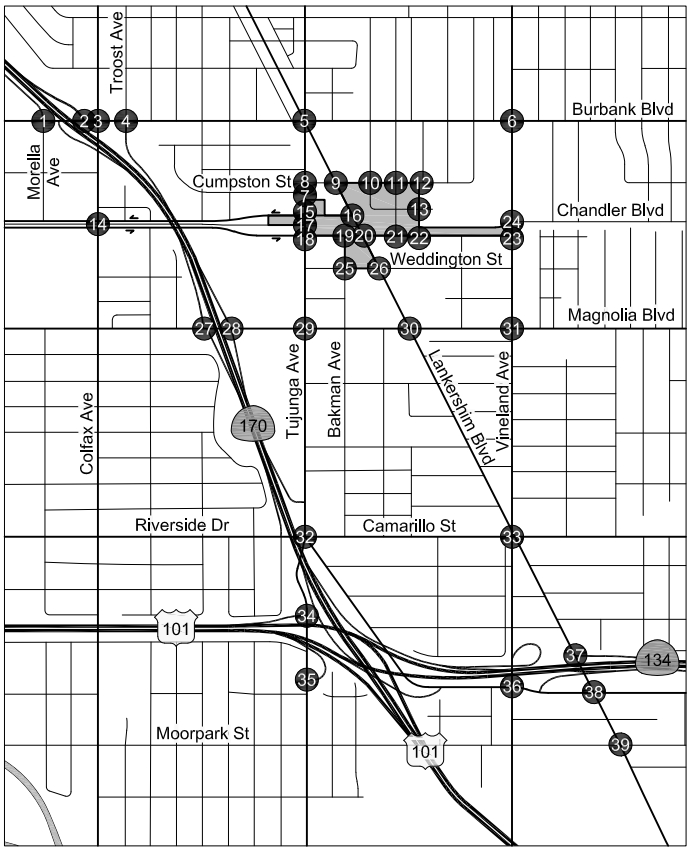
LEGEND

Project Site

Analyzed Intersection

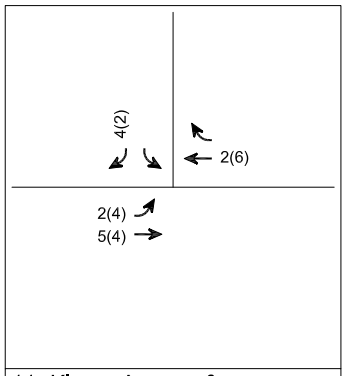
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

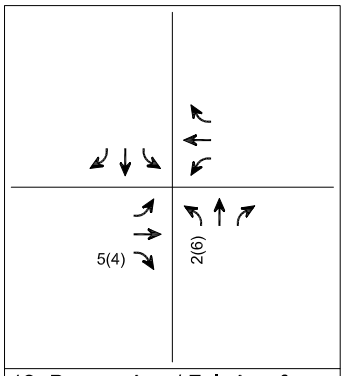


PROJECT FULL BUILDOUT ONLY
PEAK HOUR TRAFFIC VOLUMES

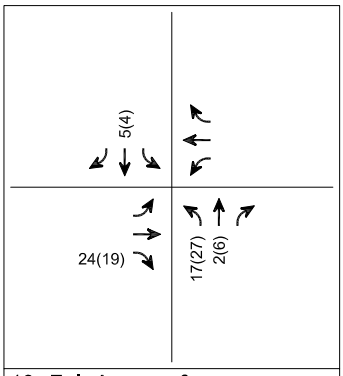
FIGURE 13



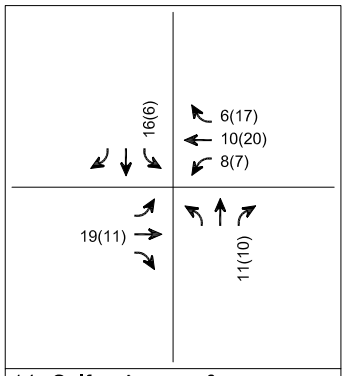
11. Klump Avenue & Cumpston Street



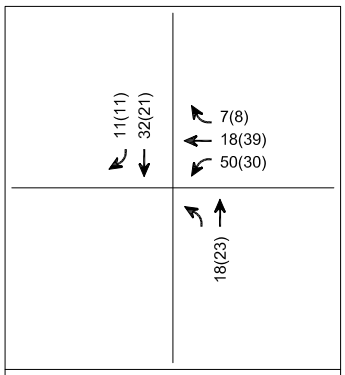
12. Bonner Ave / Fair Ave & Cumpston Street



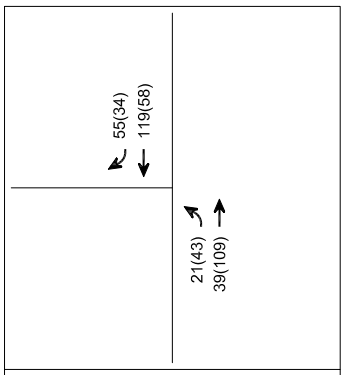
13. Fair Avenue & District Way



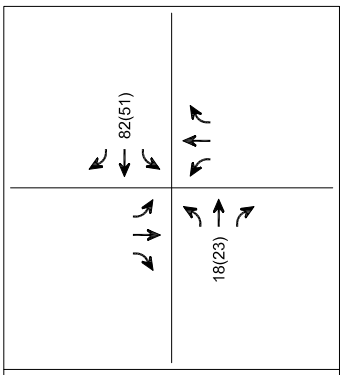
14. Colfax Avenue & Chandler Boulevard



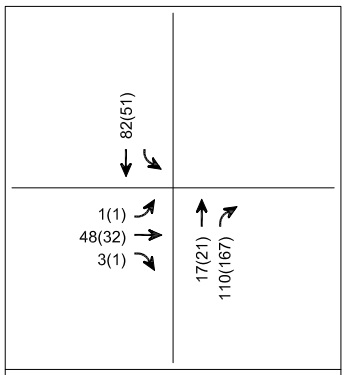
15. Tujunga Avenue & Chandler Boulevard WB



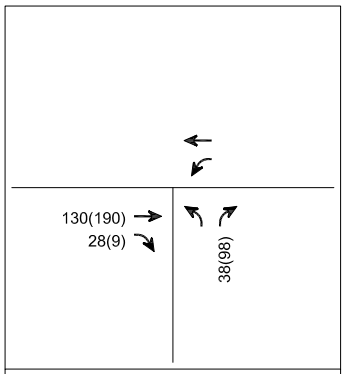
16. Lankershim Boulevard & Chandler Boulevard WB



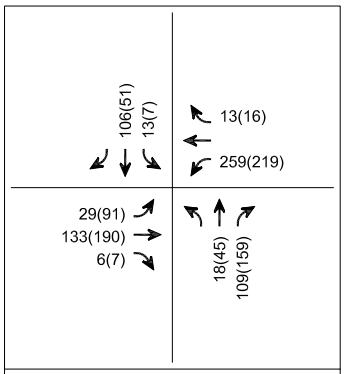
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

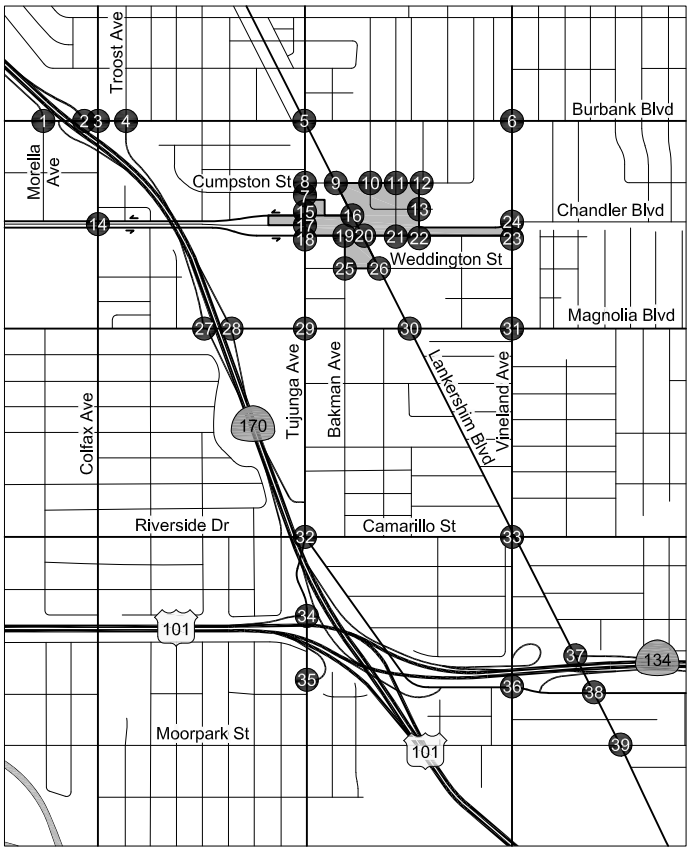
LEGEND

Project Site

Analyzed Intersection

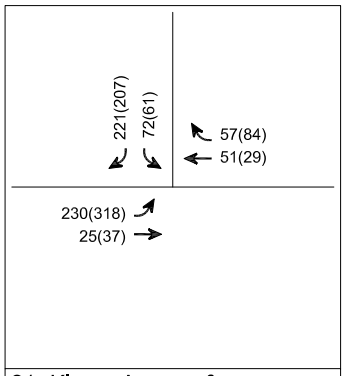
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

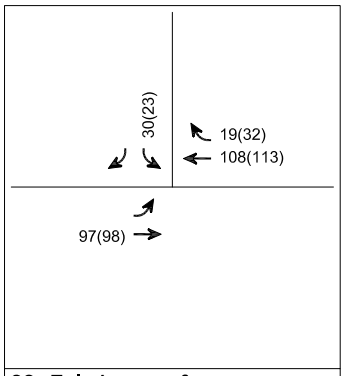


PROJECT FULL BUILDOUT ONLY
PEAK HOUR TRAFFIC VOLUMES

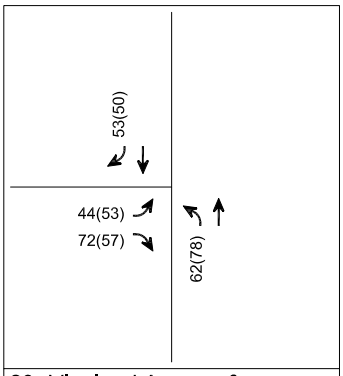
FIGURE
13 (CONT.)



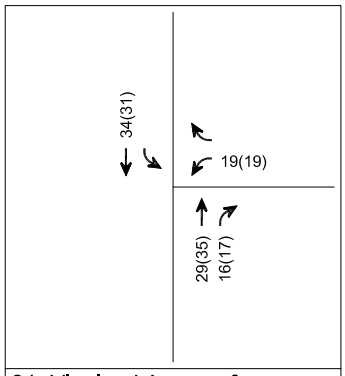
21. Klump Avenue & Chandler Boulevard



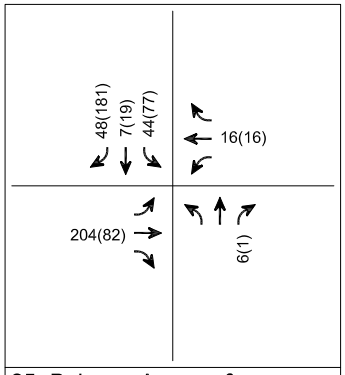
22. Fair Avenue & Chandler Boulevard



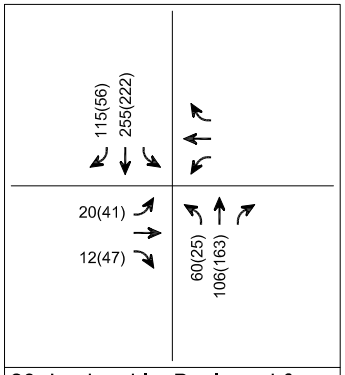
23. Vineland Avenue & Chandler Boulevard (West)



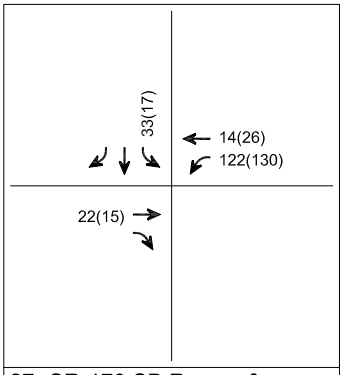
24. Vineland Avenue & Chandler Boulevard (East)



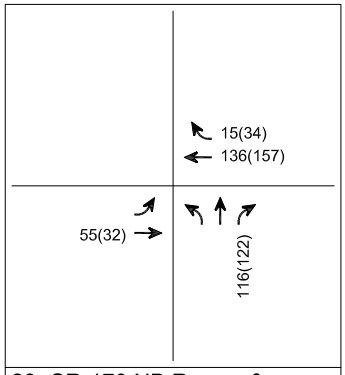
25. Bakman Avenue & Weddington Street



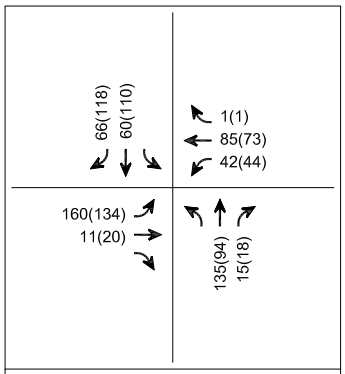
26. Lankershim Boulevard & Weddington Street



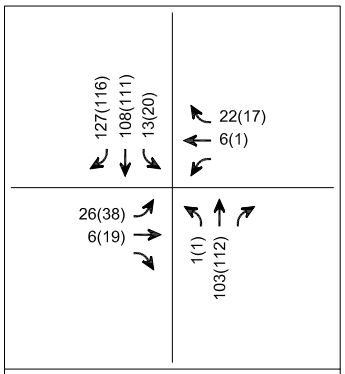
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard

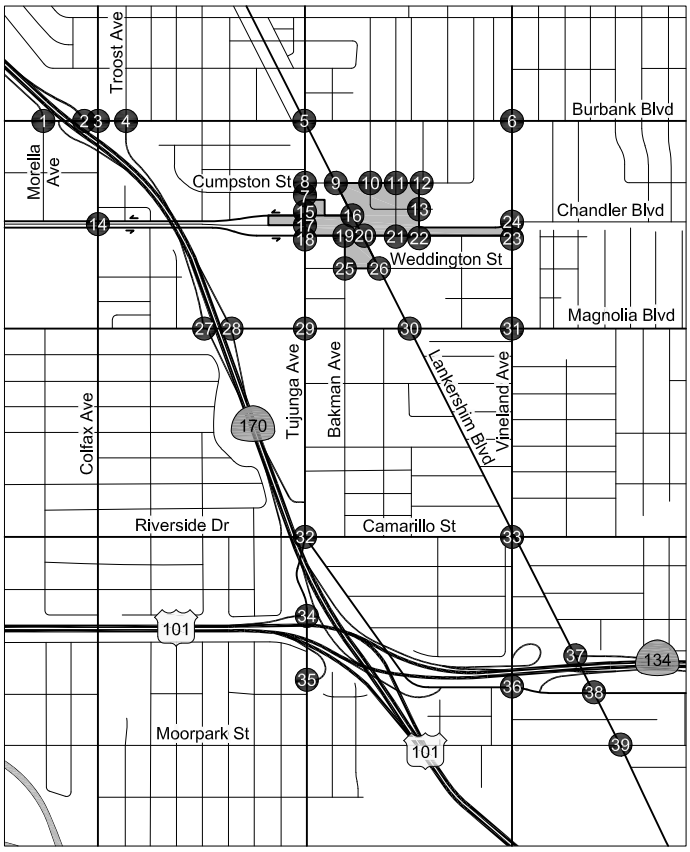
LEGEND

Project Site

Analyzed Intersection

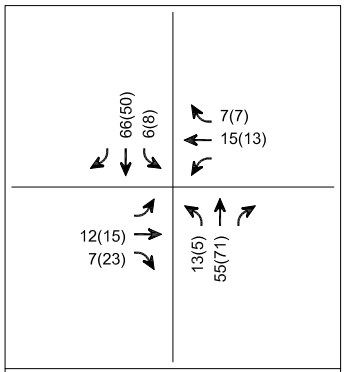
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

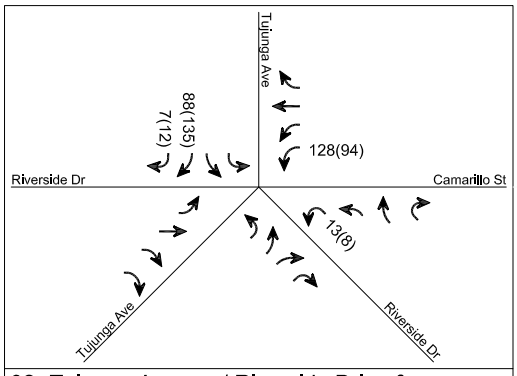


PROJECT FULL BUILDOUT ONLY
PEAK HOUR TRAFFIC VOLUMES

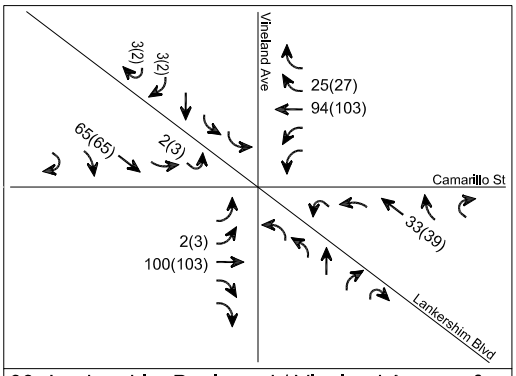
FIGURE
13 (CONT.)



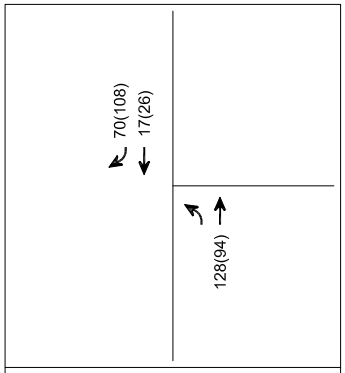
31. Vineland Avenue & Magnolia Boulevard



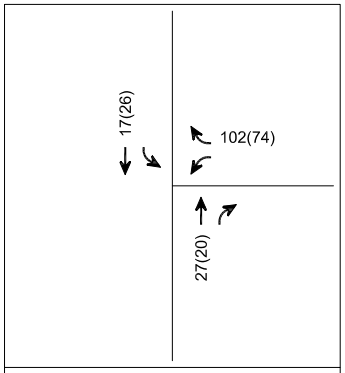
32. Tujunga Avenue / Riverside Drive & Camarillo Street



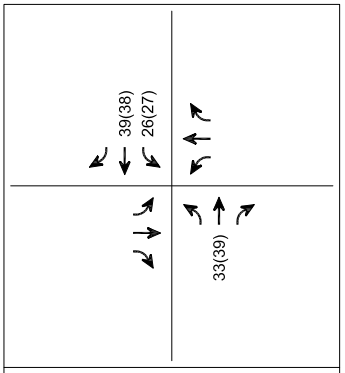
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



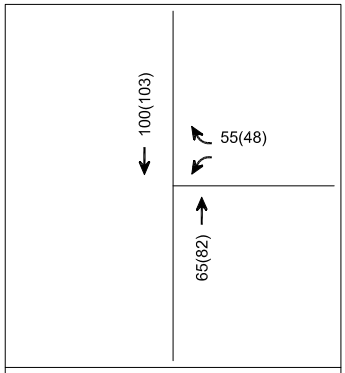
34. Tujunga Avenue & US 101 WB On-Ramp



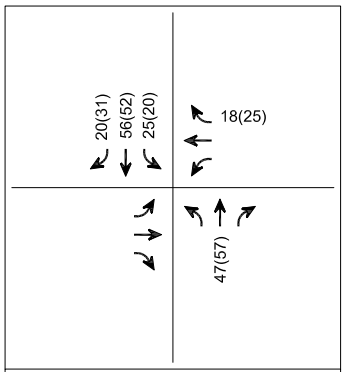
35. Tujunga Avenue & US 101 EB Off-Ramp



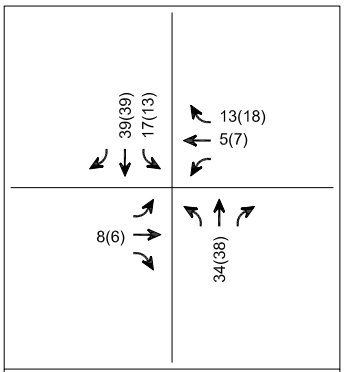
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

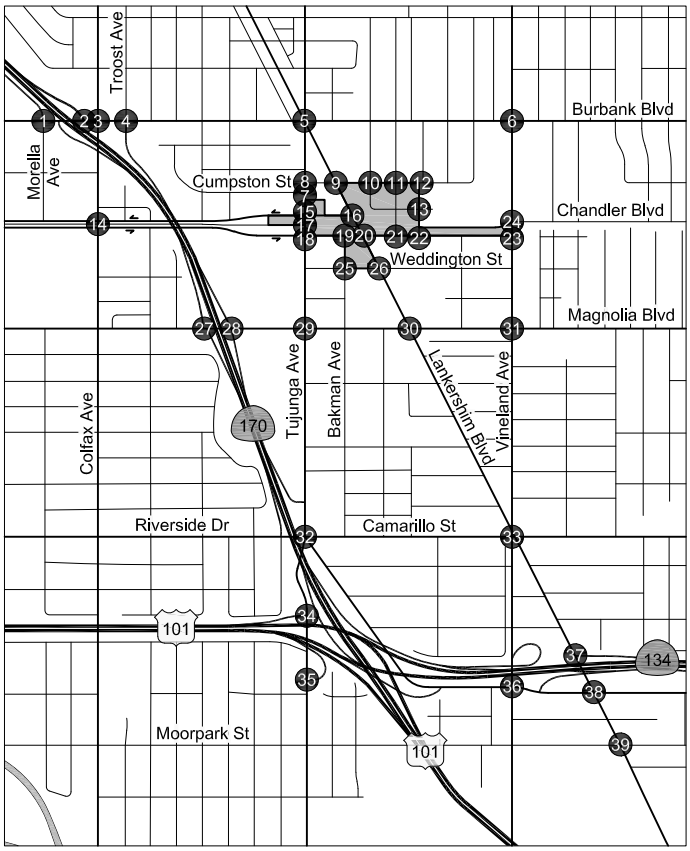
LEGEND

Project Site

Analyzed Intersection

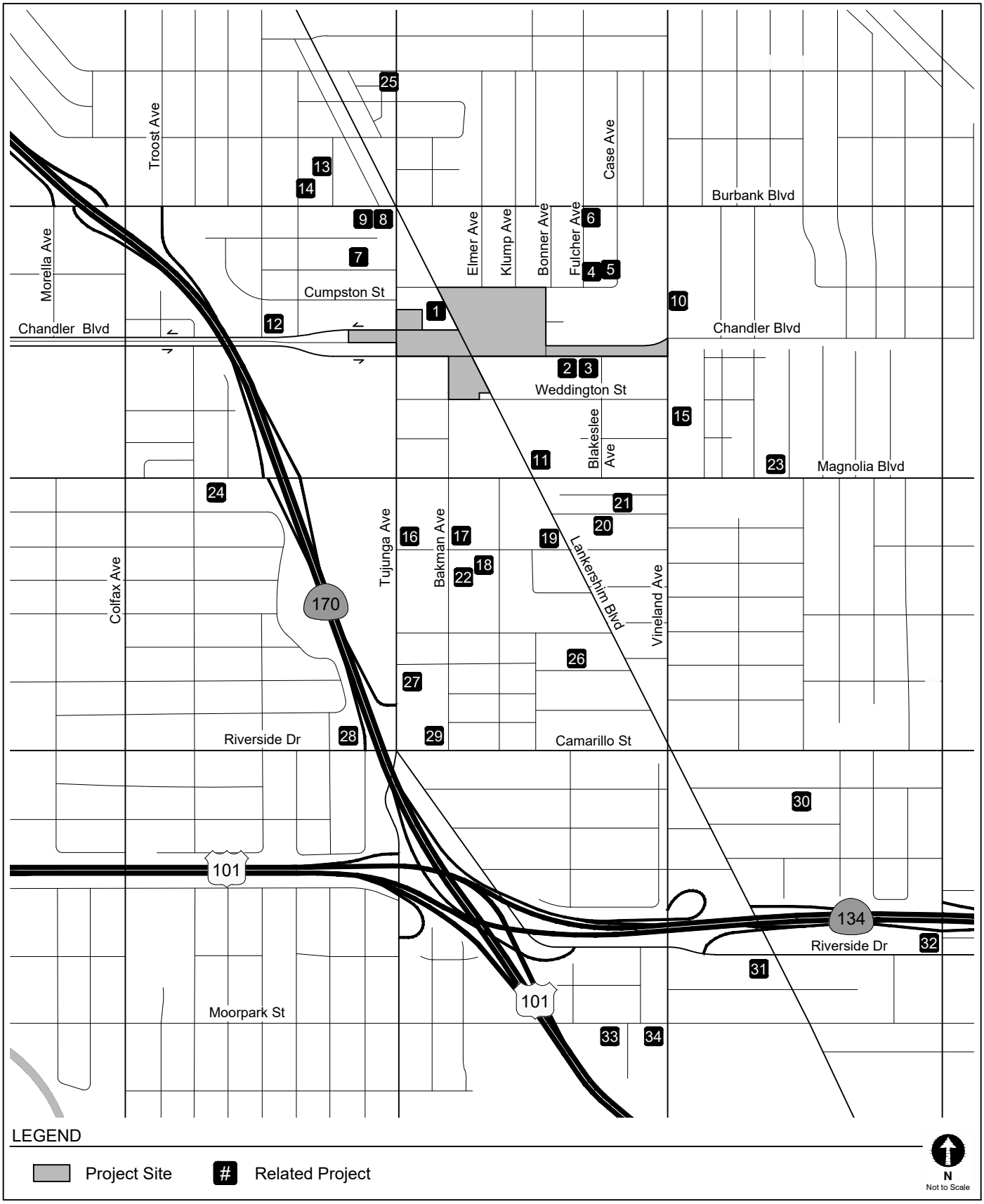
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale



PROJECT FULL BUILDOUT ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
13 (CONT.)



LOCATIONS OF RELATED PROJECTS

FIGURE 14

TABLE 8
PEDESTRIAN PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Size	Daily Vehicle Trips	Pedestrian-Generating Trip Reductions [a]	Daily Pedestrian Trips [b]
Block 0					
Office	710	709 sf	7		
Transit/Walk Adjustment - 25%			*(2)*	2	3
Retail	820	1,643 sf	62		
Internal Capture - 10%			*(6)*	6	8
Transit/Walk Adjustment - 25%			*(14)*	14	20
Pass-By Adjustment - 50%			*(21)*		
Restaurant	932	6,497 sf	729		
Internal Capture - 10%			*(73)*	73	102
Transit/Walk Adjustment - 25%			*(164)*	164	230
Pass-By Adjustment - 20%			*(98)*		
Block 0 Subtotal			**420**	**259**	**363**
Block 1					
Multi-Family Housing (High-Rise)	222	313 du	1,393	464	650
Retail	820	10,507 sf	397		
Internal Capture - 10%			*(40)*	40	56
Transit/Walk Adjustment - 25%			*(89)*	89	125
Pass-By Adjustment - 50%			*(134)*		
Restaurant	932	7,985 sf	896		
Internal Capture - 10%			*(90)*	90	126
Transit/Walk Adjustment - 25%			*(202)*	202	283
Pass-By Adjustment - 20%			*(121)*		
Block 1 Subtotal			**2,010**	**885**	**1,240**

Notes:

du = dwelling unit; sf = square feet. Daily vehicle trips based on trip generation estimates from Table 3.

[a] Vehicle trips reduced by internal capture and transit/walk adjustments. Also assumes that residential trip estimates have an inherent 25% transit/walk trip reduction.

[b] Assumes 1.4 persons per vehicle.

TABLE 8 (CONT'D)
PEDESTRIAN PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Daily Vehicle Trips	Pedestrian-Generating Trip Reductions [a]	Daily Pedestrian Trips [b]
Block 2					
Multi-Family Housing (High-Rise)	222	309 du	1,375	458	642
Retail	820	2,975 sf	112		
Internal Capture - 10%			*(11)*	11	15
Transit/Walk Adjustment - 25%			*(25)*	25	35
Pass-By Adjustment - 50%			*(38)*		
Block 2 Subtotal			**1,413**	**494**	**692**
Block 3					
Affordable Family Housing	n/a	160 du	666	222	311
Block 3 Subtotal			**666**	**222**	**311**
Block 4					
Multi-Family Housing (Mid-Rise)	221	194 du	1,055	352	492
Retail [c]	820	12,425 sf	469		
Internal Capture - 10%			*(47)*	47	66
Transit/Walk Adjustment - 25%			*(106)*	106	148
Pass-By Adjustment - 50%			*(158)*		
Restaurant	932	13,325 sf	1,495		
Internal Capture - 10%			*(150)*	150	210
Transit/Walk Adjustment - 25%			*(336)*	336	470
Pass-By Adjustment - 20%			*(202)*		
Block 4 Subtotal			**2,020**	**991**	**1,386**

Notes:

du = dwelling unit; sf = square feet. Daily vehicle trips based on trip generation estimates from Table 3.

[a] Vehicle trips reduced by internal capture and transit/walk adjustments. Also assumes that residential trip estimates have an inherent 25% transit/walk trip reduction.

[b] Assumes 1.4 persons per vehicle.

[c] For future flexibility, 450 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 4.

TABLE 8 (CONT'D)
PEDESTRIAN PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Daily Vehicle Trips	Pedestrian-Generating Trip Reductions [a]	Daily Pedestrian Trips [b]
Block 5					
Multi-Family Housing (High-Rise)	222	400 du	1,780	593	831
Office	710	91,345 sf	920		
Transit/Walk Adjustment - 25%			*(230)*	230	322
Retail	820	2,575 sf	97		
Internal Capture - 10%			*(10)*	10	14
Transit/Walk Adjustment - 25%			*(22)*	22	31
Pass-By Adjustment - 50%			*(33)*		
Restaurant	932	15,227 sf	1,708		
Internal Capture - 10%			*(171)*	171	239
Transit/Walk Adjustment - 25%			*(384)*	384	538
Pass-By Adjustment - 20%			*(231)*		
Block 5 Subtotal			**3,424**	**1,410**	**1,975**
Block 6					
Restaurant	932	13,024 sf	1,461		
Internal Capture - 10%			*(146)*	146	204
Transit/Walk Adjustment - 25%			*(329)*	329	461
Pass-By Adjustment - 20%			*(197)*		
Block 6 Subtotal			**789**	**475**	**665**

Notes:

du = dwelling unit; sf = square feet. Daily vehicle trips based on trip generation estimates from Table 3.

[a] Vehicle trips reduced by internal capture and transit/walk adjustments. Also assumes that residential trip estimates have an inherent 25% transit/walk trip reduction.

[b] Assumes 1.4 persons per vehicle.

TABLE 8 (CONT'D)
PEDESTRIAN PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Daily Vehicle Trips	Pedestrian-Generating Trip Reductions [a]	Daily Pedestrian Trips [b]
Block 7					
Affordable Family Housing	n/a	151 du	628	209	293
Block 7 Subtotal			**628**	**209**	**293**
Block 8					
Office	710	488,320 sf	4,917		
Transit/Walk Adjustment - 25%			*(1,229)*	1,229	1,721
Retail [c]	820	0 sf	0		
Restaurant	932	18,942 sf	2,125		
Internal Capture - 10%			*(213)*	213	298
Transit/Walk Adjustment - 25%			*(478)*	478	669
Pass-By Adjustment - 20%			*(287)*		
Block 8 Subtotal			**4,835**	**1,920**	**2,688**
TOTAL - PROPOSED PROJECT			**16,205**	**6,866**	**9,613**

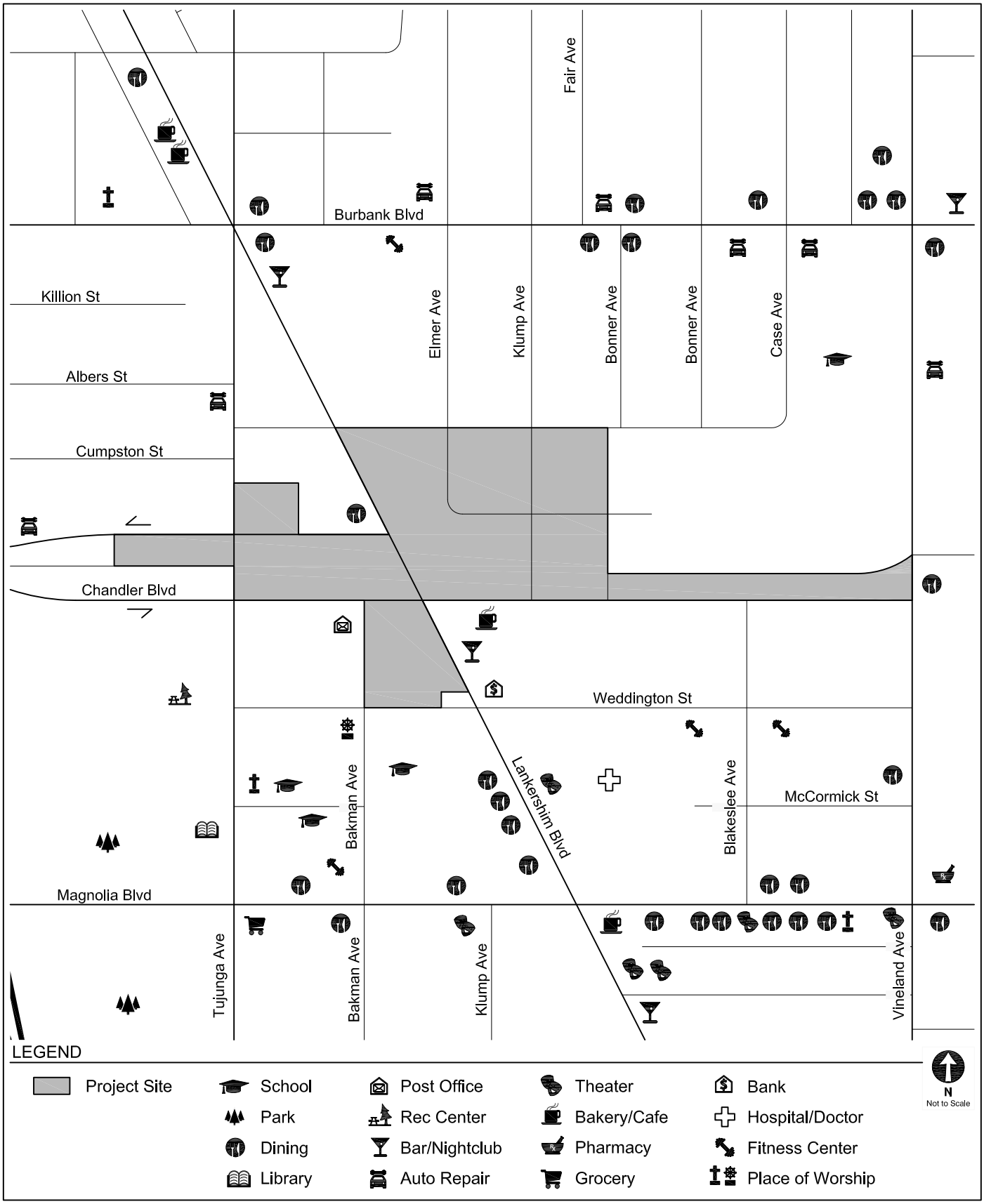
Notes:

du = dwelling unit; sf = square feet. Daily vehicle trips based on trip generation estimates from Table 3.

[a] Vehicle trips reduced by internal capture and transit/walk adjustments. Also assumes that residential trip estimates have an inherent 25% transit/walk trip reduction.

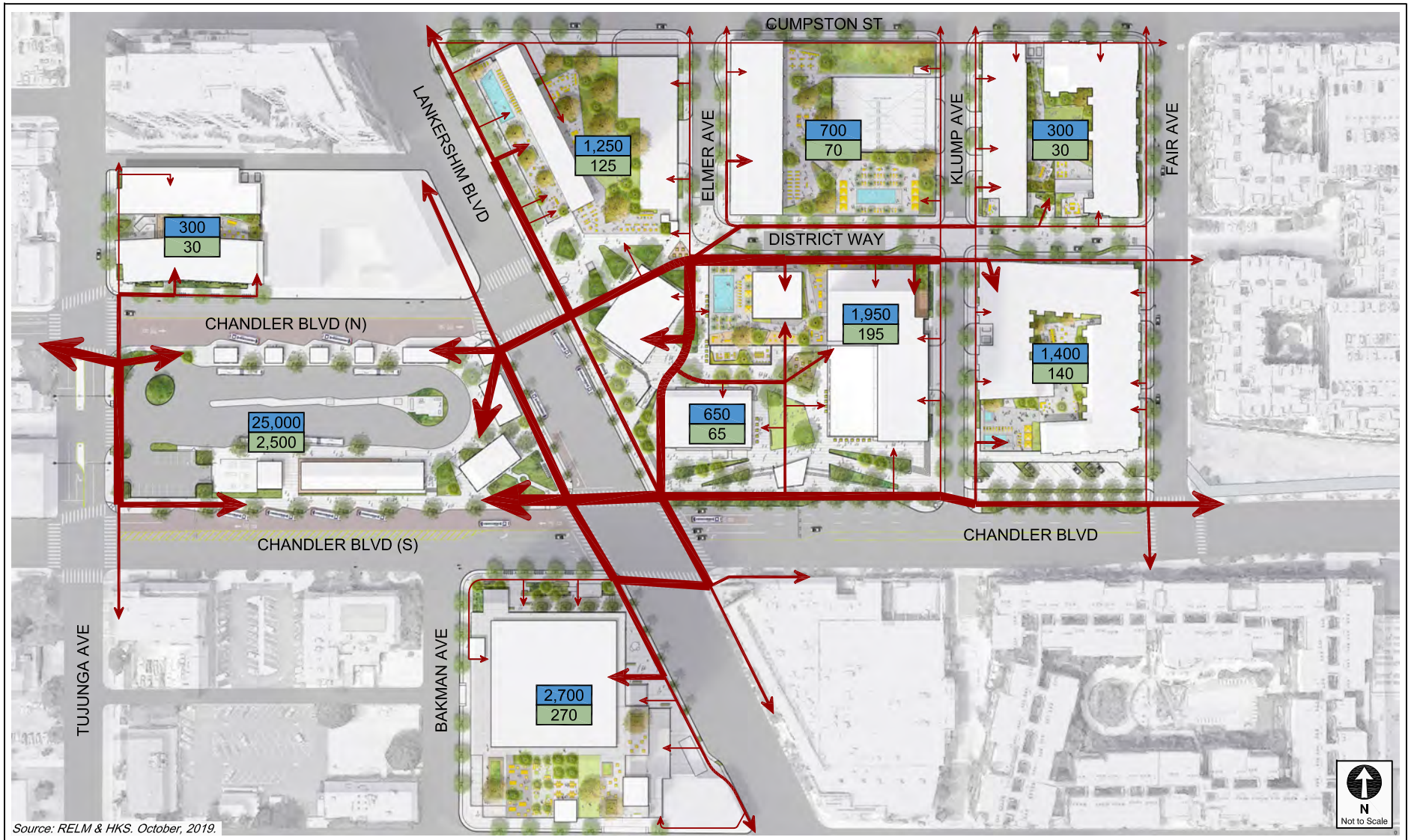
[b] Assumes 1.4 persons per vehicle.

[c] For future flexibility, 10,284 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 8.



PEDESTRIAN ATTRACTORS INVENTORY

FIGURE 15



Source: RELM & HKS. October, 2019.

LEGEND

X,XXX — Estimated Daily Pedestrian Trips
X,XXX — Estimated Peak Hour Pedestrian Trips

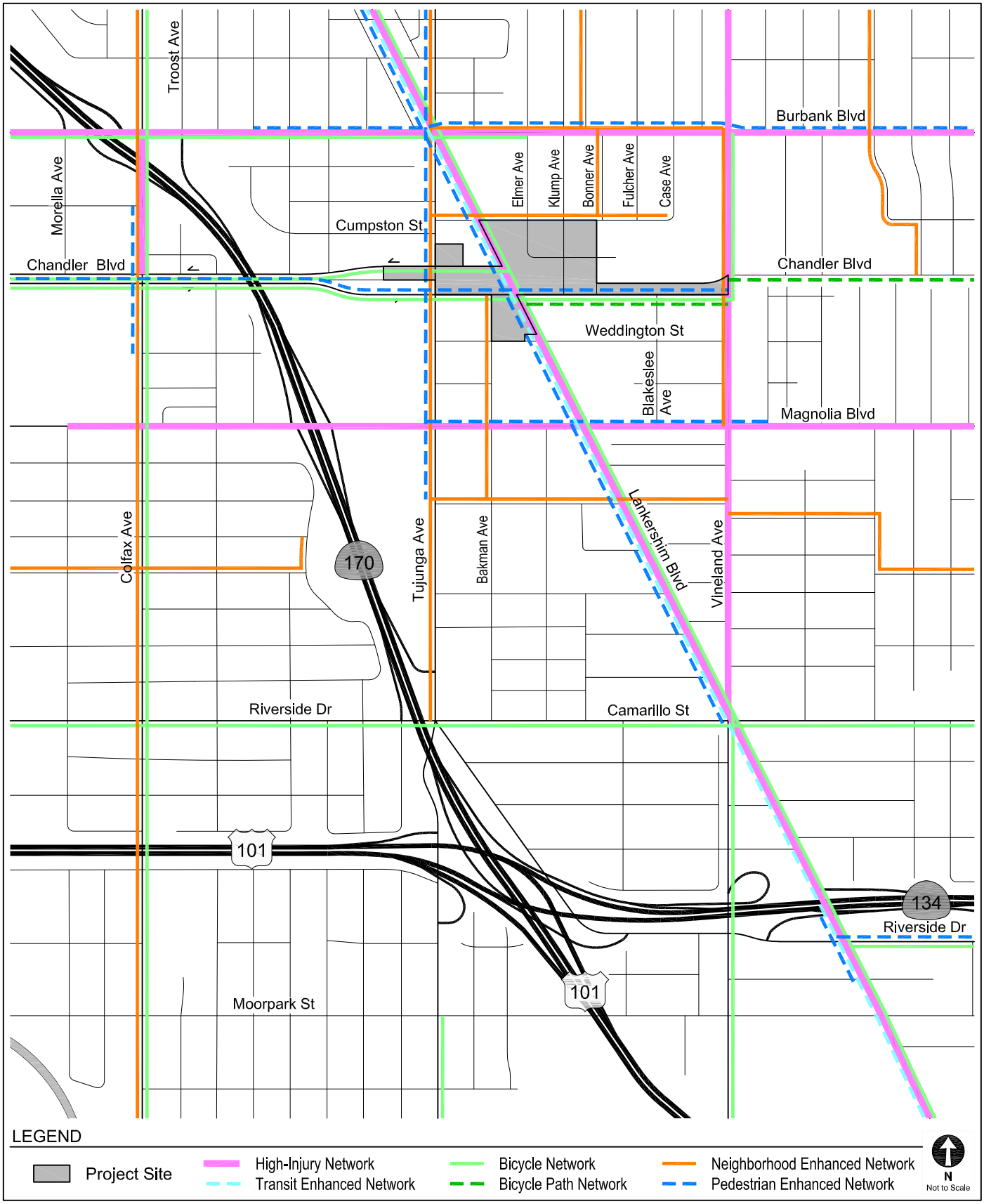
PEDESTRIAN PATHS OF TRAVEL

Minimal Pedestrian Activity (~10 trips/hr)

Maximum Pedestrian Activity (up to 800 trips/hr)

ESTIMATED PROJECT-RELATED PEDESTRIAN ACTIVITY

FIGURE 16

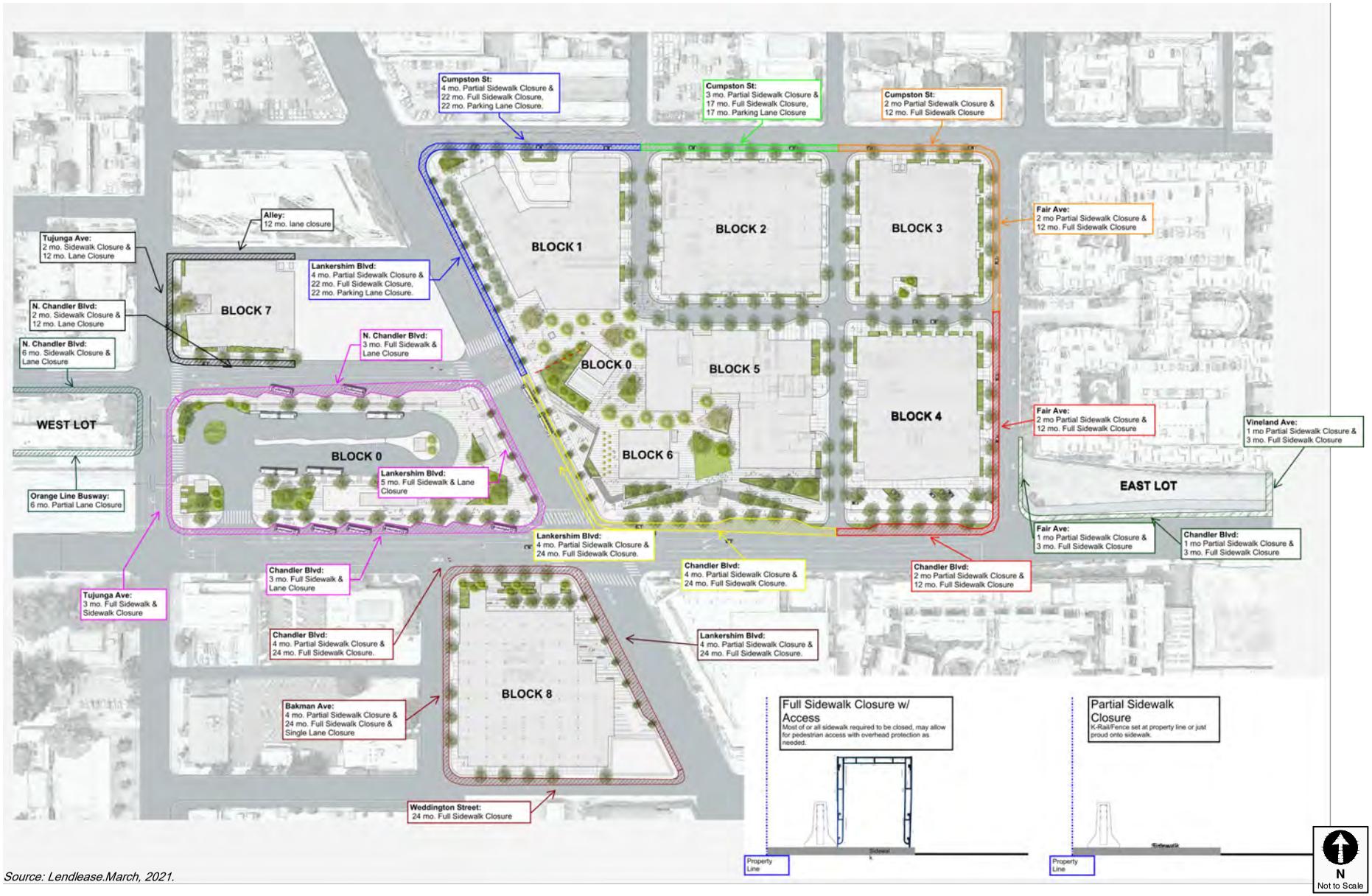


ROADWAY MODAL PRIORITIES AND HIGH INJURY NETWORK

FIGURE 17

TABLE 9
CROSSING DISTANCE ANALYSIS

Street Name	Between		Distance (ft)
	N/E Street	S/W Street	
Burbank Boulevard	Troost Avenue / SR 170 Northbound Off-ramp	Lankershim Boulevard	2250
Burbank Boulevard	Lankershim Boulevard	Vineland Avenue	2250
Chandler Boulevard / Orange Line Busway	Colfax Avenue	Tujunga Avenue	2600
Chandler Boulevard (North & South)	Tujunga Avenue	Lankershim Boulevard	550
Chandler Boulevard	Lankershim Boulevard	Vineland Avenue	1750
Magnolia Boulevard	SR 170 NB Ramps	Tujunga Avenue	900
Magnolia Boulevard	Tujunga Avenue	Bakman Avenue	400
Magnolia Boulevard	Bakman Avenue	Lankershim Boulevard	750
Magnolia Boulevard	Lankershim Boulevard	Blakeslee Avenue	600
Magnolia Boulevard	Blakeslee Avenue	Vineland Avenue	600
Lankershim Boulevard	Hatteras Street	Burbank Boulevard	1400
Lankershim Boulevard	Burbank Boulevard	Cumpston Street	800
Lankershim Boulevard	Cumpston Street	Chandler Boulevard (North)	300
Lankershim Boulevard	Chandler Boulevard (North)	Chandler Boulevard (South)	250
Lankershim Boulevard	Chandler Boulevard (South)	Weddington Street	350
Lankershim Boulevard	Weddington Street	Crosswalk	500
Lankershim Boulevard	Crosswalk	Magnolia Boulevard	250
Lankershim Boulevard	Magnolia Boulevard	Ostego Street	700
Tujunga Avenue	Burbank Boulevard	Chandler Boulevard (North)	1150
Tujunga Avenue	Chandler Boulevard (North)	Orangle Line Busway	100
Tujunga Avenue	Orangle Line Busway	Chandler Boulevard (South)	100
Tujunga Avenue	Chandler Boulevard (South)	Magnolia Boulevard	1050
Tujunga Avenue	Magnolia Boulevard	Carmarillo Street / Riverside Drive	2550
Vineland Avenue	Hatteras Street	Burbank Boulevard	1250
Vineland Avenue	Burbank Boulevard	Chandler Boulevard (East Leg)	1200
Vineland Avenue	Chandler Boulevard (East Leg)	Chandler Boulevard (West Leg)	100
Vineland Avenue	Chandler Boulevard (West Leg)	Magnolia Boulevard	1100
Vineland Avenue	Magnolia Boulevard	Hesby Street	1050



Source: Lendlease.March, 2021.

ANTICIPATED SIDEWALK AND LANE CLOSURES

FIGURE
18

Phase 1 VMT

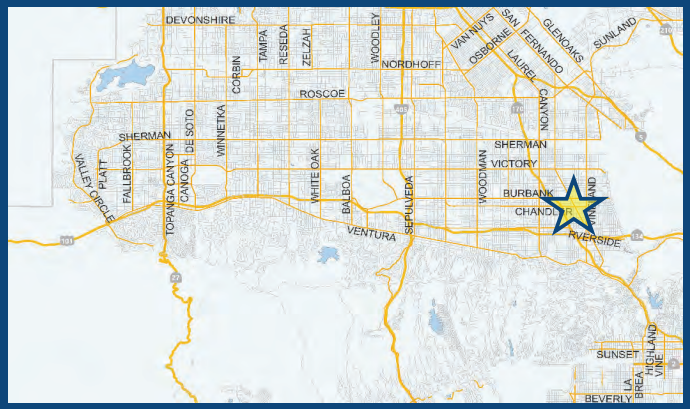
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Phase 1

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	400	DU
Retail | General Retail	4.218	ksf
Retail | High-Turnover Sit-Down Restaurant	53.69	ksf
Office | General Office	580.374	ksf
Housing | Affordable Housing - Family	151	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply — ☐ Proposed Prj ☑ Mitigation
- 2458 city code parking provision for the project site
- 1979 actual parking provision for the project site

Unbundle Parking — ☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

Parking Cash-Out — ☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking — ☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits — ☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
8,988 Daily Vehicle Trips	**7,674** Daily Vehicle Trips
79,534 Daily VMT	**67,913** Daily VMT
4.8 Household VMT per Capita	**4.1** Household VMT per Capita
10.4 Work VMT per Employee	**8.9** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	400	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	Family	151	DU
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	4.218	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	53.690	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	580.374	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 2,545
Total Population: 1,375

Proposed Project		*With Mitigation*	
8,988	**Daily Vehicle Trips**	**7,674**	**Daily Vehicle Trips**
79,534	**Daily VMT**	**67,913**	**Daily VMT**
4.8	**Household VMT per Capita**	**4.1**	**Household VMT per Capita**
10.4	**Work VMT per Employee**	**8.9**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	*0*	2458
		Actual parking provision (spaces)	*0*	1979
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	Employees and residents participating (%)	*0%*	50%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	Implement/Improve on-street bicycle facility	Provide bicycle facility along site (Yes/No)	*0*	Yes
	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	*0*	Yes
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	Traffic calming improvements	Streets with traffic calming improvements (%)	*0%*	25%
		Intersections with traffic calming improvements (%)	*0%*	25%
	Pedestrian network improvements	Included (within project and connecting off-site/within project only)	*0*	within project and connecting off-site

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	10%	0%	10%	0%	10%	0%	10%	0%	10%	0%	10%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	2%	0%	2%	0%	2%	0%	2%	0%	2%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*13%*
MAX. TDM EFFECT	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*	*0%*	*15%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,…). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Phase 1
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	486	-39.9%	292	8.7	4,228	2,540
Home Based Other Production	1,346	-42.1%	779	5.3	7,134	4,129
Non-Home Based Other Production	2,254	-4.8%	2,146	8.5	19,159	18,241
Home-Based Work Attraction	2,951	-26.4%	2,172	12.2	36,002	26,498
Home-Based Other Attraction	4,199	-54.4%	1,915	7.3	30,653	13,980
Non-Home Based Other Attraction	1,778	-5.3%	1,684	8.4	14,935	14,146

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	292	2,540	-14.6%	249	2,169
Home Based Other Production	0.0%	779	4,129	-14.6%	665	3,526
Non-Home Based Other Production	0.0%	2,146	18,241	-14.6%	1,832	15,576
Home-Based Work Attraction	0.0%	2,172	26,498	-14.6%	1,855	22,626
Home-Based Other Attraction	0.0%	1,915	13,980	-14.6%	1,635	11,937
Non-Home Based Other Attraction	0.0%	1,684	14,146	-14.6%	1,438	12,079

MXD VMT Methodology Per Capita & Per Employee

Total Population: 1,375
Total Employees: 2,545
APC: South Valley

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**6,669**	**5,695**
Total Home Based Work Attraction VMT	**26,498**	**22,626**
Total Home Based VMT Per Capita	**4.8**	**4.1**
Total Work Based VMT Per Employee	**10.4**	**8.9**

Full Buildout VMT

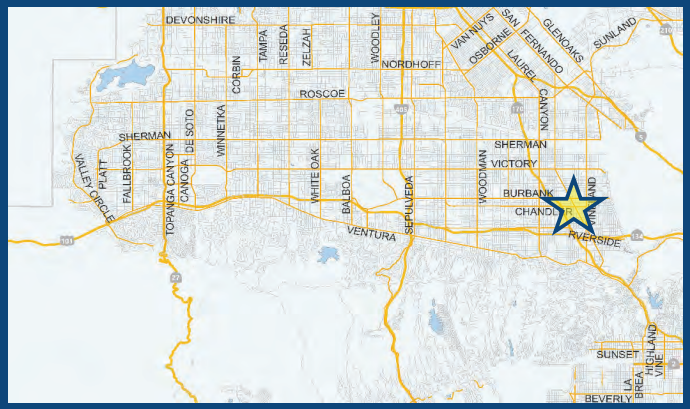
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Full Buildout

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	1216	DU
Retail | General Retail	30.125	ksf
Retail | High-Turnover Sit-Down Restaurant	75	ksf
Office | General Office	580.374	ksf
Housing | Affordable Housing - Family	311	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply — ☐ Proposed Prj ☑ Mitigation
- 4291 city code parking provision for the project site
- 3313 actual parking provision for the project site

Unbundle Parking — ☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

Parking Cash-Out — ☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking — ☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits — ☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
14,823 Daily Vehicle Trips	**12,425** Daily Vehicle Trips
123,802 Daily VMT	**103,775** Daily VMT
5.3 Household VMT per Capita	**4.5** Household VMT per Capita
10.4 Work VMT per Employee	**8.7** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout
Project Address: 34.168819, -118.375779

Version 1.3

Project Information

Land Use Type		Value	Units
Housing	*Single Family*	*0*	*DU*
	Multi Family	1,216	DU
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	Family	311	DU
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	30.125	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	75.000	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	*0.000*	*ksf*
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	580.374	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other		*0*	*Trips*

Analysis Results

Total Employees: 2,682
Total Population: 3,717

Proposed Project		*With Mitigation*	
14,823	**Daily Vehicle Trips**	**12,425**	**Daily Vehicle Trips**
123,802	**Daily VMT**	**103,775**	**Daily VMT**
5.3	**Household VMT per Capita**	**4.5**	**Household VMT per Capita**
10.4	**Work VMT per Employee**	**8.7**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Valley

Impact Threshold: 15% Below APC Average
Household = 9.4
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 9.4	No	Household > 9.4	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	*0*	4291
		Actual parking provision (spaces)	*0*	3313
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Transit	*Reduce transit headways*	*Reduction in headways (increase in frequency) (%)*	*0%*	*0%*
		Existing transit mode share (as a percent of total daily trips) (%)	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	Employees and residents participating (%)	*0%*	50%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Commute Trip Reductions	*Required commute trip reduction program*	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*
	Employer sponsored vanpool or shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	*Employees eligible (%)*	*0%*	*0%*
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	Implement/Improve on-street bicycle facility	Provide bicycle facility along site (Yes/No)	*0*	Yes
	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	*0*	Yes
	Include secure bike parking and showers	*Includes indoor bike parking/lockers, showers, & repair station (Yes/No)*	*0*	*0*
Neighborhood Enhancement	Traffic calming improvements	Streets with traffic calming improvements (%)	*0%*	25%
		Intersections with traffic calming improvements (%)	*0%*	25%
	Pedestrian network improvements	Included (within project and connecting off-site/within project only)	*0*	within project and connecting off-site

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	0%	11%	0%	11%	0%	11%	0%	11%	0%	11%	0%	11%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	2%	0%	2%	0%	2%	0%	2%	0%	2%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	*0.0%*	0.6%	
	Include secure bike parking and showers	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	*0.0%*	2.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*14%*
MAX. TDM EFFECT	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*	*0%*	*16%*

= Minimum (X%, 1-[(1-A)*(1-B)…])

where X%=

PLACE	*urban*	*75%*
TYPE	compact infill	*40%*
MAX:	*suburban center*	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,…). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: July 14, 2020
Project Name: District NoHo
Project Scenario: Full Buildout
Project Address: 34.168819, -118.375779

Version 1.3

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	1,353	-29.5%	954	8.7	11,771	8,300
Home Based Other Production	3,747	-42.2%	2,167	5.3	19,859	11,485
Non-Home Based Other Production	4,010	-4.7%	3,821	8.5	34,085	32,479
Home-Based Work Attraction	3,149	-27.3%	2,290	12.2	38,418	27,938
Home-Based Other Attraction	6,799	-55.0%	3,058	7.3	49,633	22,323
Non-Home Based Other Attraction	2,684	-5.6%	2,533	8.4	22,546	21,277

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	0.0%	954	8,300	-16.2%	800	6,957
Home Based Other Production	0.0%	2,167	11,485	-16.2%	1,816	9,627
Non-Home Based Other Production	0.0%	3,821	32,479	-16.2%	3,203	27,225
Home-Based Work Attraction	0.0%	2,290	27,938	-16.2%	1,920	23,419
Home-Based Other Attraction	0.0%	3,058	22,323	-16.2%	2,563	18,712
Non-Home Based Other Attraction	0.0%	2,533	21,277	-16.2%	2,123	17,835

MXD VMT Methodology Per Capita & Per Employee

Total Population: 3,717
Total Employees: 2,682
APC: South Valley

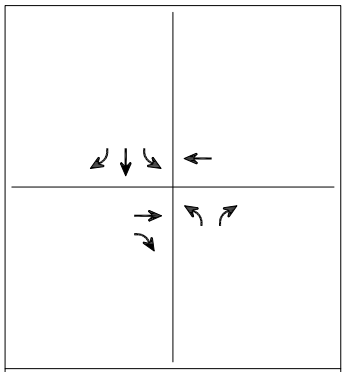
	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**19,785**	**16,584**
Total Home Based Work Attraction VMT	**27,938**	**23,419**
Total Home Based VMT Per Capita	**5.3**	**4.5**
Total Work Based VMT Per Employee	**10.4**	**8.7**

Appendix G

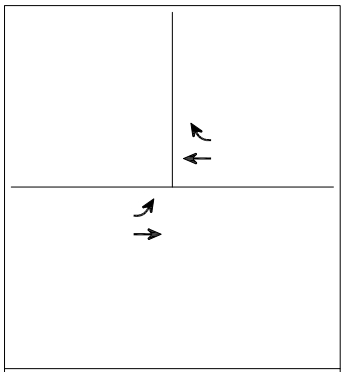
Traffic Volume Adjustments

Project-Related Traffic Effects

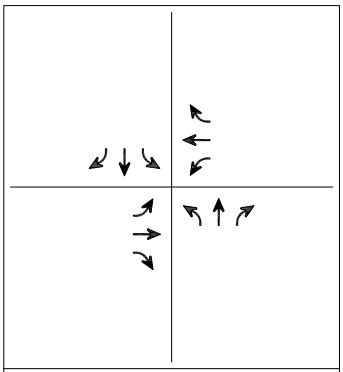
Transit Riders Rerouted to Relocated Metro Parking
Transit Buses Rerouted to Consolidated Transit Center
Chandler Boulevard (South) Reconfiguration



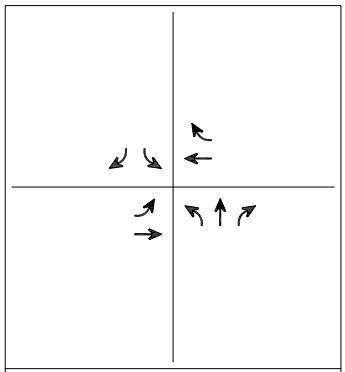
1. SR-170 SB Off-Ramp & Burbank Boulevard



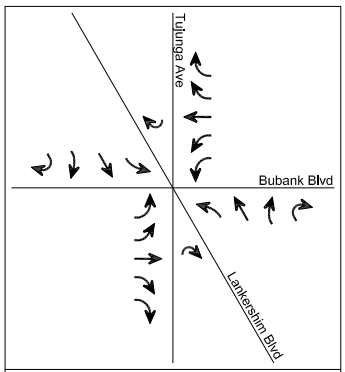
2. SR-170 NB On-Ramp & Burbank Boulevard



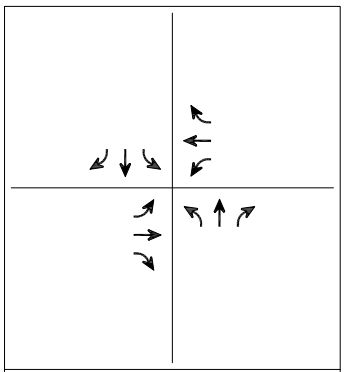
3. Colfax Avenue & Burbank Boulevard



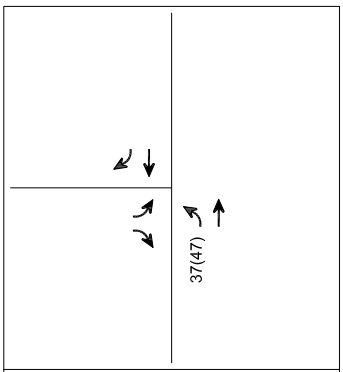
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



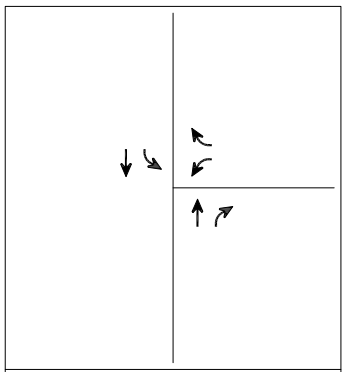
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



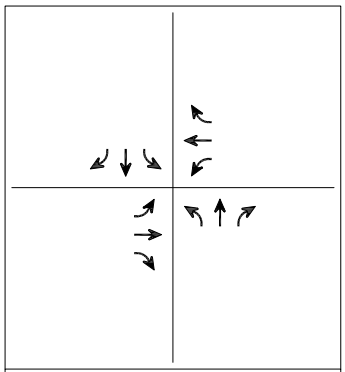
6. Vineland Avenue & Burbank Boulevard



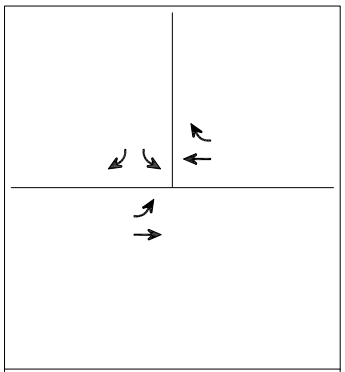
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street

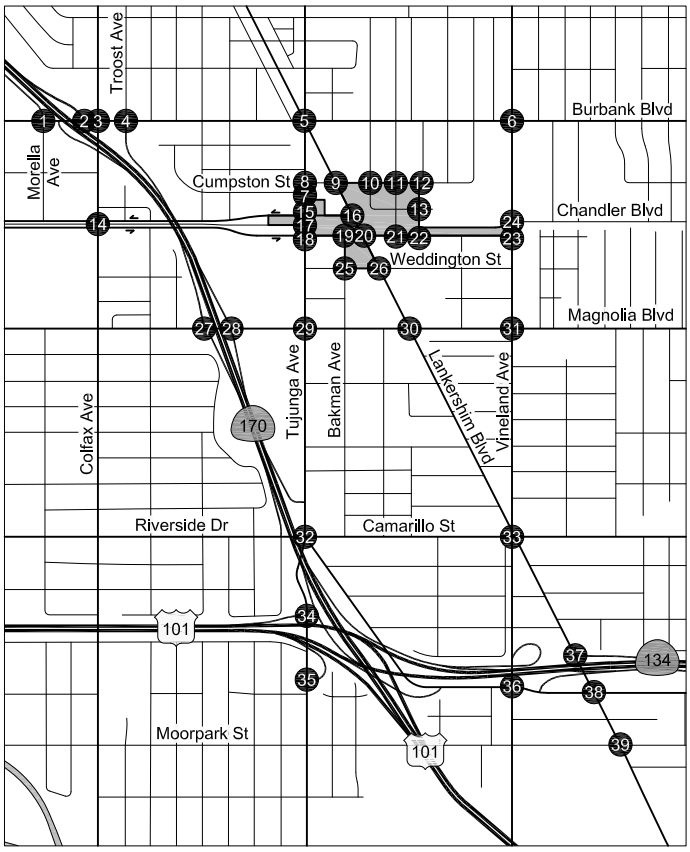
LEGEND

Project Site

Analyzed Intersection

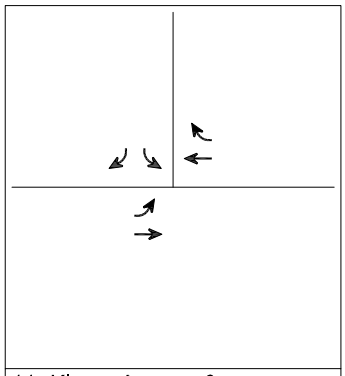
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

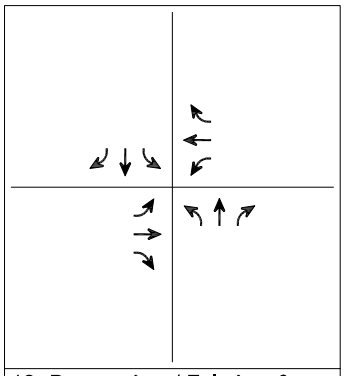


PROJECT-RELATED TRAFFIC EFFECTS (PHASE 1)
TRANSIT RIDER PARKING, TRANSIT BUS REROUTES, AND CHANDLER BOULEVARD (SOUTH) RECONFIGURATION

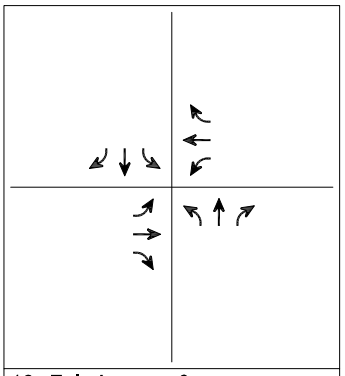
FIGURE
G-1



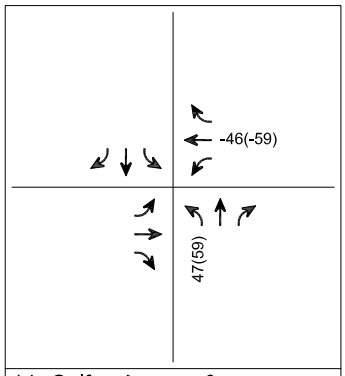
11. Klump Avenue & Cumpston Street



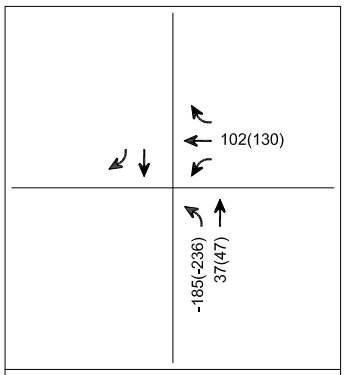
12. Bonner Ave / Fair Ave & Cumpston Street



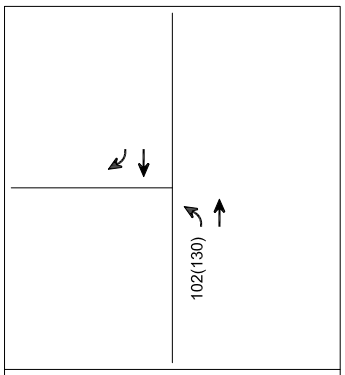
13. Fair Avenue & District Way



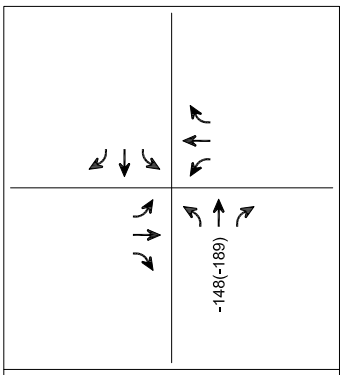
14. Colfax Avenue & Chandler Boulevard



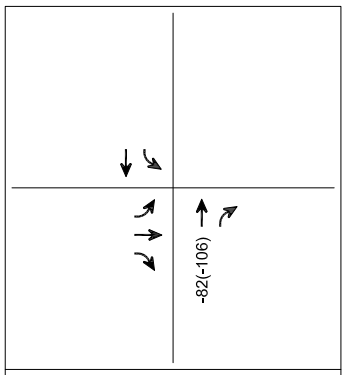
15. Tujunga Avenue & Chandler Boulevard WB



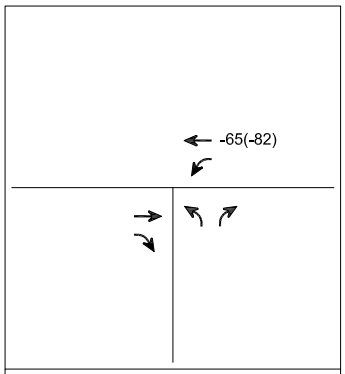
16. Lankershim Boulevard & Chandler Boulevard WB



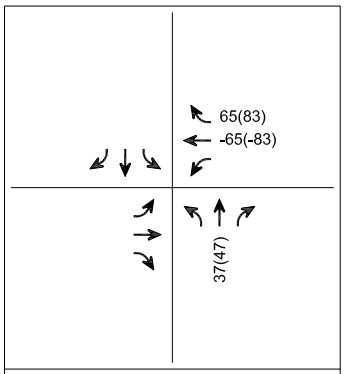
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

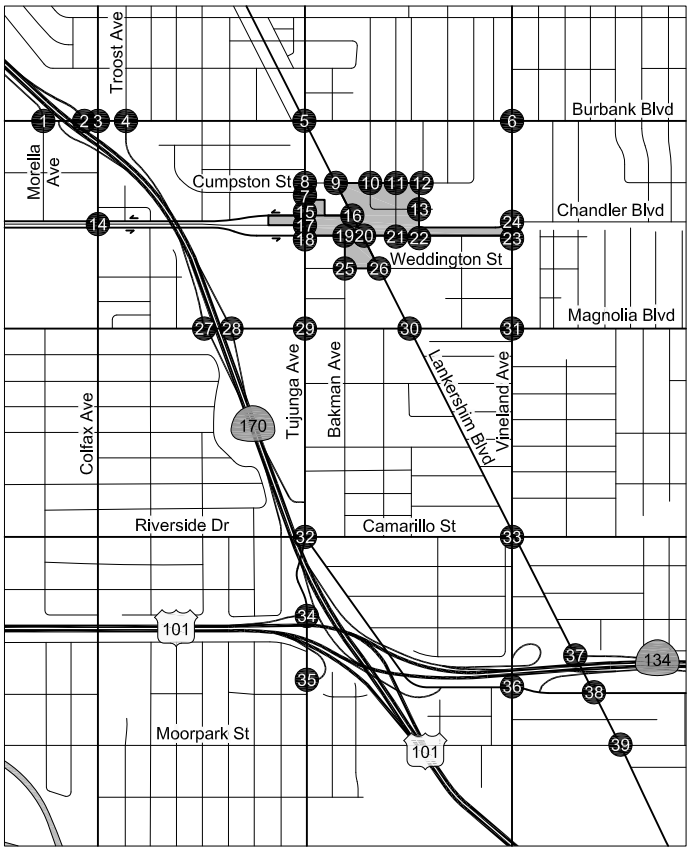
LEGEND

Project Site

Analyzed Intersection

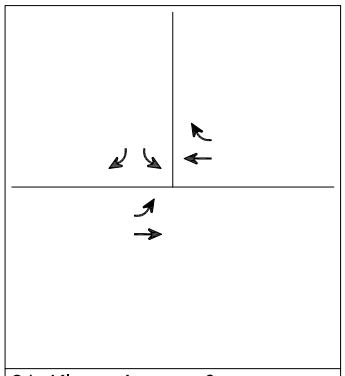
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

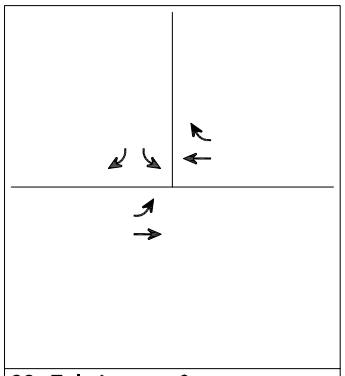


PROJECT-RELATED TRAFFIC EFFECTS (PHASE 1)
TRANSIT RIDER PARKING, TRANSIT BUS REROUTES, AND CHANDLER BOULEVARD (SOUTH) RECONFIGURATION

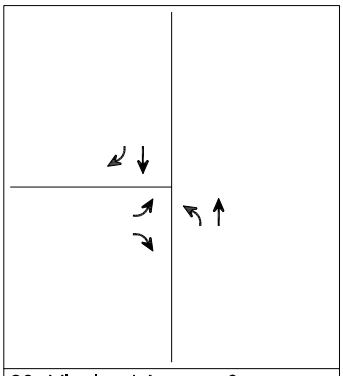
FIGURE
G-1 (CONT.)



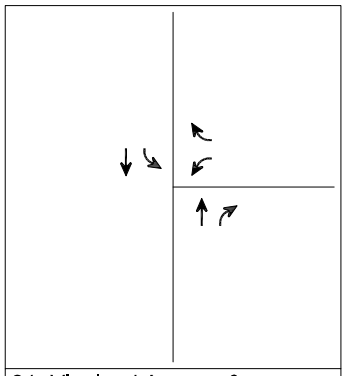
21. Klump Avenue & Chandler Boulevard



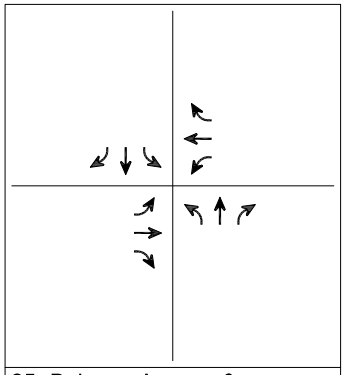
22. Fair Avenue & Chandler Boulevard



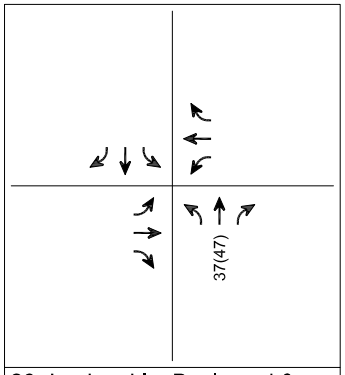
23. Vineland Avenue & Chandler Boulevard (West)



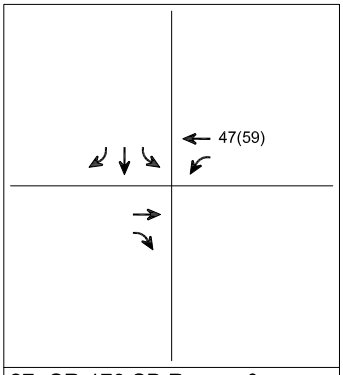
24. Vineland Avenue & Chandler Boulevard (East)



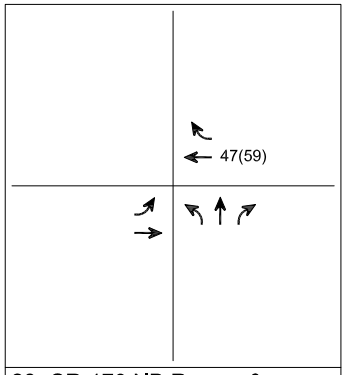
25. Bakman Avenue & Weddington Street



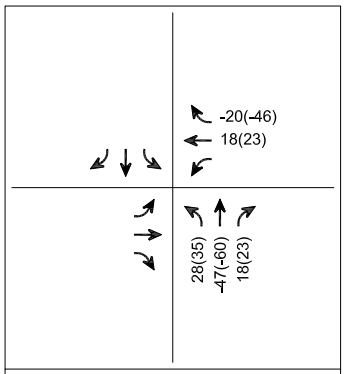
26. Lankershim Boulevard & Weddington Street



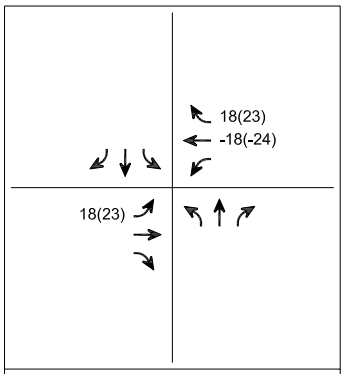
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard

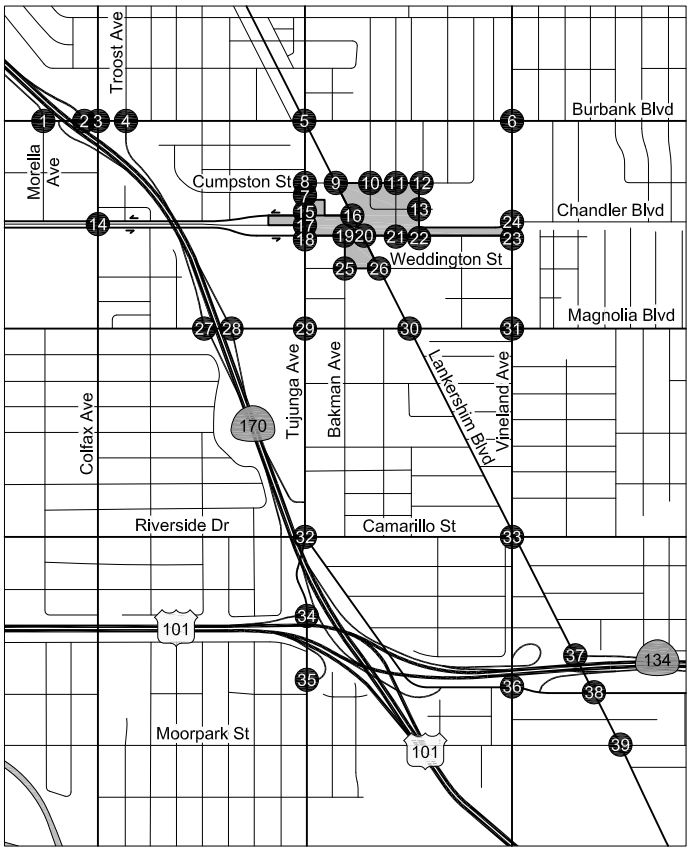
LEGEND

Project Site

Analyzed Intersection

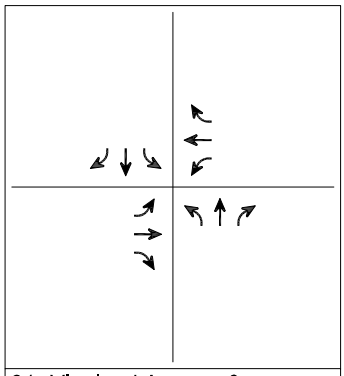
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

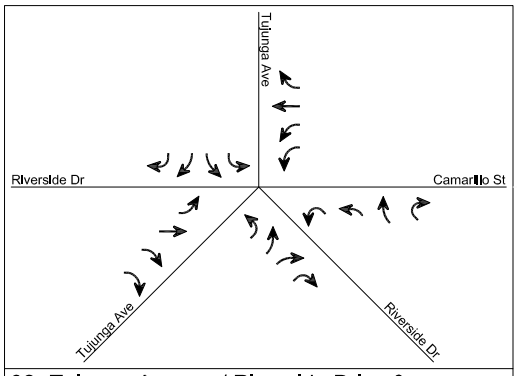


PROJECT-RELATED TRAFFIC EFFECTS (PHASE 1)
TRANSIT RIDER PARKING, TRANSIT BUS REROUTES, AND CHANDLER BOULEVARD (SOUTH) RECONFIGURATION

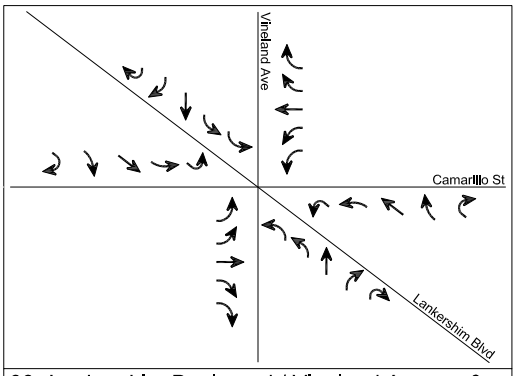
FIGURE G-1 (CONT.)



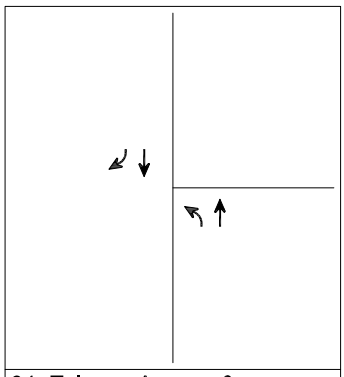
31. Vineland Avenue & Magnolia Boulevard



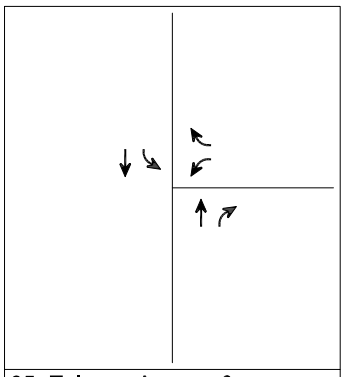
32. Tujunga Avenue / Riverside Drive & Camarillo Street



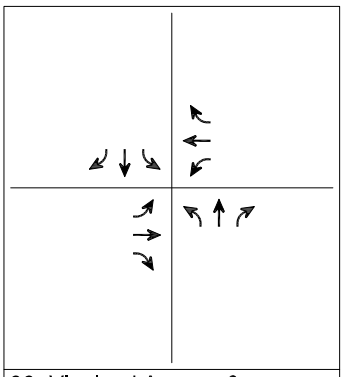
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



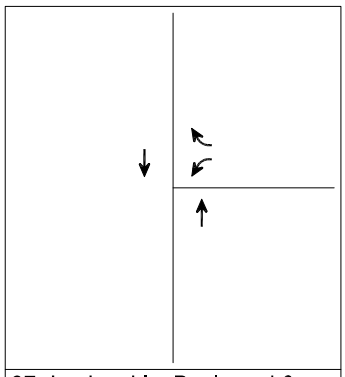
34. Tujunga Avenue & US 101 WB On-Ramp



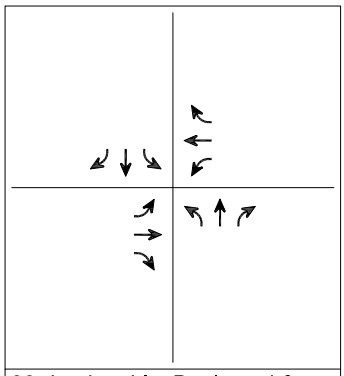
35. Tujunga Avenue & US 101 EB Off-Ramp



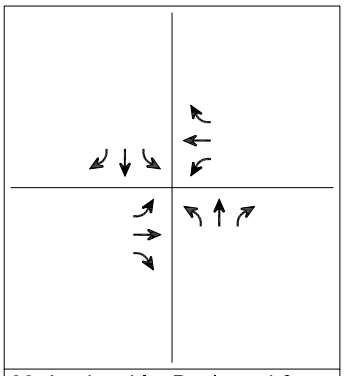
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

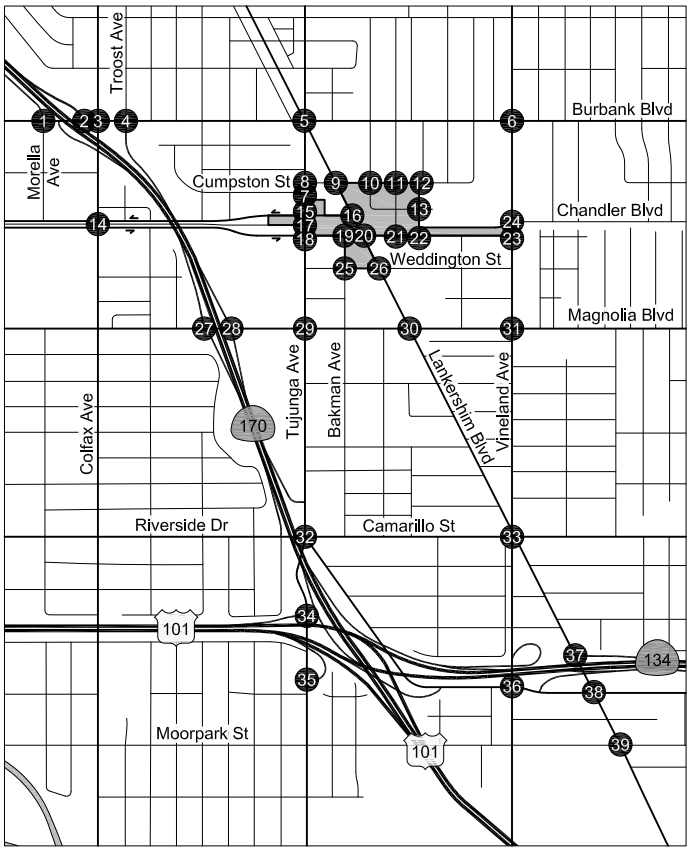
LEGEND

Project Site

Analyzed Intersection

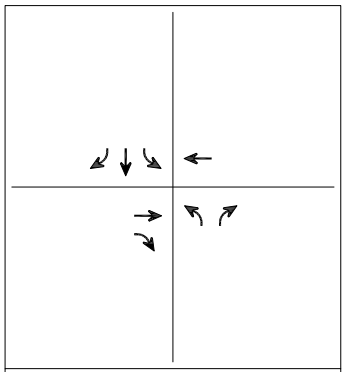
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

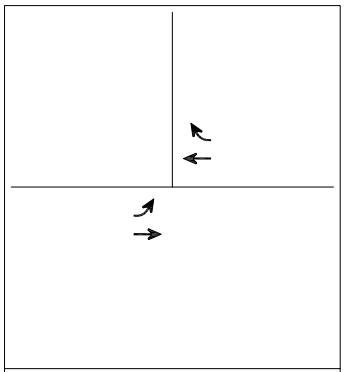


PROJECT-RELATED TRAFFIC EFFECTS (PHASE 1)
TRANSIT RIDER PARKING, TRANSIT BUS REROUTES, AND CHANDLER BOULEVARD (SOUTH) RECONFIGURATION

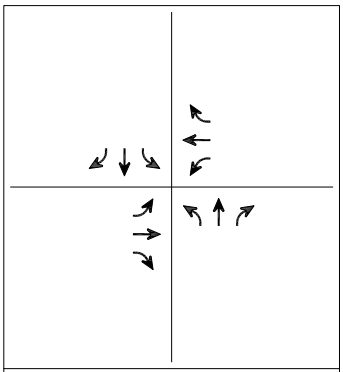
FIGURE
G-1 (CONT.)



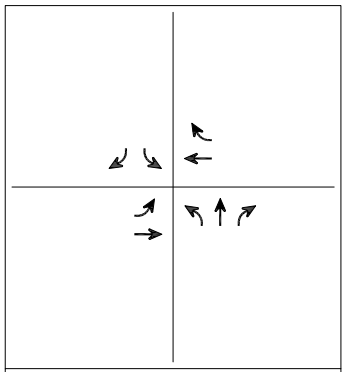
1. SR-170 SB Off-Ramp & Burbank Boulevard



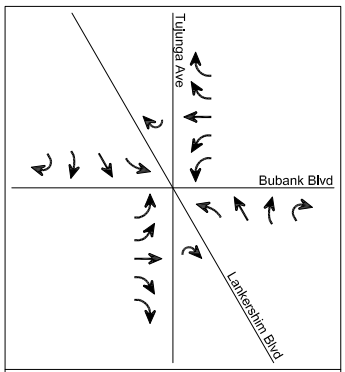
2. SR-170 NB On-Ramp & Burbank Boulevard



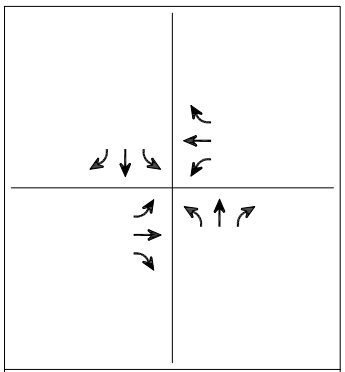
3. Colfax Avenue & Burbank Boulevard



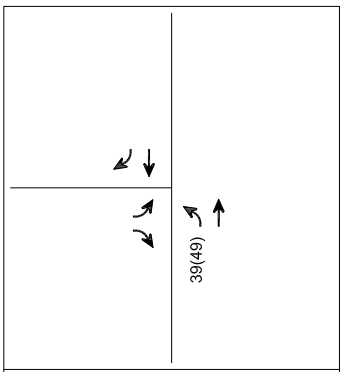
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



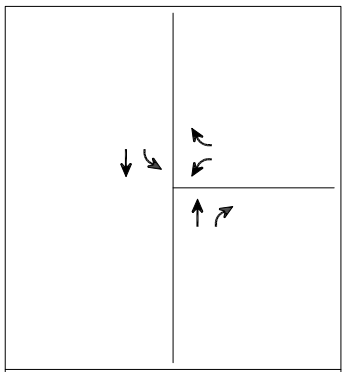
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



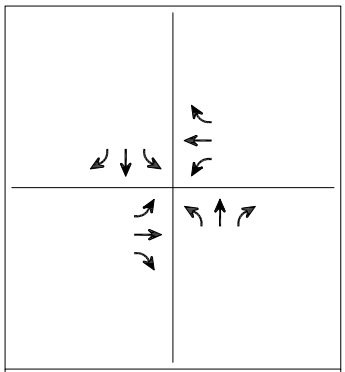
6. Vineland Avenue & Burbank Boulevard



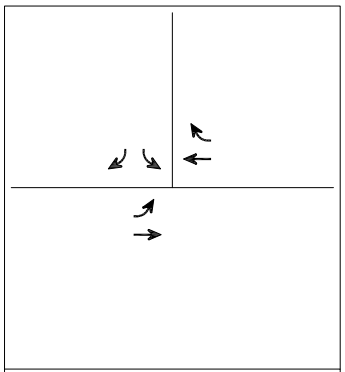
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street

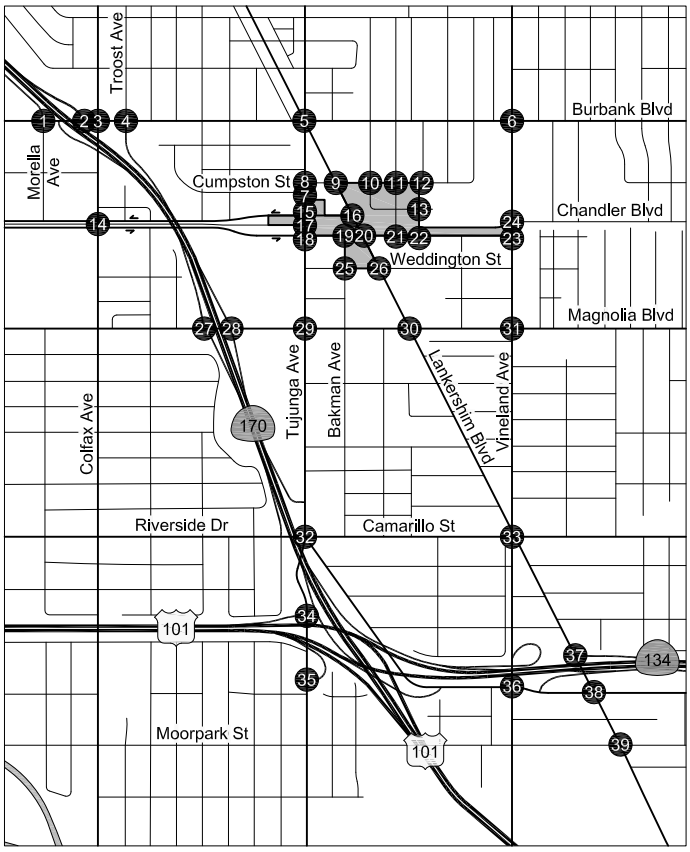
LEGEND

Project Site

Analyzed Intersection

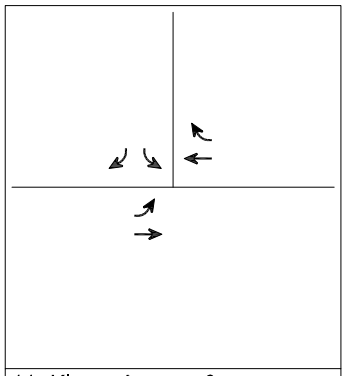
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

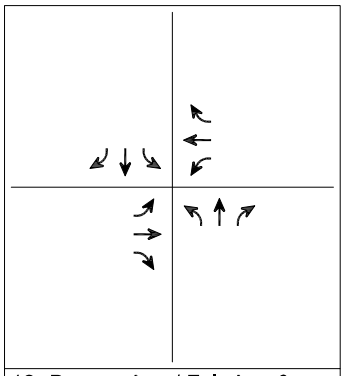


PROJECT-RELATED TRAFFIC EFFECTS (FULL BUILDOUT)
TRANSIT RIDER PARKING, TRANSIT BUS REROUTES, AND CHANDLER BOULEVARD (SOUTH) RECONFIGURATION

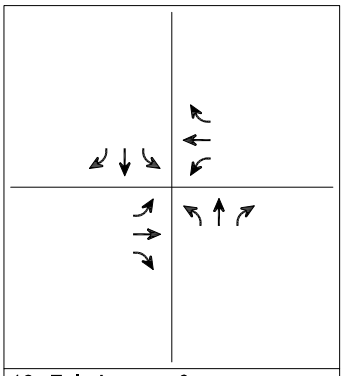
FIGURE G-2



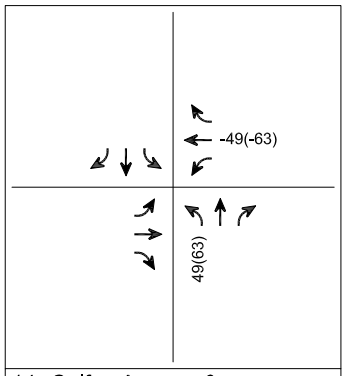
11. Klump Avenue & Cumpston Street



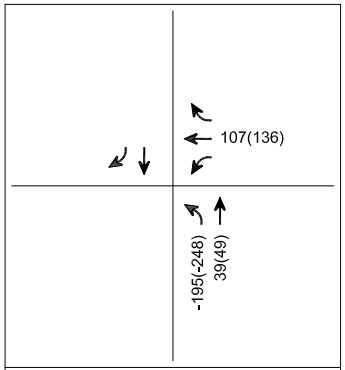
12. Bonner Ave / Fair Ave & Cumpston Street



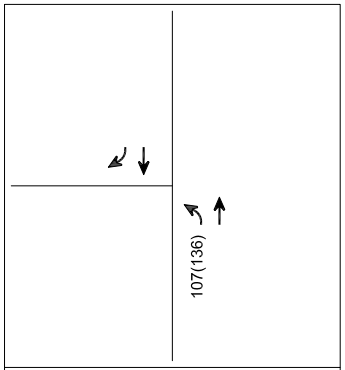
13. Fair Avenue & District Way



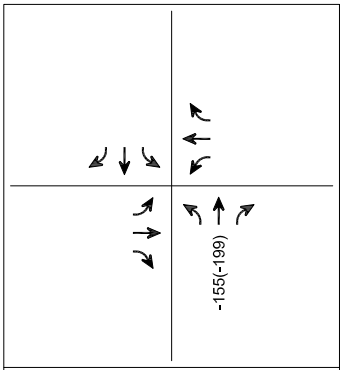
14. Colfax Avenue & Chandler Boulevard



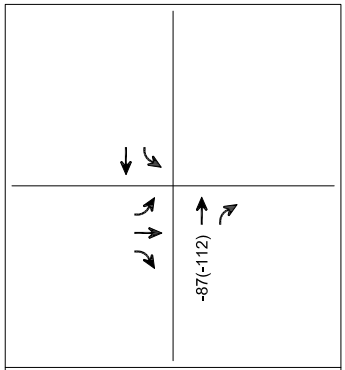
15. Tujunga Avenue & Chandler Boulevard WB



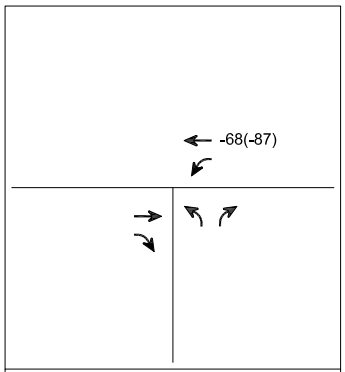
16. Lankershim Boulevard & Chandler Boulevard WB



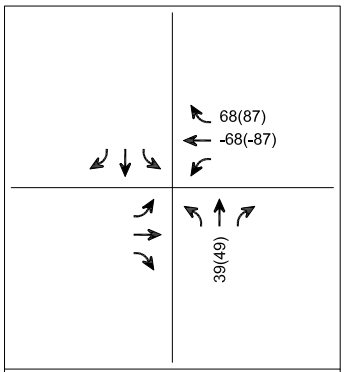
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

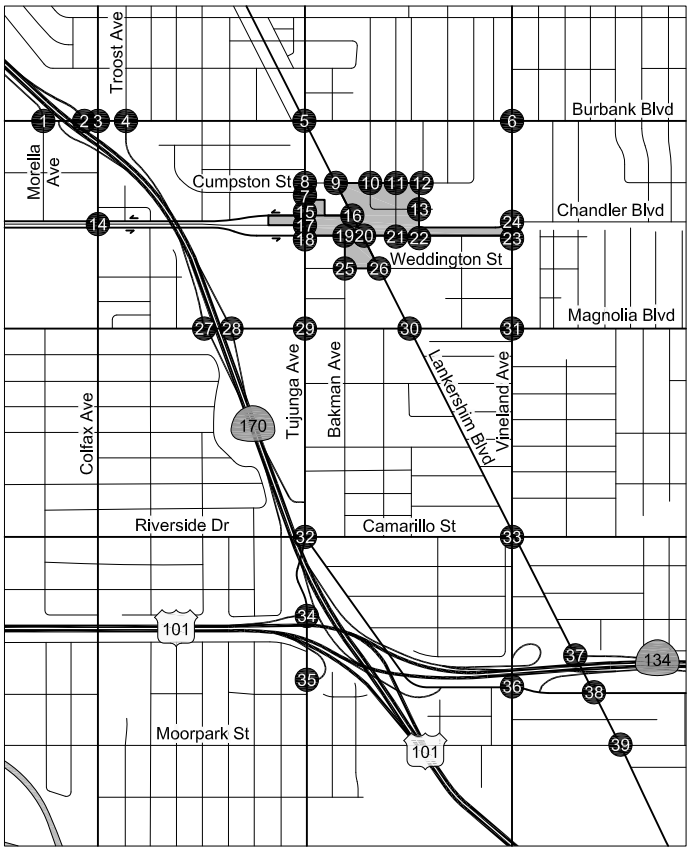
LEGEND

Project Site

Analyzed Intersection

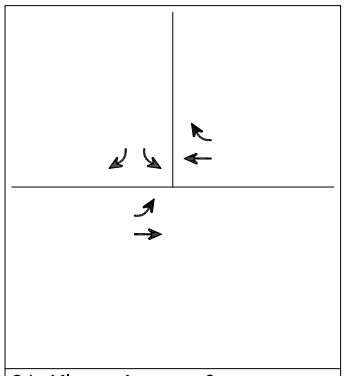
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

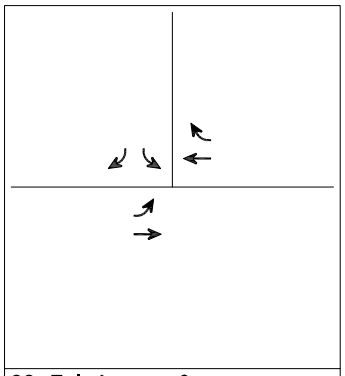


PROJECT-RELATED TRAFFIC EFFECTS (FULL BUILDOUT)
TRANSIT RIDER PARKING, TRANSIT BUS REROUTES, AND CHANDLER BOULEVARD (SOUTH) RECONFIGURATION

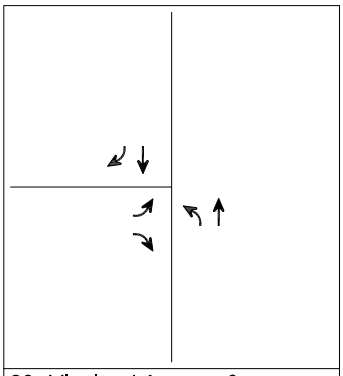
FIGURE G-2 (CONT.)



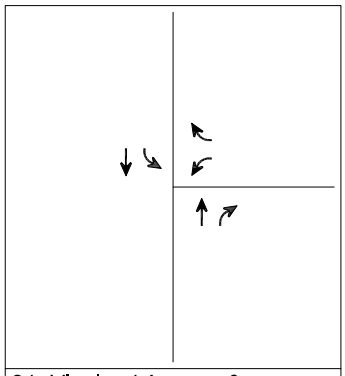
21. Klump Avenue & Chandler Boulevard



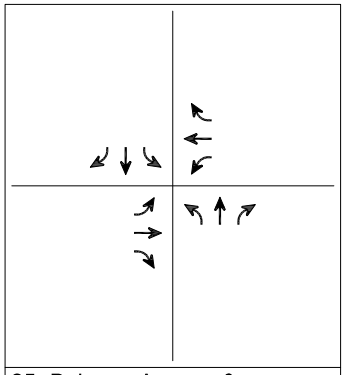
22. Fair Avenue & Chandler Boulevard



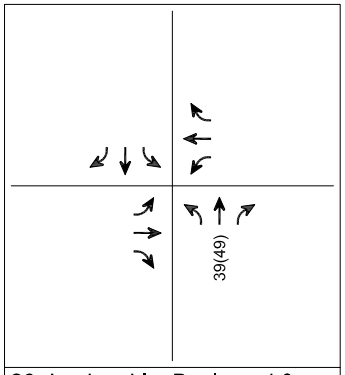
23. Vineland Avenue & Chandler Boulevard (West)



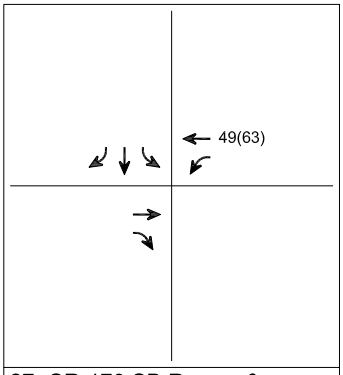
24. Vineland Avenue & Chandler Boulevard (East)



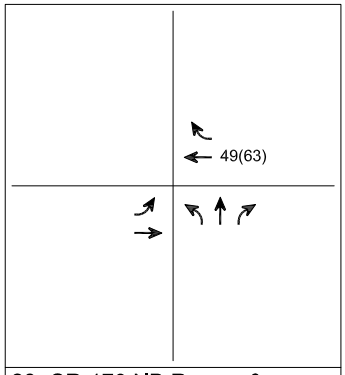
25. Bakman Avenue & Weddington Street



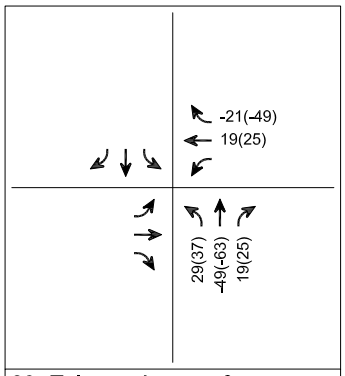
26. Lankershim Boulevard & Weddington Street



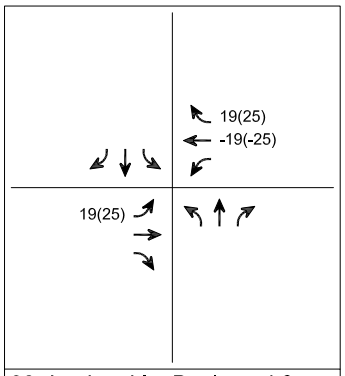
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard

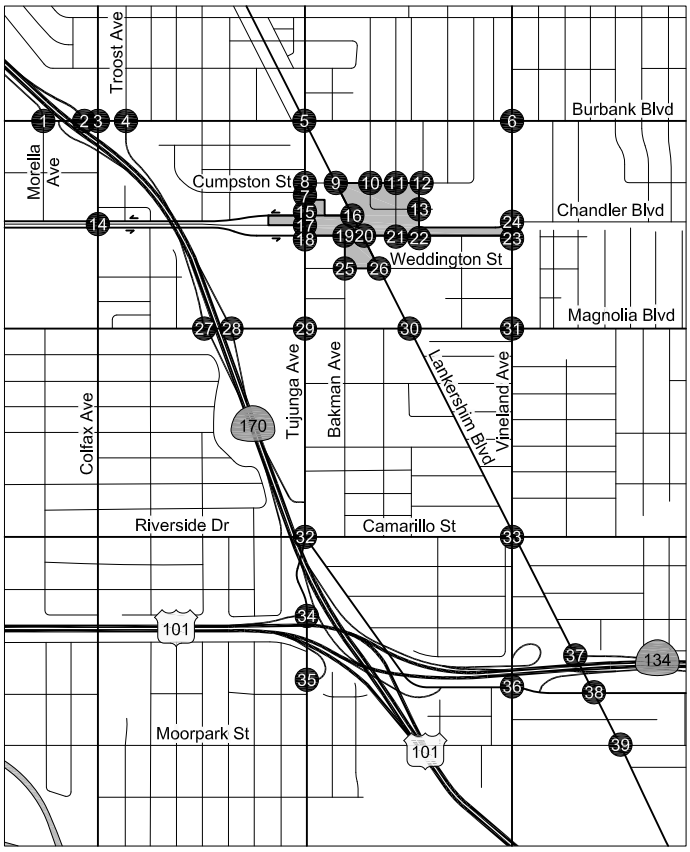
LEGEND

Project Site

Analyzed Intersection

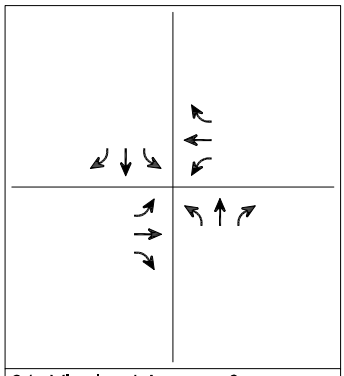
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

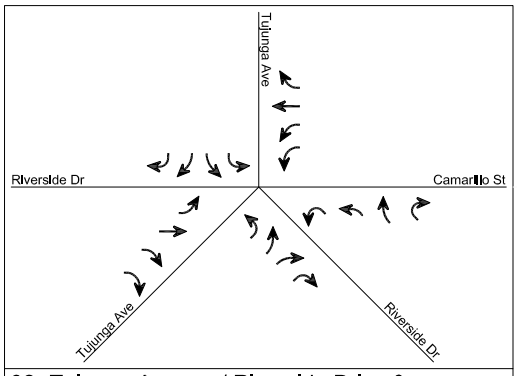


PROJECT-RELATED TRAFFIC EFFECTS (FULL BUILDOUT)
TRANSIT RIDER PARKING, TRANSIT BUS REROUTES, AND CHANDLER BOULEVARD (SOUTH) RECONFIGURATION

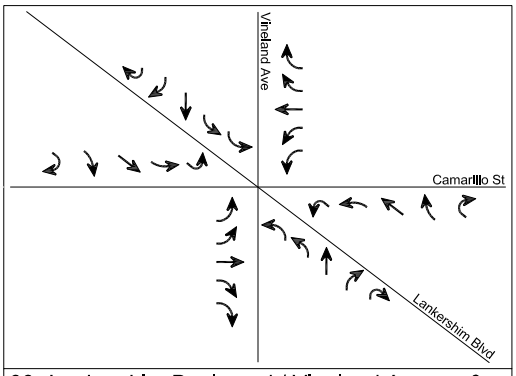
FIGURE G-2 (CONT.)



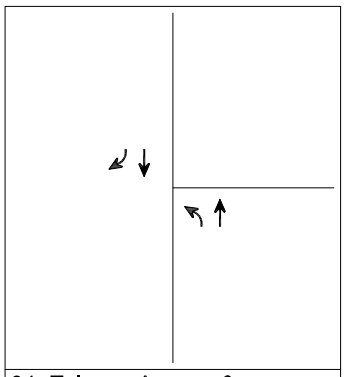
31. Vineland Avenue & Magnolia Boulevard



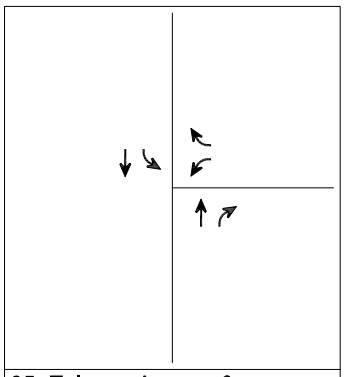
32. Tujunga Avenue / Riverside Drive & Camarillo Street



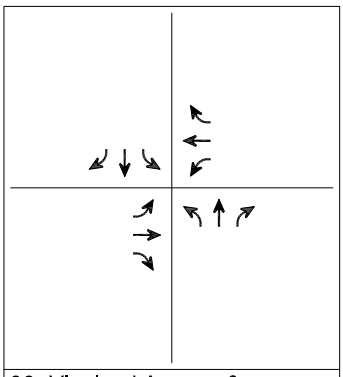
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



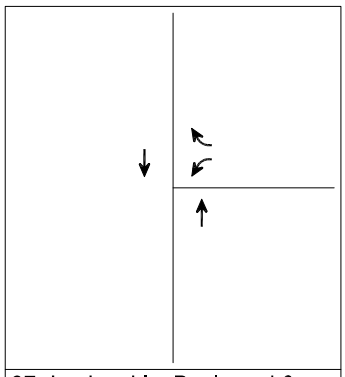
34. Tujunga Avenue & US 101 WB On-Ramp



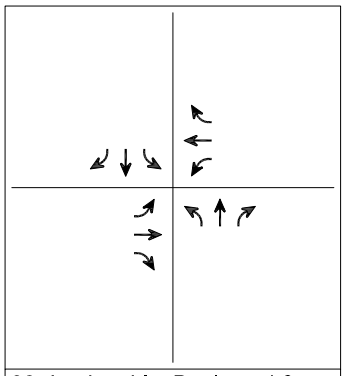
35. Tujunga Avenue & US 101 EB Off-Ramp



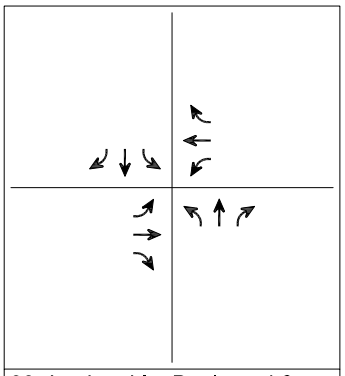
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

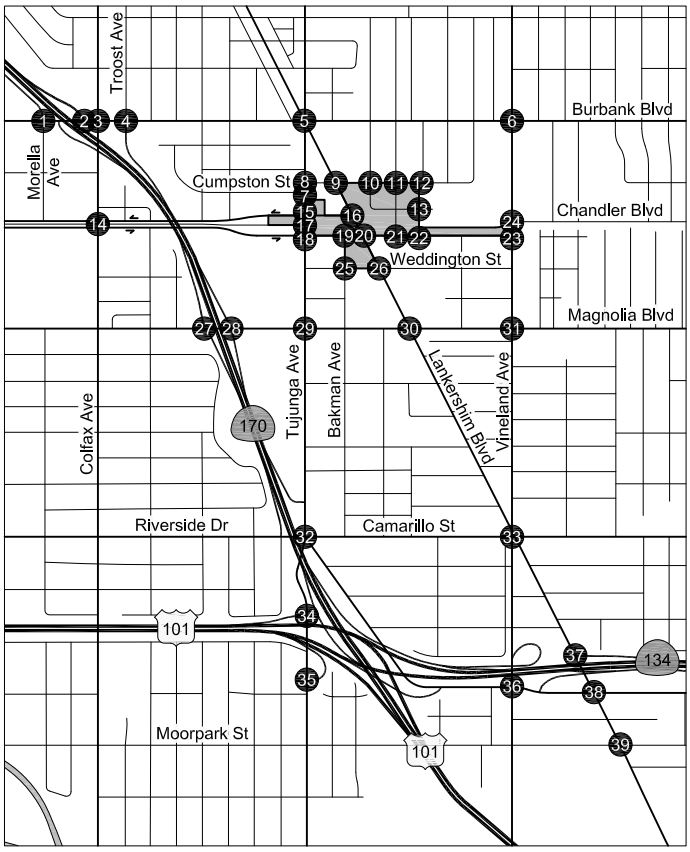
LEGEND

Project Site

Analyzed Intersection

#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

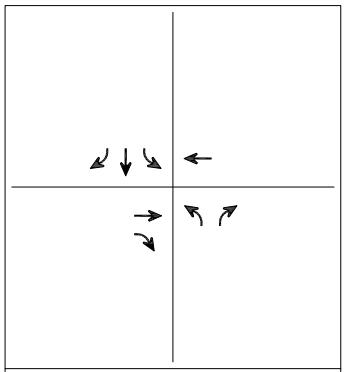


PROJECT-RELATED TRAFFIC EFFECTS (FULL BUILDOUT)
TRANSIT RIDER PARKING, TRANSIT BUS REROUTES, AND CHANDLER BOULEVARD (SOUTH) RECONFIGURATION

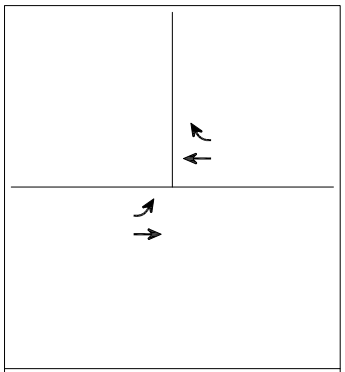
FIGURE G-2 (CONT.)

Existing Conditions Background Traffic Shifts

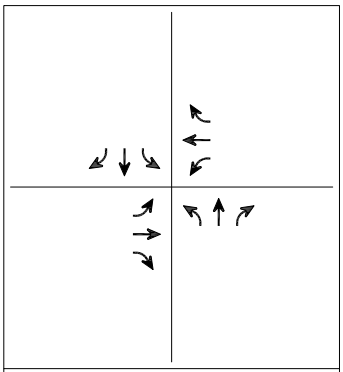
Metro G (Orange) Line Rerouted to Standard Route



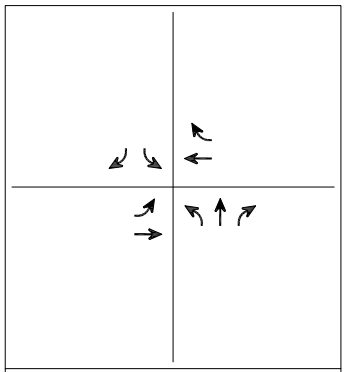
1. SR-170 SB Off-Ramp & Burbank Boulevard



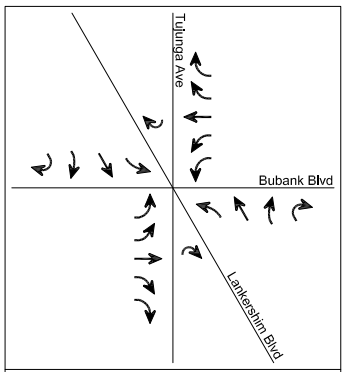
2. SR-170 NB On-Ramp & Burbank Boulevard



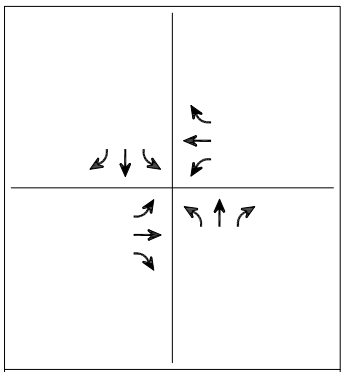
3. Colfax Avenue & Burbank Boulevard



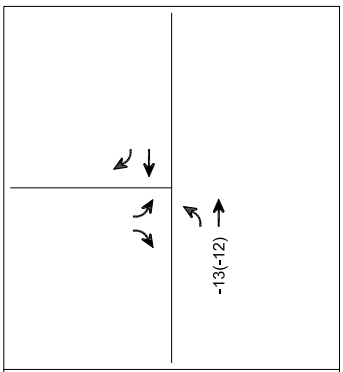
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



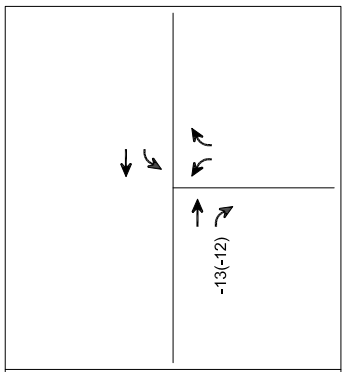
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



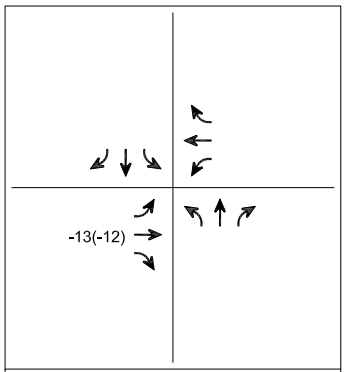
6. Vineland Avenue & Burbank Boulevard



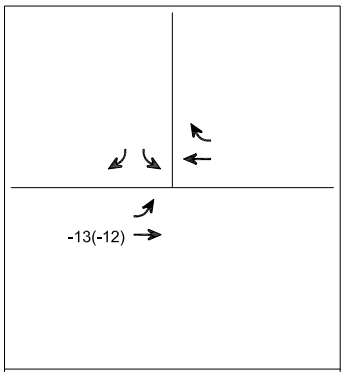
7. Tujunga Avenue & Cumpston Street (West)



8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street

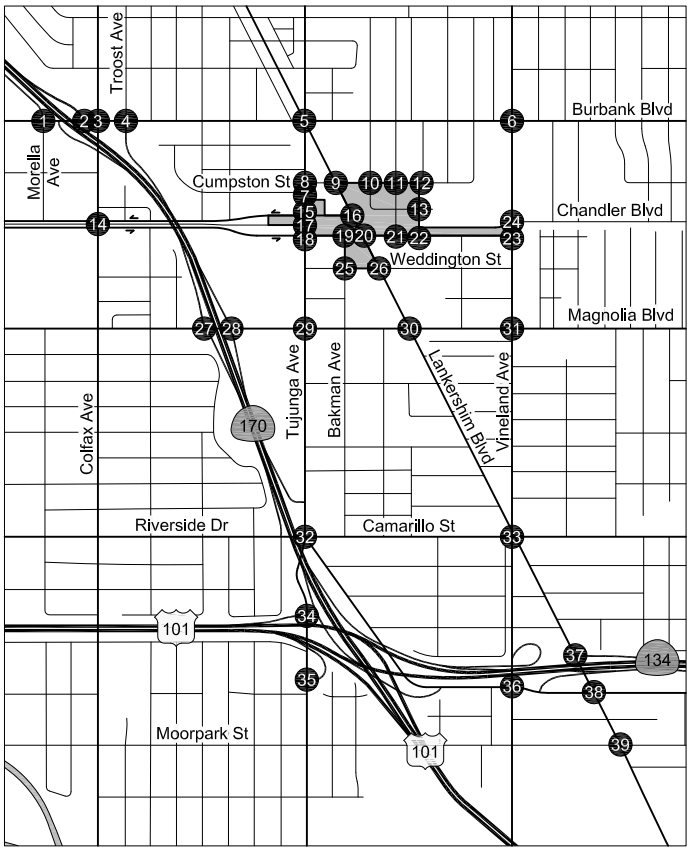
LEGEND

Project Site

Analyzed Intersection

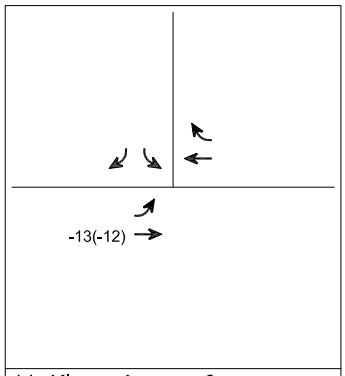
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

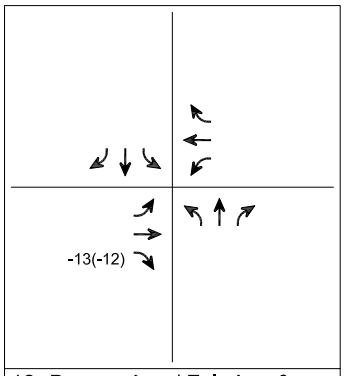


EXISTING CONDITIONS BACKGROUND TRAFFIC SHIFTS
METRO G (ORANGE) LINE REROUTED TO STANDARD ROUTE

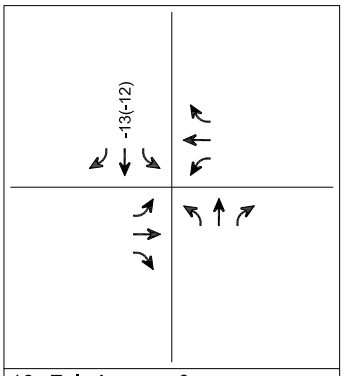
FIGURE
G-3



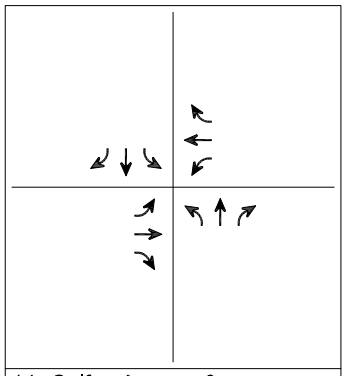
11. Klump Avenue & Cumpston Street



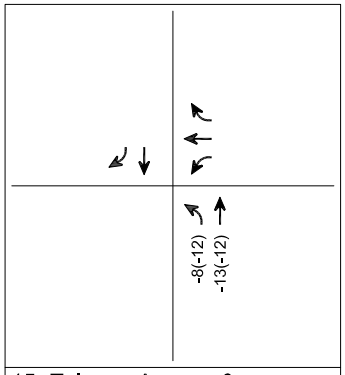
12. Bonner Ave / Fair Ave & Cumpston Street



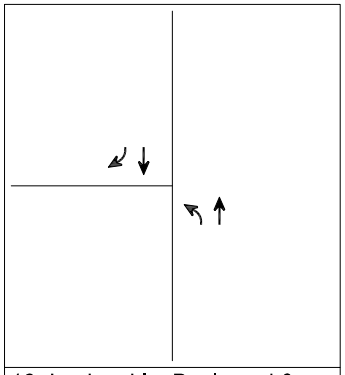
13. Fair Avenue & District Way



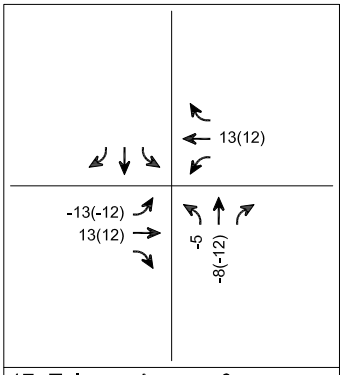
14. Colfax Avenue & Chandler Boulevard



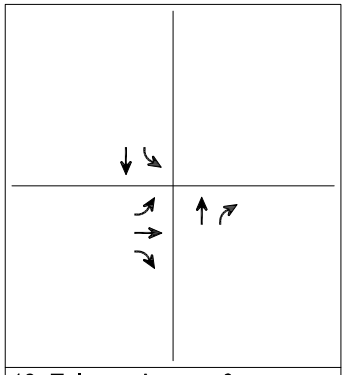
15. Tujunga Avenue & Chandler Boulevard WB



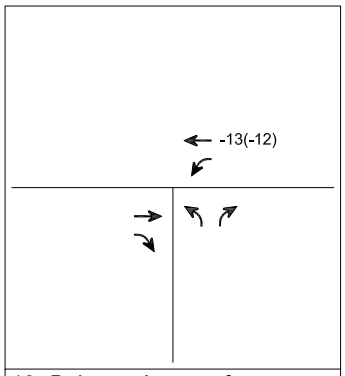
16. Lankershim Boulevard & Chandler Boulevard WB



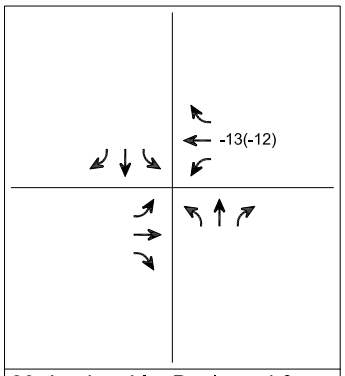
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

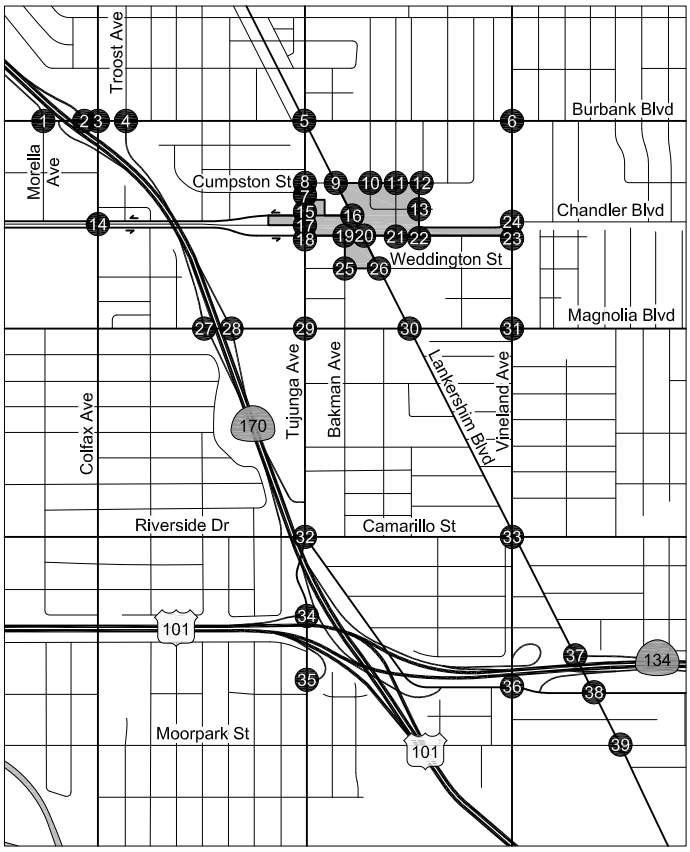
LEGEND

Project Site

Analyzed Intersection

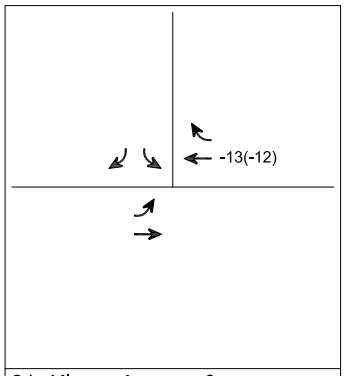
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

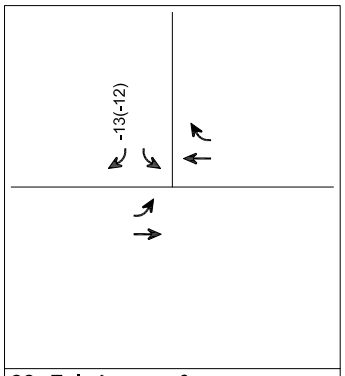


EXISTING CONDITIONS BACKGROUND TRAFFIC SHIFTS
METRO G (ORANGE) LINE REROUTED TO STANDARD ROUTE

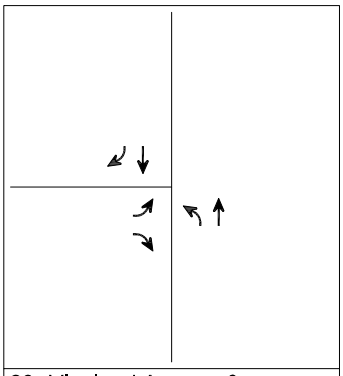
FIGURE
G-3 (CONT.)



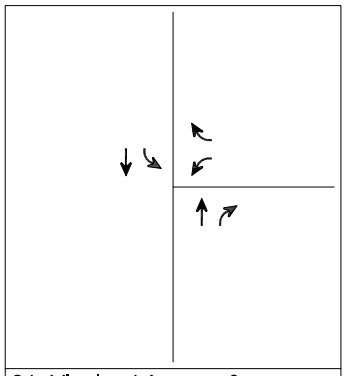
21. Klump Avenue & Chandler Boulevard



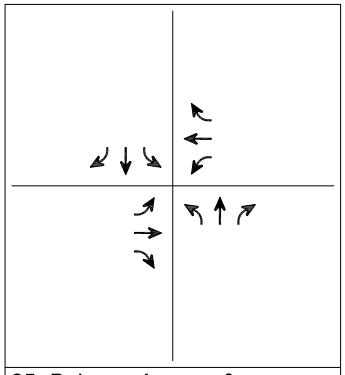
22. Fair Avenue & Chandler Boulevard



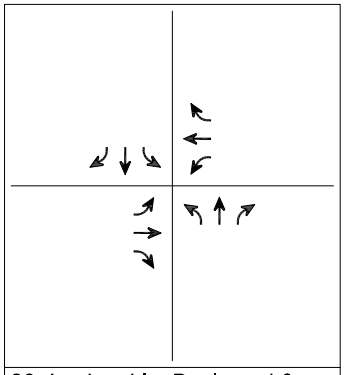
23. Vineland Avenue & Chandler Boulevard (West)



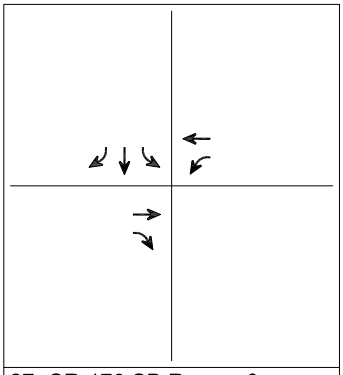
24. Vineland Avenue & Chandler Boulevard (East)



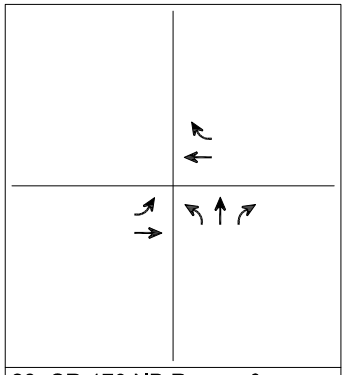
25. Bakman Avenue & Weddington Street



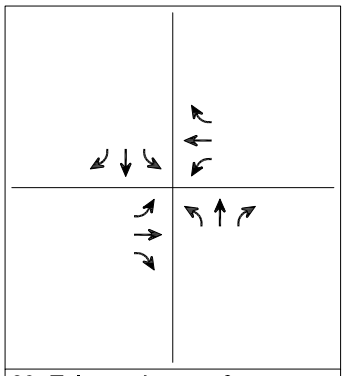
26. Lankershim Boulevard & Weddington Street



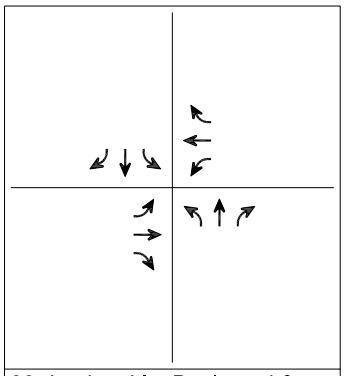
27. SR-170 SB Ramps & Magnolia Boulevard



28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard

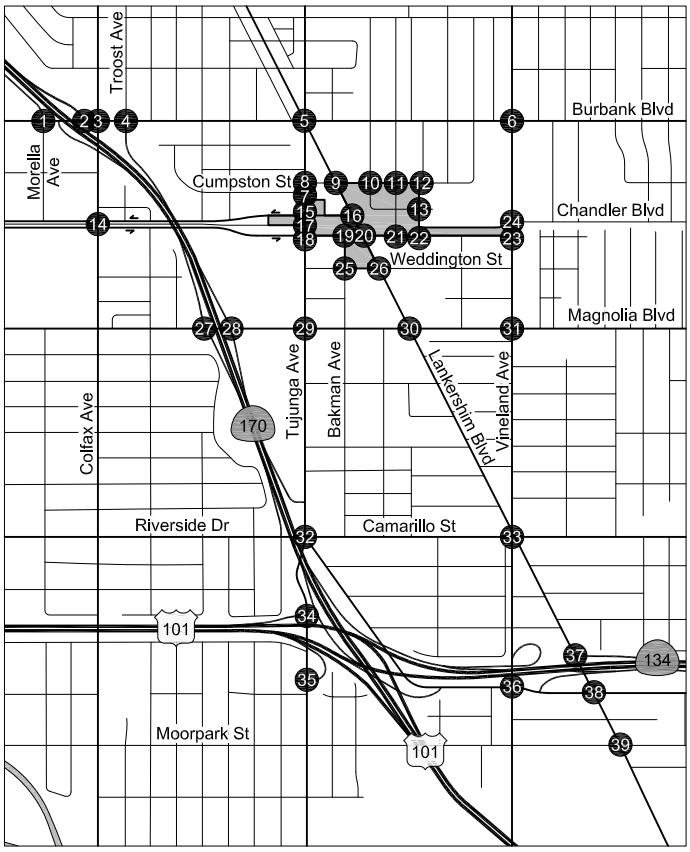
LEGEND

Project Site

Analyzed Intersection

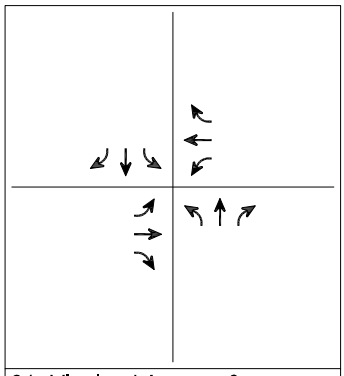
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

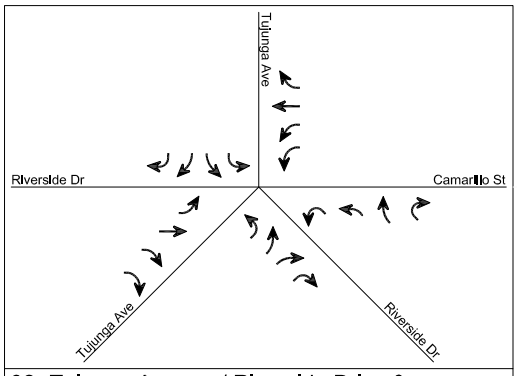


EXISTING CONDITIONS BACKGROUND TRAFFIC SHIFTS
METRO G (ORANGE) LINE REROUTED TO STANDARD ROUTE

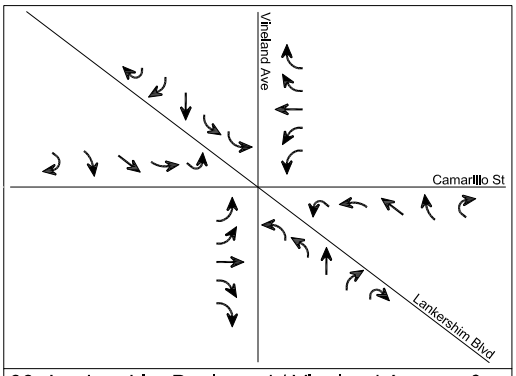
FIGURE
G-3 (CONT.)



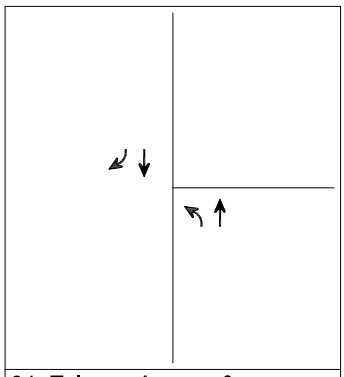
31. Vineland Avenue & Magnolia Boulevard



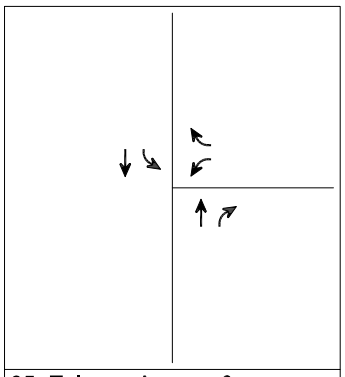
32. Tujunga Avenue / Riverside Drive & Camarillo Street



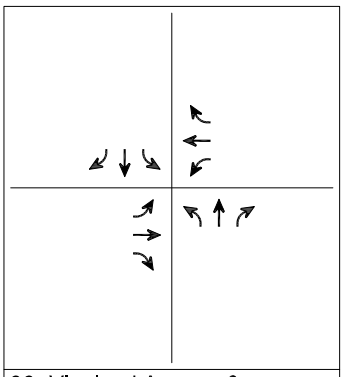
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



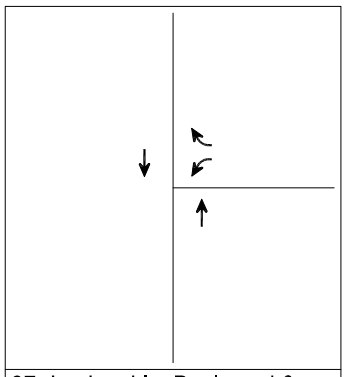
34. Tujunga Avenue & US 101 WB On-Ramp



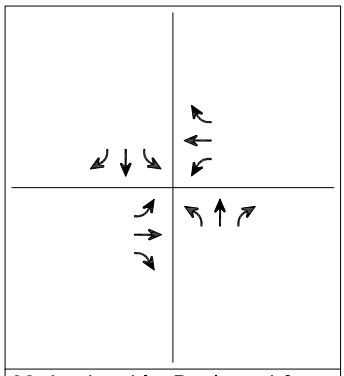
35. Tujunga Avenue & US 101 EB Off-Ramp



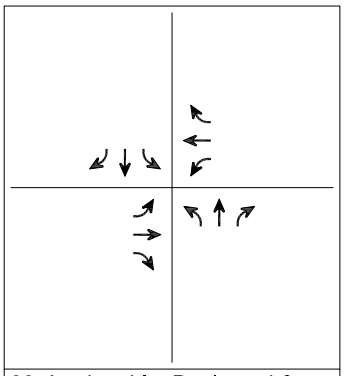
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

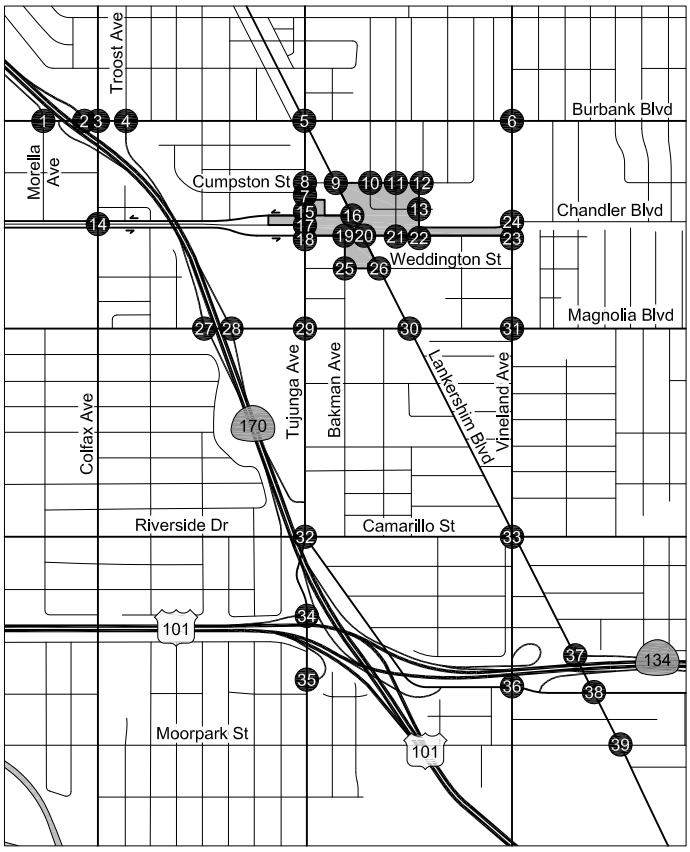
LEGEND

Project Site

Analyzed Intersection

#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

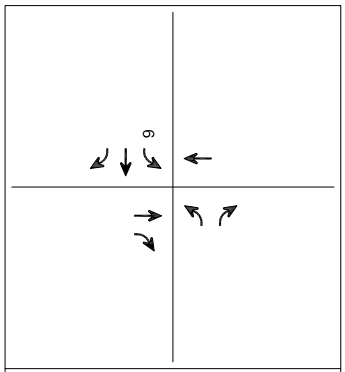


EXISTING CONDITIONS BACKGROUND TRAFFIC SHIFTS
METRO G (ORANGE) LINE REROUTED TO STANDARD ROUTE

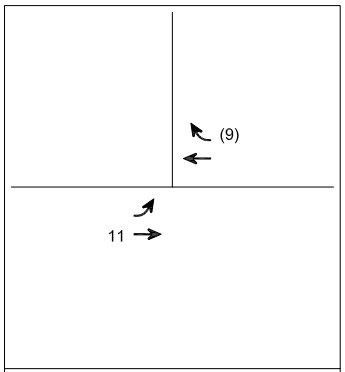
FIGURE
G-3 (CONT.)

Future Conditions Background Traffic Shifts

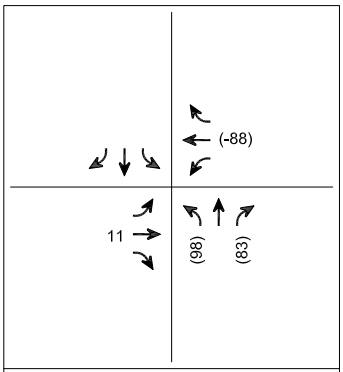
Elimination of Northbound Left-Turns from Tujunga Avenue to Chandler Boulevard (North)



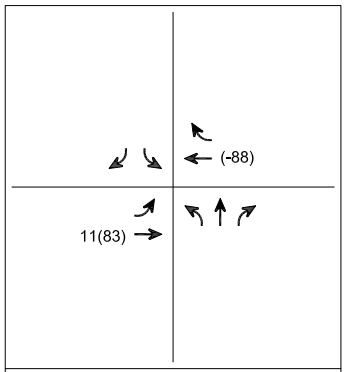
1. SR-170 SB Off-Ramp & Burbank Boulevard



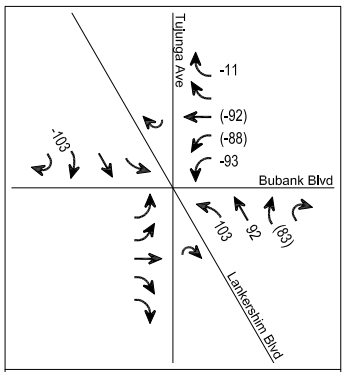
2. SR-170 NB On-Ramp & Burbank Boulevard



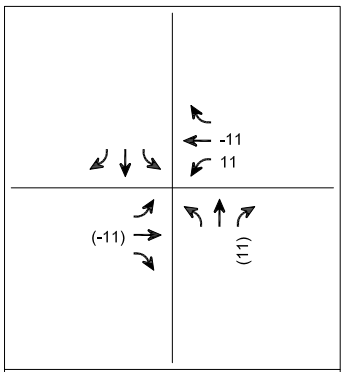
3. Colfax Avenue & Burbank Boulevard



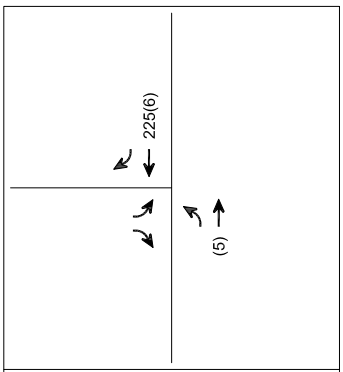
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



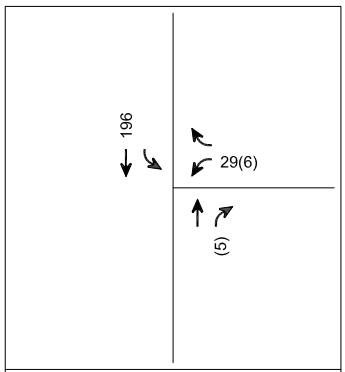
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



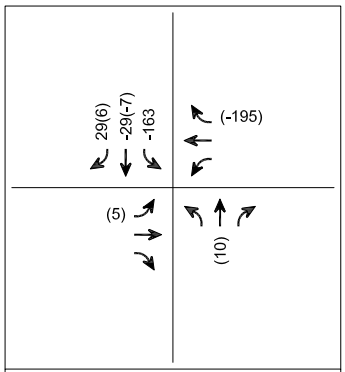
6. Vineland Avenue & Burbank Boulevard



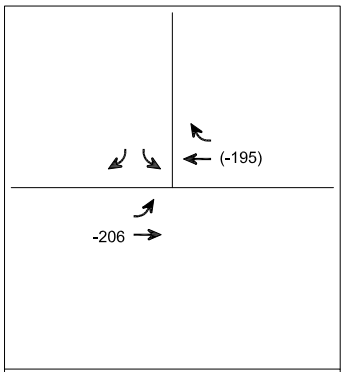
7. Tujunga Avenue & Cumpston Street (West)



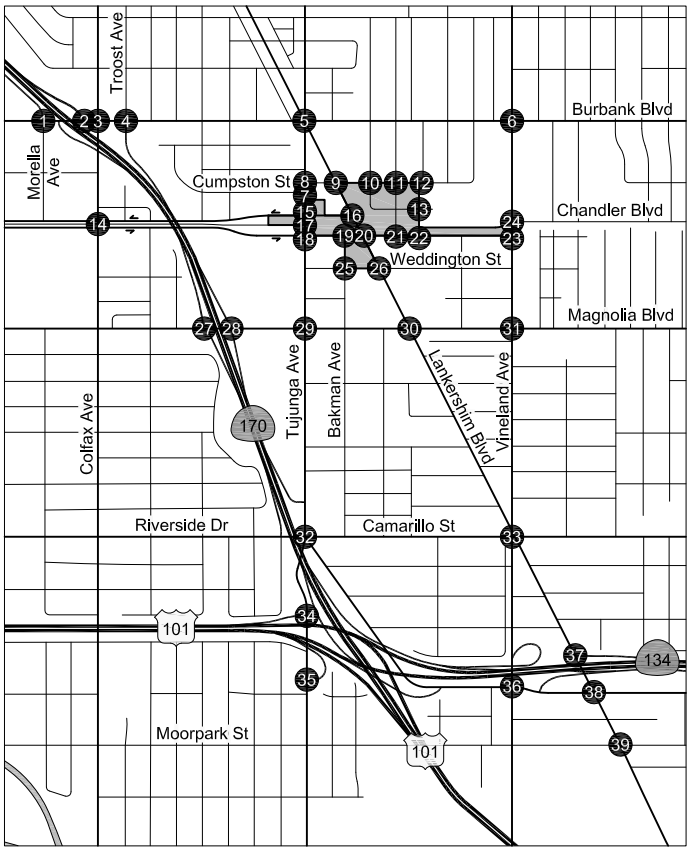
8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street



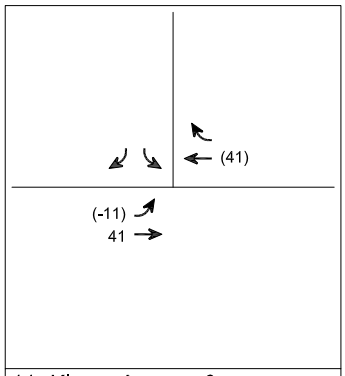
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

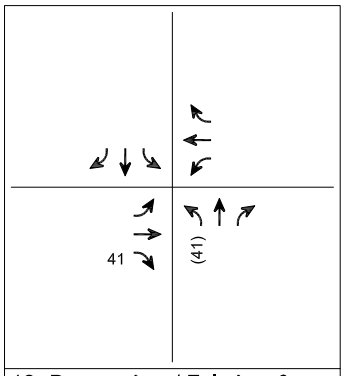
N
Not to Scale

FUTURE CONDITIONS BACKGROUND TRAFFIC SHIFTS (YEAR 2026)
ELIMINATION OF NORTHBOUND LEFT-TURNS FROM TUJUNGA AVENUE TO CHANDLER BOULEVARD (NORTH)

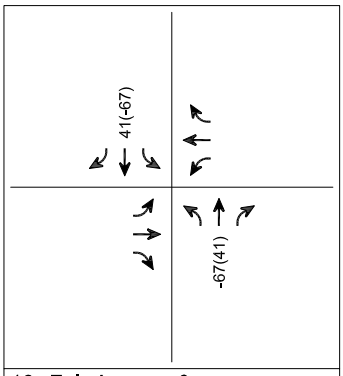
FIGURE G-4



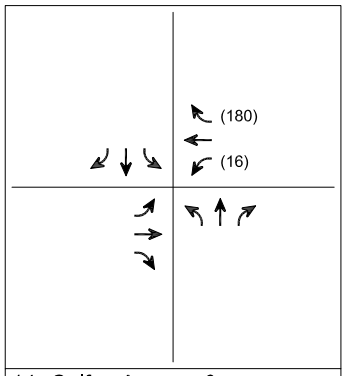
11. Klump Avenue & Cumpston Street



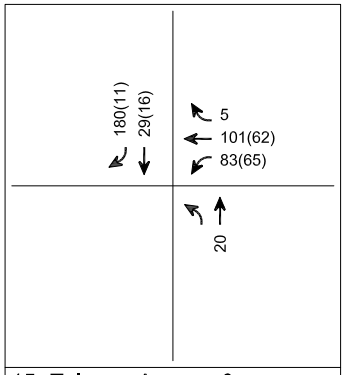
12. Bonner Ave / Fair Ave & Cumpston Street



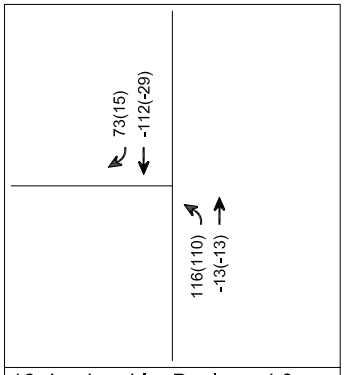
13. Fair Avenue & District Way



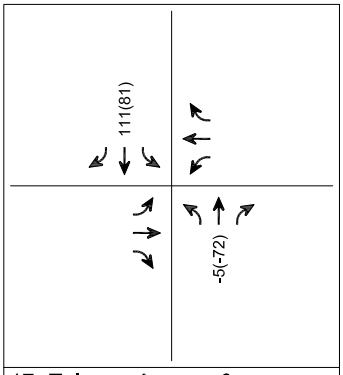
14. Colfax Avenue & Chandler Boulevard



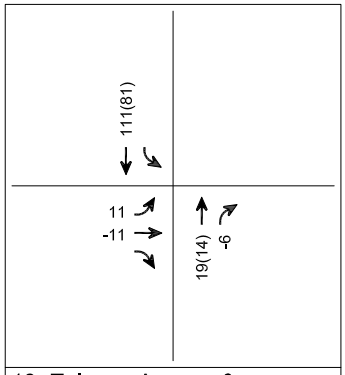
15. Tujunga Avenue & Chandler Boulevard WB



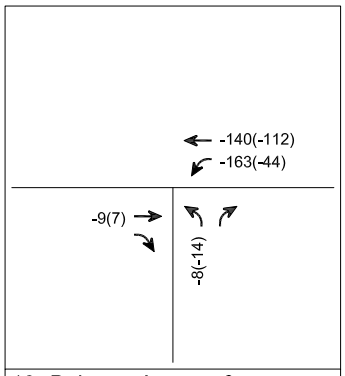
16. Lankershim Boulevard & Chandler Boulevard WB



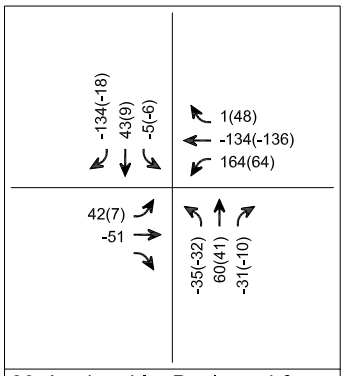
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

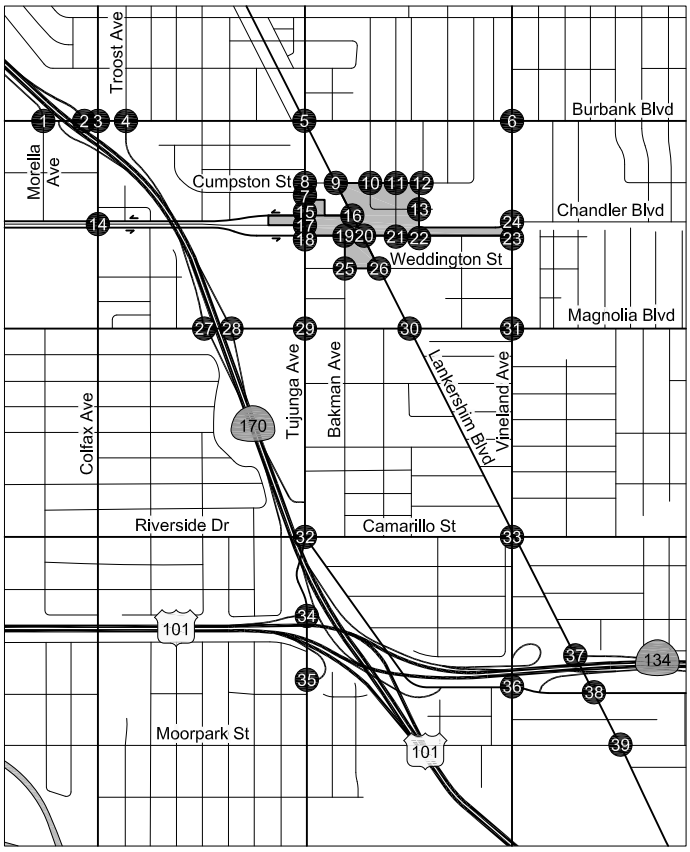
LEGEND

Project Site

Analyzed Intersection

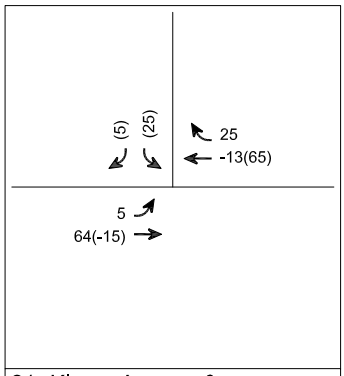
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

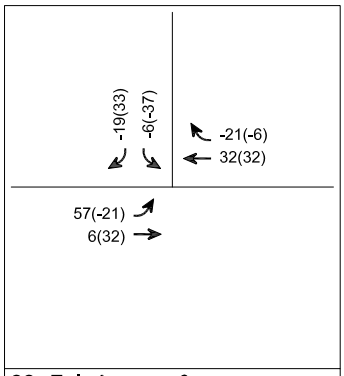


FUTURE CONDITIONS BACKGROUND TRAFFIC SHIFTS (YEAR 2026)
ELIMINATION OF NORTHBOUND LEFT-TURNS FROM TUJUNGA AVENUE TO CHANDLER BOULEVARD (NORTH)

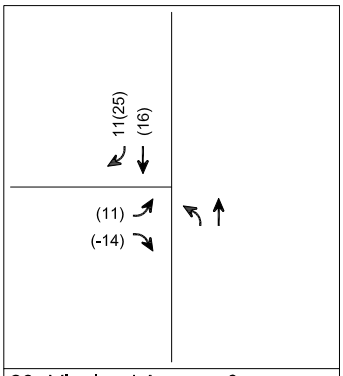
FIGURE G-4 (CONT.)



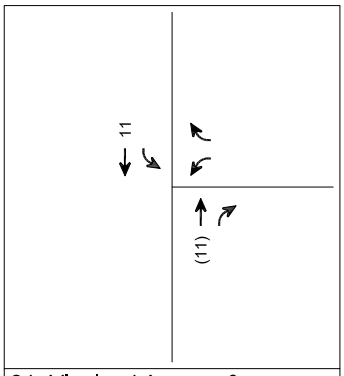
21. Klump Avenue & Chandler Boulevard



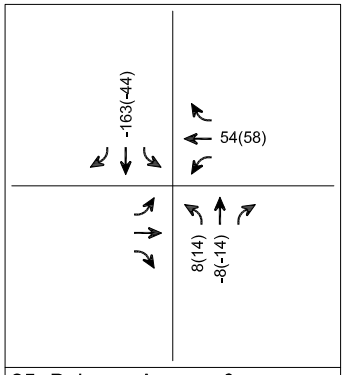
22. Fair Avenue & Chandler Boulevard



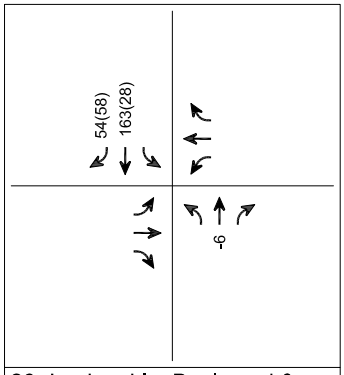
23. Vineland Avenue & Chandler Boulevard (West)



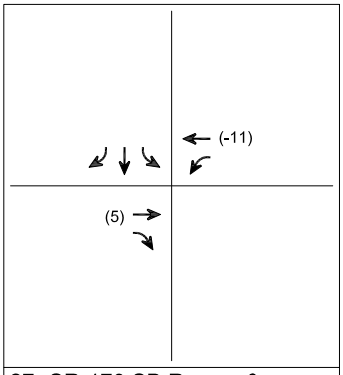
24. Vineland Avenue & Chandler Boulevard (East)



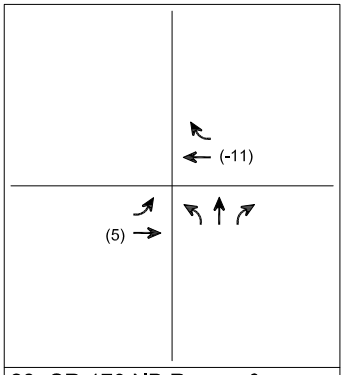
25. Bakman Avenue & Weddington Street



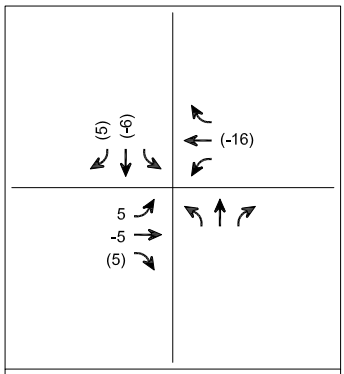
26. Lankershim Boulevard & Weddington Street



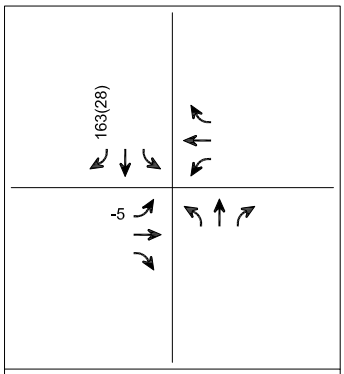
27. SR-170 SB Ramps & Magnolia Boulevard



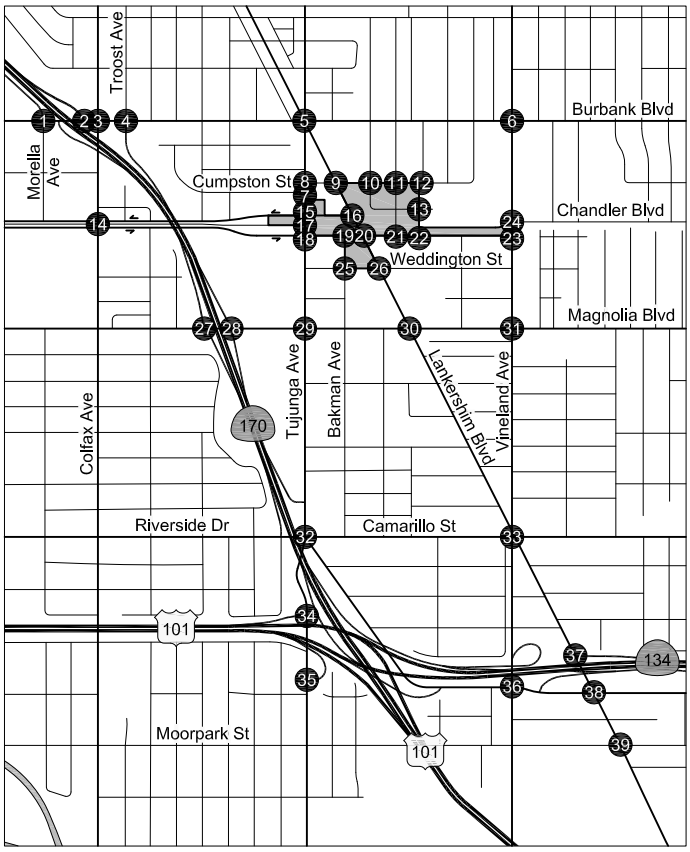
28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard



LEGEND

Project Site

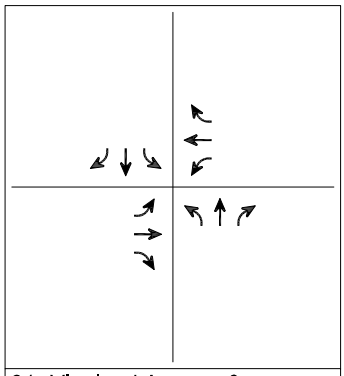
Analyzed Intersection

#(#) AM(PM) Peak Hour Traffic Volumes

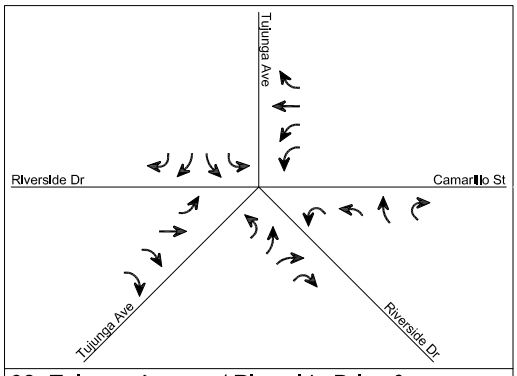
N
Not to Scale

FUTURE CONDITIONS BACKGROUND TRAFFIC SHIFTS (YEAR 2026)
ELIMINATION OF NORTHBOUND LEFT-TURNS FROM TUJUNGA AVENUE TO CHANDLER BOULEVARD (NORTH)

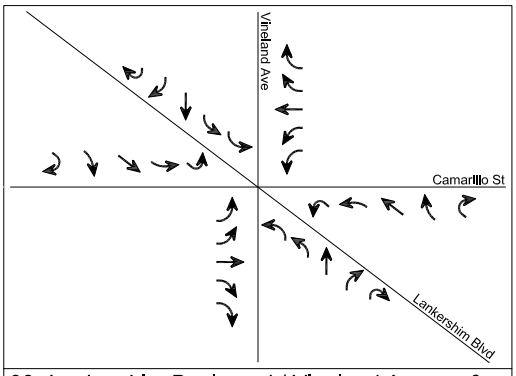
FIGURE G-4 (CONT.)



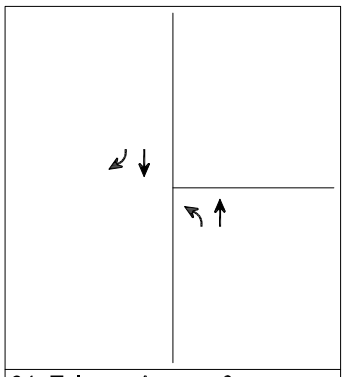
31. Vineland Avenue & Magnolia Boulevard



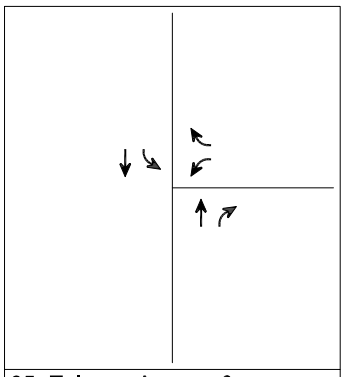
32. Tujunga Avenue / Riverside Drive & Camarillo Street



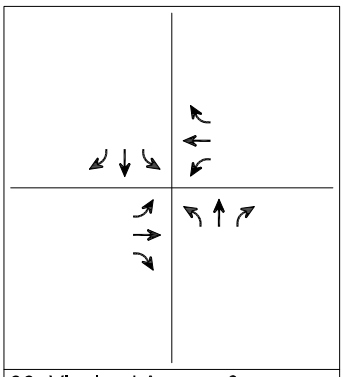
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



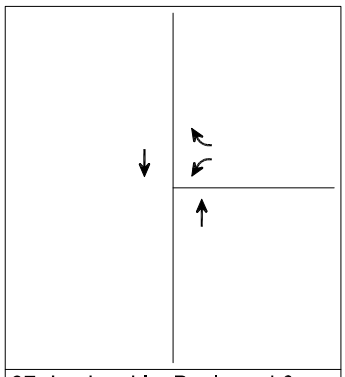
34. Tujunga Avenue & US 101 WB On-Ramp



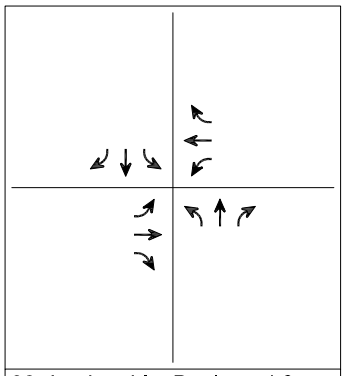
35. Tujunga Avenue & US 101 EB Off-Ramp



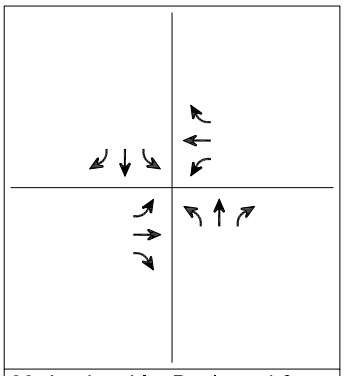
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

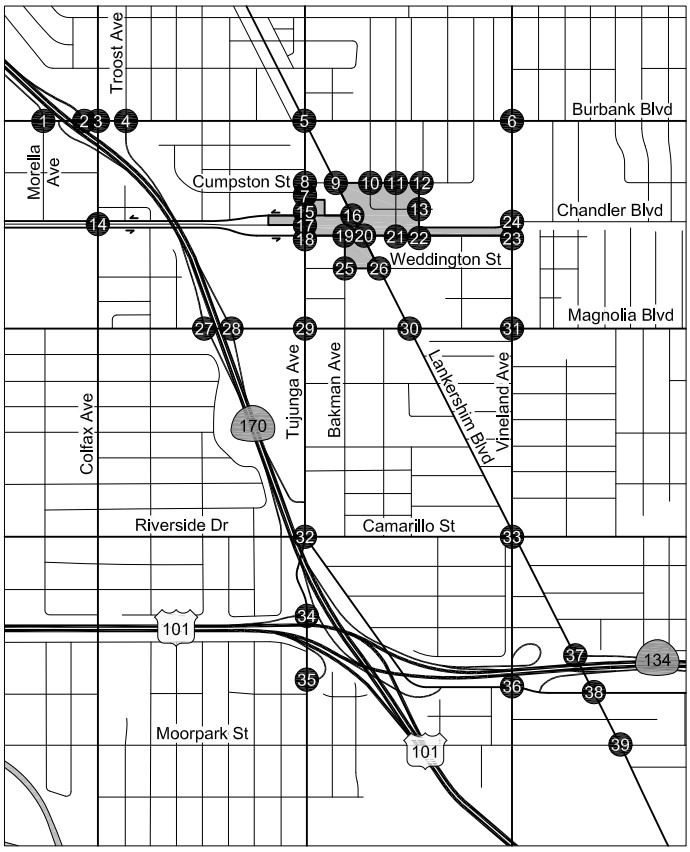
LEGEND

Project Site

Analyzed Intersection

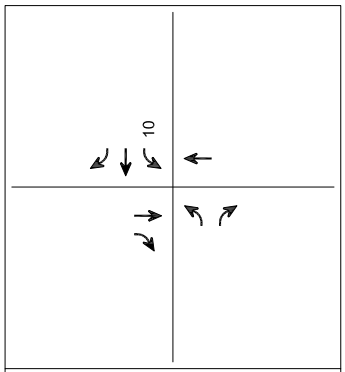
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

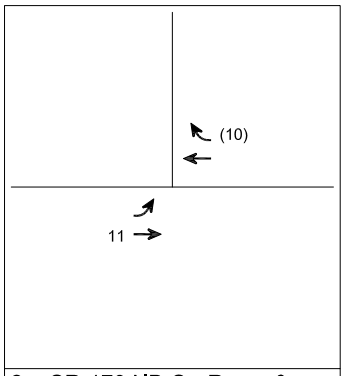


FUTURE CONDITIONS BACKGROUND TRAFFIC SHIFTS (YEAR 2026)
ELIMINATION OF NORTHBOUND LEFT-TURNS FROM TUJUNGA AVENUE TO CHANDLER BOULEVARD (NORTH)

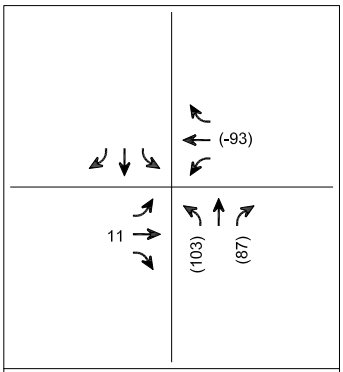
FIGURE G-4 (CONT.)



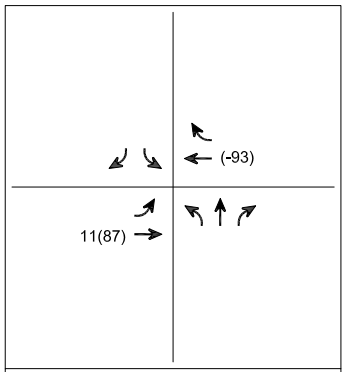
1. SR-170 SB Off-Ramp & Burbank Boulevard



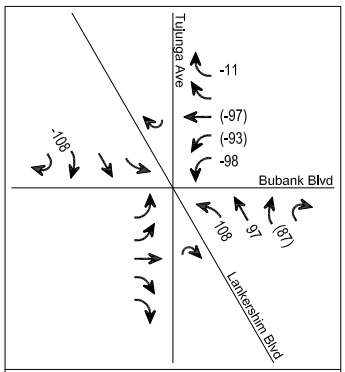
2. SR-170 NB On-Ramp & Burbank Boulevard



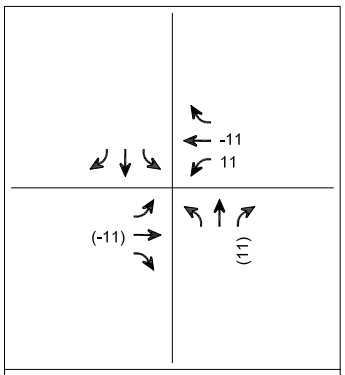
3. Colfax Avenue & Burbank Boulevard



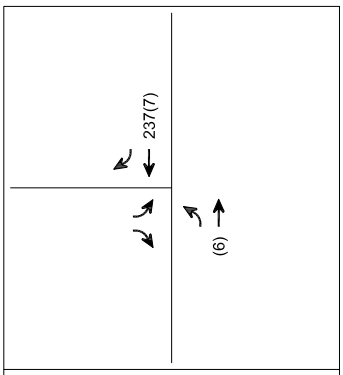
4. Troost Ave / SR-170 NB On-Ramp & Burbank Blvd



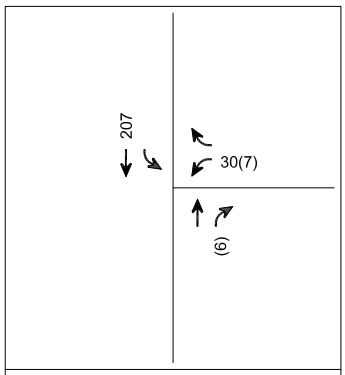
5. Lankershim Blvd / Tujunga Ave & Burbank Blvd



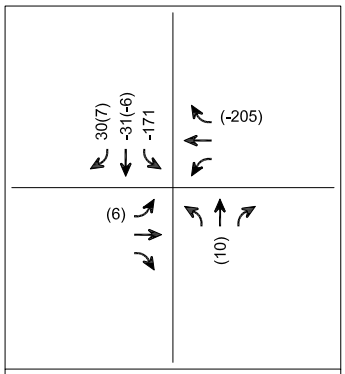
6. Vineland Avenue & Burbank Boulevard



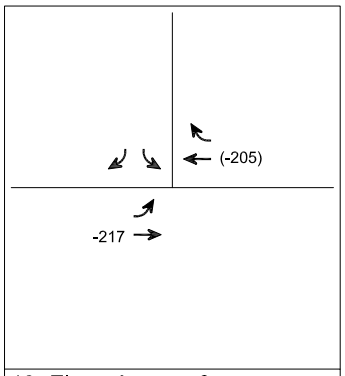
7. Tujunga Avenue & Cumpston Street (West)



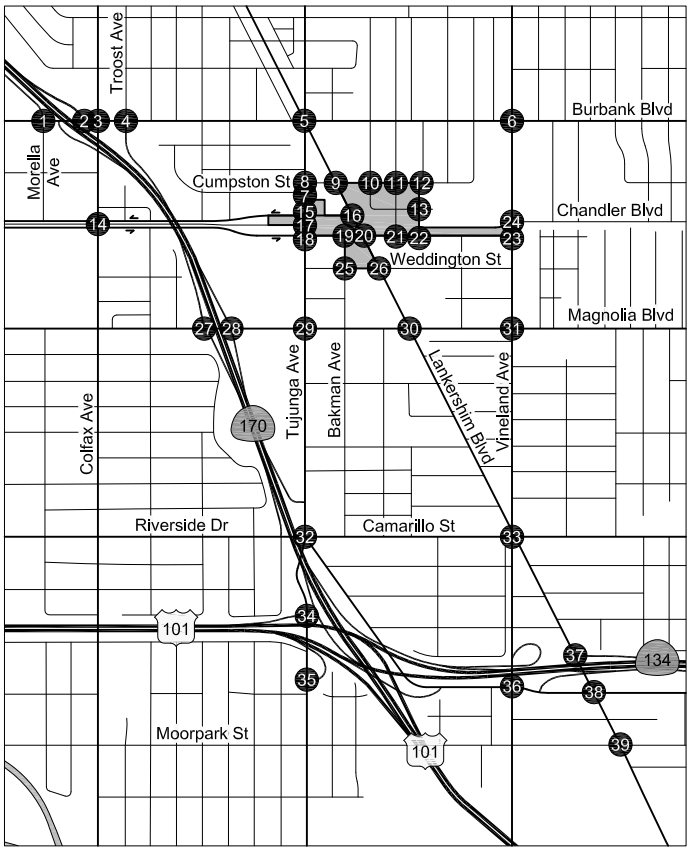
8. Tujunga Avenue & Cumpston Street (East)



9. Lankershim Boulevard & Cumpston Street



10. Elmer Avenue & Cumpston Street



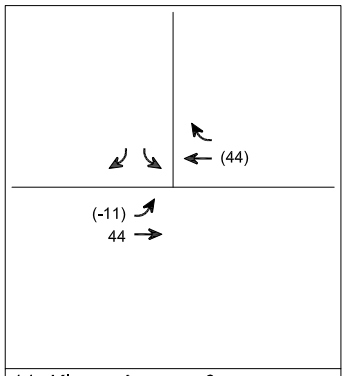
LEGEND

- Project Site
- # Analyzed Intersection
- #(#) AM(PM) Peak Hour Traffic Volumes

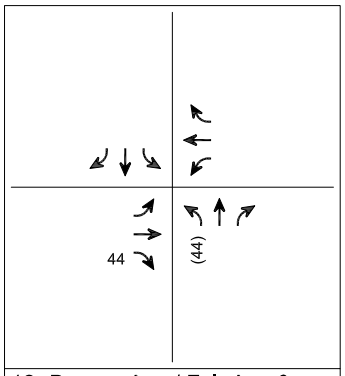
N
Not to Scale

FUTURE CONDITIONS BACKGROUND TRAFFIC SHIFTS (YEAR 2037)
ELIMINATION OF NORTHBOUND LEFT-TURNS FROM TUJUNGA AVENUE TO CHANDLER BOULEVARD (NORTH)

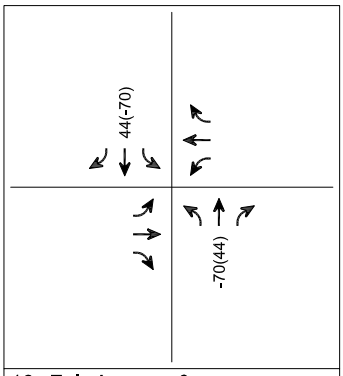
FIGURE G-5



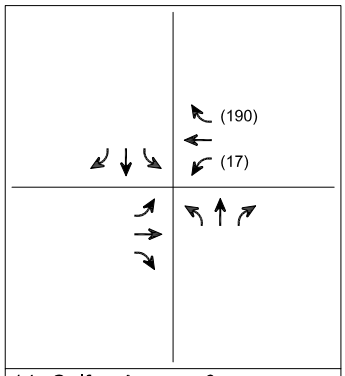
11. Klump Avenue & Cumpston Street



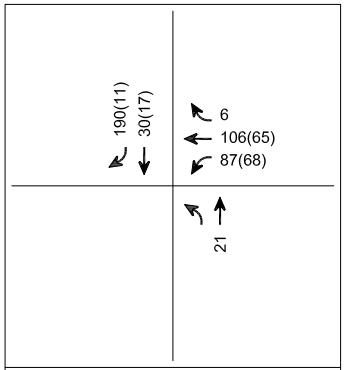
12. Bonner Ave / Fair Ave & Cumpston Street



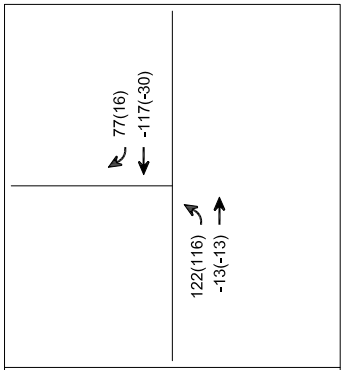
13. Fair Avenue & District Way



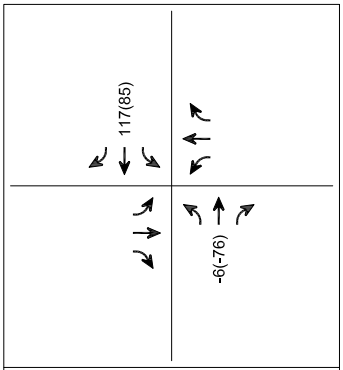
14. Colfax Avenue & Chandler Boulevard



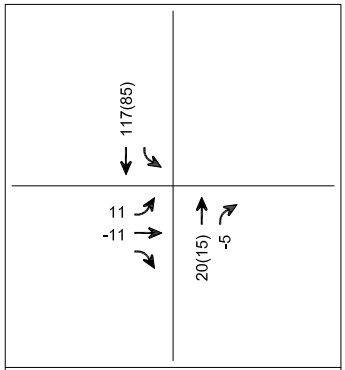
15. Tujunga Avenue & Chandler Boulevard WB



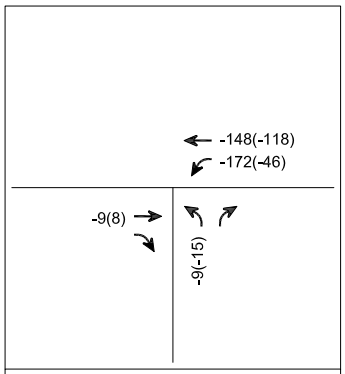
16. Lankershim Boulevard & Chandler Boulevard WB



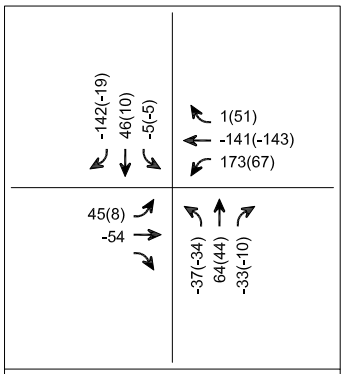
17. Tujunga Avenue & Orange Line Busway



18. Tujunga Avenue & Chandler Boulevard EB



19. Bakman Avenue & Chandler Boulevard



20. Lankershim Boulevard & Chandler Boulevard

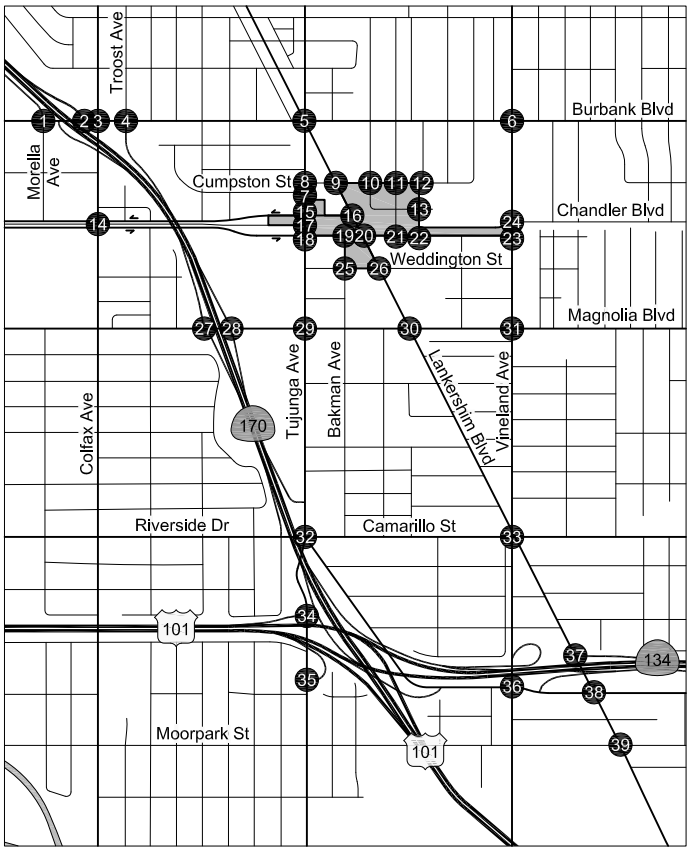
LEGEND

Project Site

Analyzed Intersection

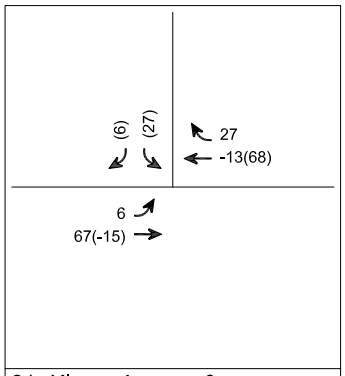
#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale

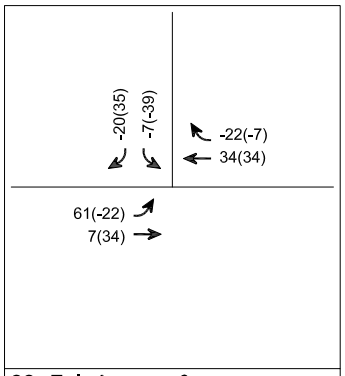


FUTURE CONDITIONS BACKGROUND TRAFFIC SHIFTS (YEAR 2037)
ELIMINATION OF NORTHBOUND LEFT-TURNS FROM TUJUNGA AVENUE TO CHANDLER BOULEVARD (NORTH)

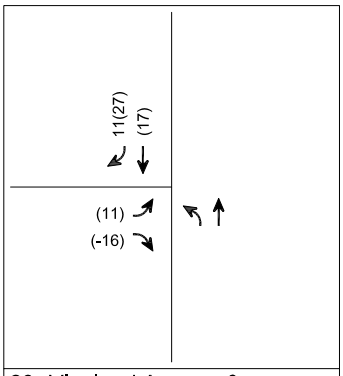
FIGURE G-5 (CONT.)



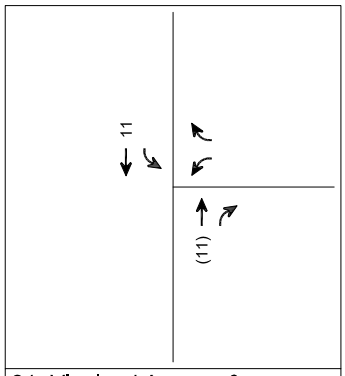
21. Klump Avenue & Chandler Boulevard



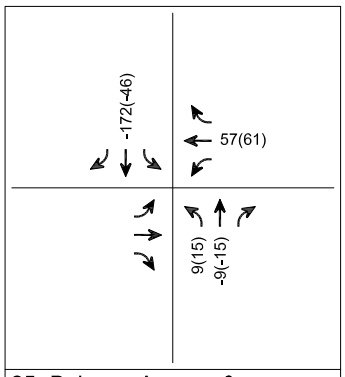
22. Fair Avenue & Chandler Boulevard



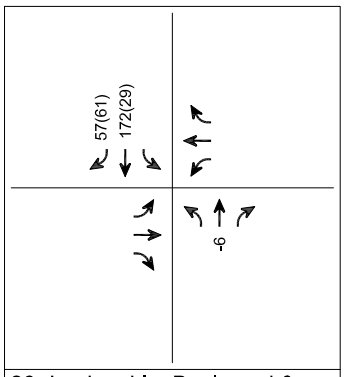
23. Vineland Avenue & Chandler Boulevard (West)



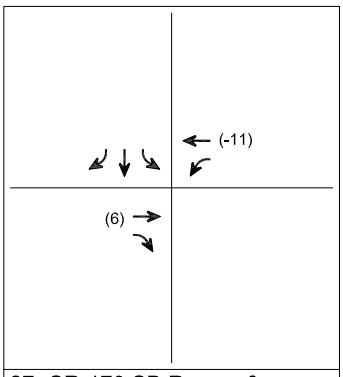
24. Vineland Avenue & Chandler Boulevard (East)



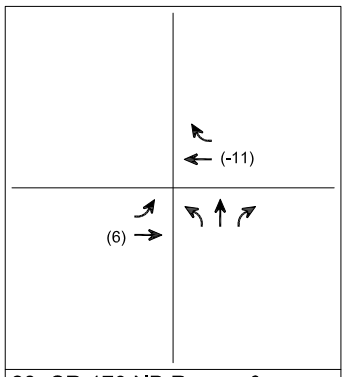
25. Bakman Avenue & Weddington Street



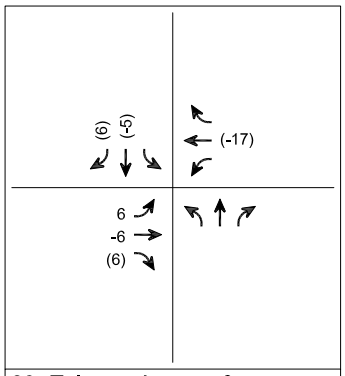
26. Lankershim Boulevard & Weddington Street



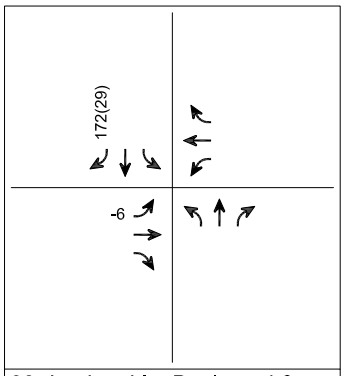
27. SR-170 SB Ramps & Magnolia Boulevard



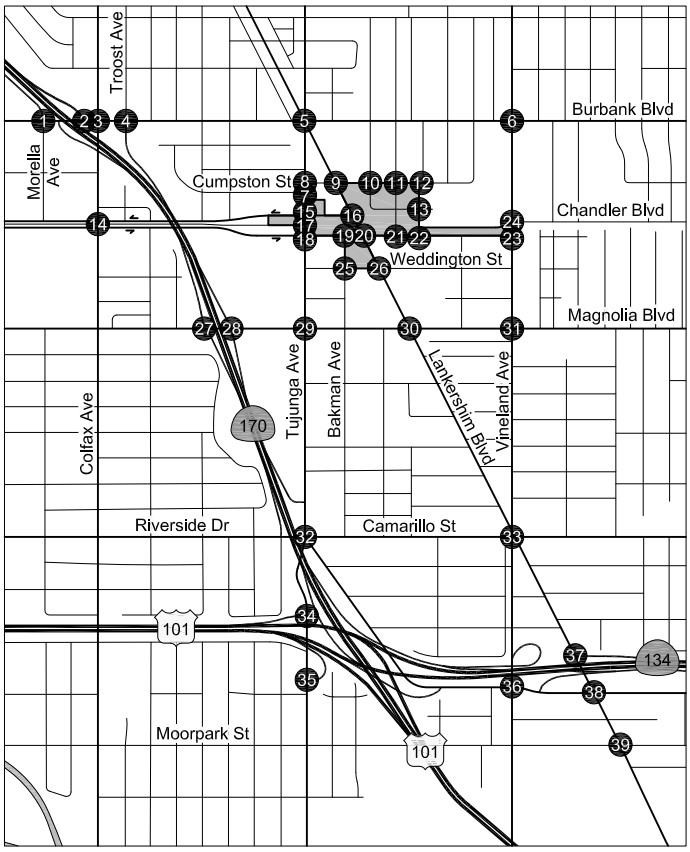
28. SR-170 NB Ramps & Magnolia Boulevard



29. Tujunga Avenue & Magnolia Boulevard



30. Lankershim Boulevard & Magnolia Boulevard



LEGEND

Project Site

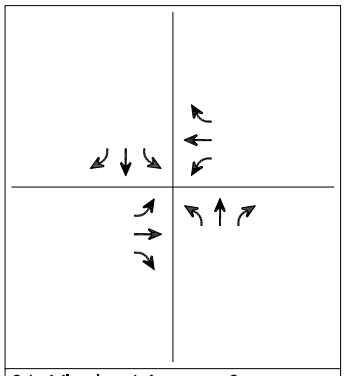
Analyzed Intersection

#(#) AM(PM) Peak Hour Traffic Volumes

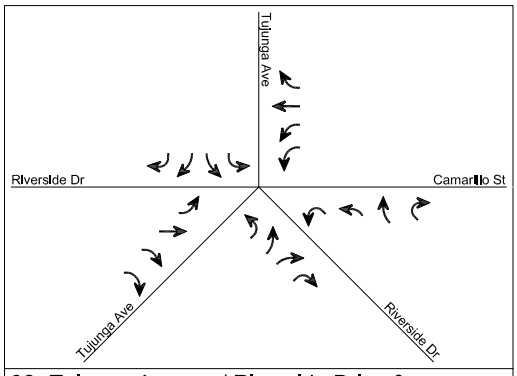
N
Not to Scale

FUTURE CONDITIONS BACKGROUND TRAFFIC SHIFTS (YEAR 2037)
ELIMINATION OF NORTHBOUND LEFT-TURNS FROM TUJUNGA AVENUE TO CHANDLER BOULEVARD (NORTH)

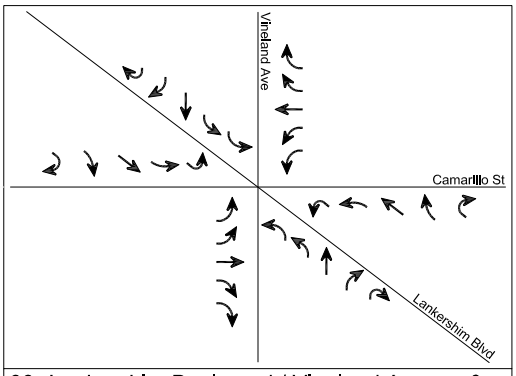
FIGURE G-5 (CONT.)



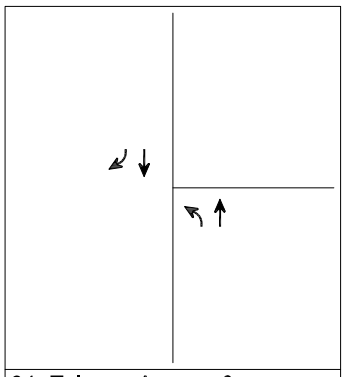
31. Vineland Avenue & Magnolia Boulevard



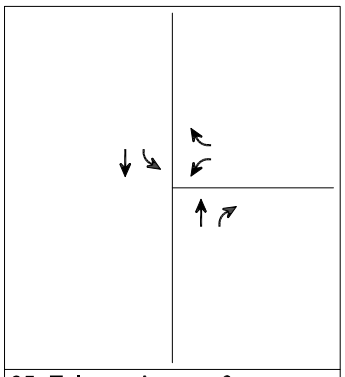
32. Tujunga Avenue / Riverside Drive & Camarillo Street



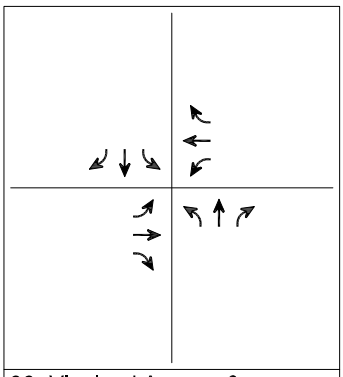
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street



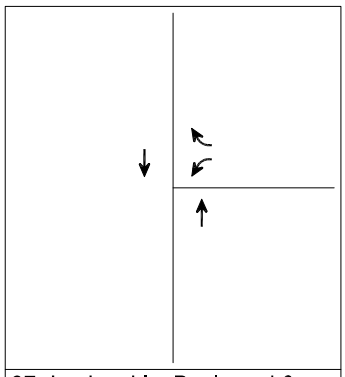
34. Tujunga Avenue & US 101 WB On-Ramp



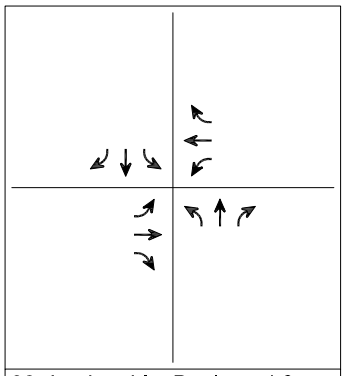
35. Tujunga Avenue & US 101 EB Off-Ramp



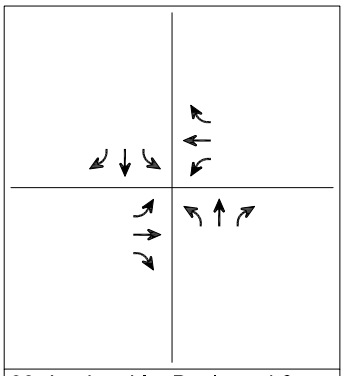
36. Vineland Avenue & Riverside Drive



37. Lankershim Boulevard & SR-134 WB Off-Ramp



38. Lankershim Boulevard & Riverside Drive



39. Lankershim Boulevard & Moorpark Street

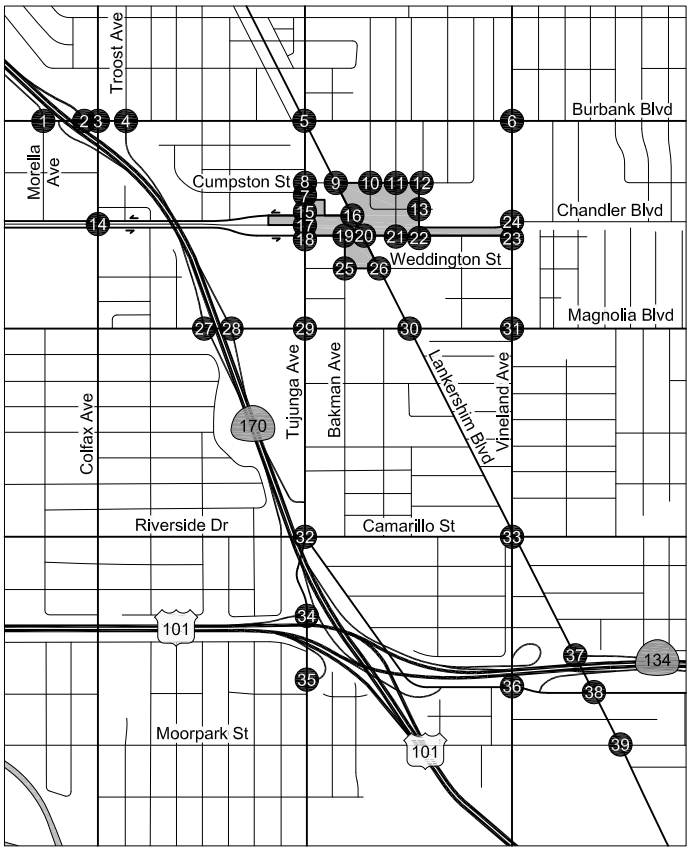
LEGEND

Project Site

Analyzed Intersection

#(#) AM(PM) Peak Hour Traffic Volumes

N
Not to Scale



FUTURE CONDITIONS BACKGROUND TRAFFIC SHIFTS (YEAR 2037)
ELIMINATION OF NORTHBOUND LEFT-TURNS FROM TUJUNGA AVENUE TO CHANDLER BOULEVARD (NORTH)

FIGURE G-5 (CONT.)

Appendix H

Traffic Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 SB Off-ramp/Morella Ave & Burbank Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-001
Date: 9/10/2019

Total

NS/EW Streets:	SR-170 SB Off-Ramp/Morella Ave					SR-170 SB Off-Ramp/Morella Ave					Burbank Blvd					Burbank Blvd					
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					
	0	1	0	0	0	1.5	0	0.5	0	0	0	2	0	0	0	0	2	0	0	0	
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
7:00 AM	0	0	4	0	0	148	1	35	0	49	0	198	1	0	123	0	219	0	0	23	801
7:15 AM	0	0	6	0	6	180	1	41	0	55	0	192	0	0	140	0	286	0	0	41	948
7:30 AM	1	0	12	0	8	110	4	49	0	37	0	239	2	0	145	0	290	0	0	49	946
7:45 AM	0	0	8	0	6	134	13	61	0	15	0	237	0	0	136	0	373	0	0	37	1020
8:00 AM	0	0	6	0	7	136	8	71	0	49	0	248	4	0	131	0	240	0	0	51	951
8:15 AM	1	0	5	0	4	126	3	26	0	65	0	247	2	0	112	0	208	0	0	57	856
8:30 AM	0	0	6	0	3	164	3	25	0	53	0	187	2	0	136	0	219	0	0	45	843
8:45 AM	2	0	5	0	9	164	2	35	0	67	0	208	0	0	116	0	246	0	0	31	885
9:00 AM	1	0	3	0	6	163	2	31	0	48	0	233	2	0	147	0	218	0	0	39	893
9:15 AM	1	0	3	0	5	169	0	30	0	45	0	232	0	0	131	0	220	0	0	37	873
9:30 AM	0	0	4	0	3	156	0	74	0	36	0	244	3	0	94	0	212	0	0	32	858
9:45 AM	0	0	3	0	6	142	0	77	0	38	0	257	2	0	137	0	154	0	0	40	856
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
TOTAL VOLUMES :	6	0	65	0	63	1792	37	555	0	557	0	2722	18	0	1548	0	2885	0	0	482	10730
APPROACH %'s :	4.48%	0.00%	48.51%	0.00%	47.01%	60.93%	1.26%	18.87%	0.00%	18.94%	0.00%	63.48%	0.42%	0.00%	36.10%	0.00%	85.68%	0.00%	0.00%	14.32%	
PEAK HR :	07:15 AM - 08:15 AM																				TOTAL
PEAK HR VOL :	1	0	32	0	27	560	26	222	0	156	0	916	6	0	552	0	1189	0	0	178	3865
PEAK HR FACTOR :	0.250	0.000	0.667	0.000	0.844	0.778	0.500	0.782	0.000	0.709	0.000	0.923	0.375	0.000	0.952	0.000	0.797	0.000	0.000	0.873	0.947
			0.714					0.870					0.955					0.834			

PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					
	0	1	0	0	0	1.5	0	0.5	0	0	0	2	0	0	0	0	2	0	0	0	
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
3:00 PM	0	0	3	0	0	83	2	38	0	2	0	209	0	0	126	0	272	0	0	80	815
3:15 PM	1	0	9	0	1	83	0	35	0	0	0	243	1	0	86	0	248	0	0	60	767
3:30 PM	0	0	7	0	4	58	1	45	0	1	0	269	3	0	122	0	238	0	0	83	831
3:45 PM	2	0	3	0	3	90	0	40	0	0	0	208	1	0	124	0	237	0	0	66	774
4:00 PM	0	0	2	0	2	74	0	35	0	0	0	262	2	0	136	0	241	0	0	68	822
4:15 PM	0	0	4	0	3	72	5	33	0	0	0	263	4	0	126	0	288	0	0	74	872
4:30 PM	0	0	0	0	1	89	2	32	0	0	0	231	0	0	126	0	282	0	0	78	841
4:45 PM	0	0	1	0	3	93	4	46	0	0	0	261	2	0	103	0	312	0	0	53	878
5:00 PM	0	0	2	0	4	79	1	35	0	0	0	249	1	0	103	0	342	0	0	51	867
5:15 PM	0	0	1	0	2	91	5	40	0	0	0	281	1	0	116	0	336	0	0	53	926
5:30 PM	1	0	3	0	2	97	0	49	0	0	0	248	2	0	113	0	347	0	0	44	906
5:45 PM	0	0	0	0	3	82	2	47	0	0	0	263	3	0	106	0	375	0	0	44	925
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
TOTAL VOLUMES :	4	0	35	0	28	991	22	475	0	3	0	2987	20	0	1387	0	3518	0	0	754	10224
APPROACH %'s :	5.97%	0.00%	52.24%	0.00%	41.79%	66.47%	1.48%	31.86%	0.00%	0.20%	0.00%	67.98%	0.46%	0.00%	31.57%	0.00%	82.35%	0.00%	0.00%	17.65%	
PEAK HR :	05:00 PM - 06:00 PM																				TOTAL
PEAK HR VOL :	1	0	6	0	11	349	8	171	0	0	0	1041	7	0	438	0	1400	0	0	192	3624
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.688	0.899	0.400	0.872	0.000	0.000	0.000	0.926	0.583	0.000	0.944	0.000	0.933	0.000	0.000	0.906	0.978
			0.750					0.904					0.933					0.950			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 SB Off-ramp/Morella Ave & Burbank Blvd
City: North Hollywood
Control: Signalized

Bikes

NS/EW Streets:	SR-170 SB Off-Ramp/Morella Ave					SR-170 SB Off-Ramp/Morella Ave					Burbank Blvd					Burbank Blvd					
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					
	0	1	0	0	0	1.5	0	0.5	0	0	0	2	0	0	0	0	2	0	0	0	
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	0	5
APPROACH %'s :											0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																				TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.375
													0.500					0.250			

PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					
	0	1	0	0	0	1.5	0	0.5	0	0	0	2	0	0	0	0	2	0	0	0	
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	ER2	WL	WT	WR	WU	WL2	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	0	10
APPROACH %'s :											0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																				TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750
													0.500					0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 SB Off-ramp/Morella Ave & Burbank Blvd
City: North Hollywood

Project ID: 19-05537-001
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR-170 SB Off-Ramp/Morella Ave		SR-170 SB Off-Ramp/Morella Ave		Burbank Blvd		Burbank Blvd		SR-170 SB On-Ramp		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SOUTH LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
7:00 AM	0	0	3	0	0	0	2	1	0	0	6
7:15 AM	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	1	0	0	0	2	0	0	4
8:00 AM	0	1	2	0	0	0	1	1	0	0	5
8:15 AM	1	0	2	0	0	0	0	1	0	0	4
8:30 AM	2	1	0	1	0	0	0	0	0	0	4
8:45 AM	1	1	0	2	0	0	0	0	0	0	4
9:00 AM	0	1	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	1	0	0	0	1	0	0	0	2
9:30 AM	0	1	0	1	0	0	0	0	0	0	2
9:45 AM	0	0	0	1	0	0	0	1	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
TOTAL VOLUMES :	4	7	9	6	0	0	4	6	0	0	36
APPROACH %'s :	36.36%	63.64%	60.00%	40.00%			40.00%	60.00%			
PEAK HR :	07:15 AM - 08:15 AM										TOTAL
PEAK HR VOL :	0	3	3	1	0	0	1	3	0	0	11
PEAK HR FACTOR :		0.750	0.375	0.250			0.250	0.375			0.550
	0.750		0.500				0.500				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SOUTH LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	1	0	0	0	0	0	0	1
3:30 PM	1	2	0	0	0	0	0	0	0	0	3
3:45 PM	0	1	0	0	0	0	2	3	0	0	6
4:00 PM	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	1	0	1	2
4:30 PM	0	2	0	0	0	0	1	0	0	0	3
4:45 PM	1	0	0	1	0	0	0	0	0	0	2
5:00 PM	3	0	0	0	0	0	2	0	1	1	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	1	0	0	3
5:45 PM	1	2	0	0	0	0	0	0	1	0	4
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	TOTAL
TOTAL VOLUMES :	6	8	1	2	0	0	5	6	2	2	32
APPROACH %'s :	42.86%	57.14%	33.33%	66.67%			45.45%	54.55%	50.00%	50.00%	
PEAK HR :	05:00 PM - 06:00 PM										TOTAL
PEAK HR VOL :	4	3	1	0	0	0	2	1	2	1	14
PEAK HR FACTOR :	0.333	0.375	0.250				0.250	0.250	0.500	0.250	0.500
	0.583		0.250				0.375		0.375		

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 NB On-ramp & Burbank Blvd
City: North Hollywood
Control: No Control

Project ID: 19-05537-002
Date: 9/10/2019

Total

NS/EW Streets:	SR-170 NB On-ramp				SR-170 NB On-ramp				Burbank Blvd				Burbank Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	47	311	0	0	0	238	98	0	694
7:15 AM	0	0	0	0	0	0	0	0	60	306	0	0	0	337	121	0	824
7:30 AM	0	0	0	0	0	0	0	0	65	310	0	0	0	331	89	0	795
7:45 AM	0	0	0	0	0	0	0	0	64	299	0	0	0	419	98	0	880
8:00 AM	0	0	0	0	0	0	0	0	55	345	0	0	0	279	95	0	774
8:15 AM	0	0	0	0	0	0	0	0	46	346	0	0	0	268	77	0	737
8:30 AM	0	0	0	0	0	0	0	0	34	312	0	0	0	250	97	0	693
8:45 AM	0	0	0	0	0	0	0	0	35	330	0	0	0	281	77	0	723
9:00 AM	0	0	0	0	0	0	0	0	33	368	0	2	0	247	58	0	708
9:15 AM	0	0	0	0	0	0	0	0	37	371	0	0	0	265	62	0	735
9:30 AM	0	0	0	0	0	0	0	0	46	355	0	0	0	235	50	0	686
9:45 AM	0	0	0	0	0	0	0	0	34	381	0	0	0	204	60	0	679
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	556	4034	0	2	0	3354	982	0	8928
APPROACH %'s :									12.11%	87.85%	0.00%	0.04%	0.00%	77.35%	22.65%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	244	1260	0	0	0	1366	403	0	3273
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.938	0.913	0.000	0.000	0.000	0.815	0.833	0.000	0.930
									0.940				0.855				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	72	235	0	0	0	364	96	0	767
3:15 PM	0	0	0	0	0	0	0	0	78	249	0	0	0	298	102	0	727
3:30 PM	0	0	0	0	0	0	0	0	67	282	0	0	0	328	87	0	764
3:45 PM	0	0	0	0	0	0	0	0	57	237	0	2	0	290	100	0	686
4:00 PM	0	0	0	0	0	0	0	0	68	280	0	0	0	319	100	0	767
4:15 PM	0	0	0	0	0	0	0	0	61	271	0	0	0	353	110	0	795
4:30 PM	0	0	0	0	0	0	0	0	57	254	0	0	0	373	100	0	784
4:45 PM	0	0	0	0	0	0	0	0	65	275	0	0	0	353	110	0	803
5:00 PM	0	0	0	0	0	0	0	0	66	281	0	0	0	402	106	0	855
5:15 PM	0	0	0	0	0	0	0	0	39	329	0	0	0	372	120	0	860
5:30 PM	0	0	0	0	0	0	0	0	46	307	0	0	0	394	107	0	854
5:45 PM	0	0	0	0	0	0	0	0	40	316	0	0	0	417	108	0	881
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	716	3316	0	2	0	4263	1246	0	9543
APPROACH %'s :									17.75%	82.20%	0.00%	0.05%	0.00%	77.38%	22.62%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	191	1233	0	0	0	1585	441	0	3450
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.723	0.937	0.000	0.000	0.000	0.950	0.919	0.000	0.979
									0.967				0.965				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 NB On-ramp & Burbank Blvd
City: North Hollywood
Control: No Control

Project ID: 19-05537-002
Date: 9/10/2019

Bikes

NS/EW Streets:	SR-170 NB On-ramp				SR-170 NB On-ramp				Burbank Blvd				Burbank Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	0	3	0	0	0	1	0	0	5
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
										0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	11
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.500
										0.375				0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 NB On-ramp & Burbank Blvd
City: North Hollywood

Project ID: 19-05537-002
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR-170 NB On-ramp		SR-170 NB On-ramp		Burbank Blvd		Burbank Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	2	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	2	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0
9:45 AM	0	1	0	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	3	0	0	0	0	0	0	6
APPROACH %'s :	50.00%	50.00%							
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	2	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.250								0.250
	0.250								

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	2	0	0	0	0	0	0	2
4:00 PM	0	1	0	0	0	0	0	0	1
4:15 PM	1	0	0	0	0	0	0	0	1
4:30 PM	1	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	1
5:00 PM	1	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	0	1
5:30 PM	1	1	0	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	4	7	0	0	0	0	0	0	11
APPROACH %'s :	36.36%	63.64%							
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	2	3	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.500	0.750							0.625
	0.625								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Colfax Ave & Burbank Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-003
Date: 9/10/2019

Total

NS/EW Streets:	Colfax Ave				Colfax Ave				Burbank Blvd				Burbank Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	29	28	19	0	8	97	53	0	9	245	54	0	12	258	4	0	816
7:15 AM	32	68	13	0	19	74	68	0	11	254	47	0	16	354	5	0	961
7:30 AM	36	85	33	0	11	77	54	0	13	252	33	0	21	336	10	0	961
7:45 AM	36	104	32	0	10	99	58	0	17	258	31	0	24	410	7	0	1086
8:00 AM	45	58	28	1	23	77	59	0	21	262	46	0	15	275	9	0	919
8:15 AM	36	46	21	0	28	76	51	0	18	290	51	0	16	251	10	0	894
8:30 AM	29	30	18	0	23	106	68	0	14	232	50	0	17	254	5	0	846
8:45 AM	33	47	26	0	21	88	48	0	12	282	45	0	15	286	2	0	905
9:00 AM	27	33	16	0	14	82	46	0	9	301	44	0	25	228	8	0	833
9:15 AM	27	24	21	0	11	58	48	0	13	315	63	0	10	258	10	0	858
9:30 AM	20	26	16	0	10	69	29	0	12	257	66	0	17	231	6	0	759
9:45 AM	22	38	26	0	14	59	52	0	10	290	91	0	16	196	14	0	828
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	372	587	269	1	192	962	634	0	159	3238	621	0	204	3337	90	0	10666
APPROACH %'s :	30.27%	47.76%	21.89%	0.08%	10.74%	53.80%	35.46%	0.00%	3.96%	80.59%	15.46%	0.00%	5.62%	91.90%	2.48%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	149	315	106	1	63	327	239	0	62	1026	157	0	76	1375	31	0	3927
PEAK HR FACTOR :	0.828	0.757	0.803	0.250	0.685	0.826	0.879	0.000	0.738	0.979	0.835	0.000	0.792	0.838	0.775	0.000	0.904
	0.830				0.942				0.946				0.840				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	51	63	19	0	10	37	60	0	19	212	13	0	17	363	13	0	877
3:15 PM	40	55	29	0	5	54	42	0	23	228	11	0	17	306	12	0	822
3:30 PM	44	64	34	0	15	35	44	0	20	231	14	0	17	343	18	1	880
3:45 PM	44	45	36	0	7	54	49	0	19	228	10	0	16	291	18	0	817
4:00 PM	47	70	40	0	15	60	36	0	22	221	20	0	18	338	12	0	899
4:15 PM	47	78	40	0	9	70	52	0	26	219	15	0	11	355	9	0	931
4:30 PM	44	76	26	0	9	66	51	0	26	226	11	0	21	374	19	0	949
4:45 PM	39	82	27	0	9	60	57	0	23	225	14	0	23	368	11	0	938
5:00 PM	48	71	29	0	8	58	51	0	20	244	17	0	20	403	15	0	984
5:15 PM	48	77	34	0	11	75	69	0	22	283	15	0	19	384	19	0	1056
5:30 PM	46	80	34	0	5	68	67	0	27	262	18	0	24	385	15	0	1031
5:45 PM	51	92	35	0	9	70	70	0	23	276	20	0	22	394	17	0	1079
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	549	853	383	0	112	707	648	0	270	2855	178	0	225	4304	178	1	11263
APPROACH %'s :	30.76%	47.79%	21.46%	0.00%	7.63%	48.19%	44.17%	0.00%	8.17%	86.44%	5.39%	0.00%	4.78%	91.42%	3.78%	0.02%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	193	320	132	0	33	271	257	0	92	1065	70	0	85	1566	66	0	4150
PEAK HR FACTOR :	0.946	0.870	0.943	0.000	0.750	0.903	0.918	0.000	0.852	0.941	0.875	0.000	0.885	0.971	0.868	0.000	0.962
	0.906				0.905				0.959				0.980				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Colfax Ave & Burbank Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-003
Date: 9/10/2019

Bikes

NS/EW Streets:	Colfax Ave				Colfax Ave				Burbank Blvd				Burbank Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	9	0	0	0	0	0	0	1	0	0	0	10
7:45 AM	0	1	0	0	0	3	0	0	0	1	0	0	0	0	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
9:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	0	0	0	16	0	0	0	3	0	0	1	1	0	0	26
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	13	0	0	0	1	0	0	1	0	0	0	16
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.361	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.400
	0.250				0.361				0.250				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
3:15 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	1	3	0	0	0	0	1	0	0	1	0	0	6
4:00 PM	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3
4:15 PM	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
4:30 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	7	0	0	1	5	1	0	2	3	1	0	0	2	0	0	23
APPROACH %'s :	12.50%	87.50%	0.00%	0.00%	14.29%	71.43%	14.29%	0.00%	33.33%	50.00%	16.67%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.375
									0.375								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Colfax Ave & Burbank Blvd
City: North Hollywood

Project ID: 19-05537-003
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Colfax Ave		Colfax Ave		Burbank Blvd		Burbank Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	2	1	0	0	3	0	2	8
7:15 AM	3	5	1	5	0	9	1	20	44
7:30 AM	2	4	1	0	0	12	0	21	40
7:45 AM	1	2	0	3	1	3	0	15	25
8:00 AM	1	0	1	1	2	2	1	1	9
8:15 AM	0	0	1	1	1	0	1	0	4
8:30 AM	0	0	0	1	0	1	0	2	4
8:45 AM	0	0	0	0	0	0	0	0	0
9:00 AM	1	0	2	1	0	0	0	0	4
9:15 AM	0	0	2	0	0	1	0	0	3
9:30 AM	0	3	0	0	1	0	0	2	6
9:45 AM	0	0	1	1	0	0	2	3	7
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	8	16	10	13	5	31	5	66	154
APPROACH %'s :	33.33%	66.67%	43.48%	56.52%	13.89%	86.11%	7.04%	92.96%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	7	11	3	9	3	26	2	57	118
PEAK HR FACTOR :	0.583	0.550	0.750	0.450	0.375	0.542	0.500	0.679	0.670
	0.563		0.500		0.604		0.702		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	1	0	3	0	1	0	5
3:15 PM	0	2	3	0	4	1	2	1	13
3:30 PM	0	1	4	0	4	2	5	0	16
3:45 PM	0	1	0	2	1	1	3	0	8
4:00 PM	1	0	0	1	1	1	0	1	5
4:15 PM	1	1	2	1	2	0	4	1	12
4:30 PM	1	1	0	0	0	0	1	1	4
4:45 PM	3	1	4	1	0	1	3	1	14
5:00 PM	1	0	1	3	1	1	2	0	9
5:15 PM	0	1	2	3	0	1	3	2	12
5:30 PM	2	2	0	1	1	1	1	1	9
5:45 PM	1	3	2	4	2	2	1	1	16
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	10	13	19	16	19	11	26	9	123
APPROACH %'s :	43.48%	56.52%	54.29%	45.71%	63.33%	36.67%	74.29%	25.71%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	4	6	5	11	4	5	7	4	46
PEAK HR FACTOR :	0.500	0.500	0.625	0.688	0.500	0.625	0.583	0.500	0.719
	0.625		0.667		0.563		0.550		

Turning Movement Count Report AM

Location ID: 4
North/South: SR 170 / Troost Avenue
East/West: Burbank Boulevard

Date: 10/22/19
City: North Hollywood, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	7	0	0	0	183	0	30	1	89	0	291	3	604
7:15	11	0	0	0	234	0	32	5	103	0	234	0	619
7:30	20	0	7	0	259	0	46	2	117	0	289	0	740
7:45	21	0	1	1	217	0	52	6	129	0	299	3	729
8:00	3	0	3	2	189	0	52	7	87	0	337	3	683
8:15	7	0	1	0	198	0	65	6	98	0	305	4	684
8:30	3	0	2	0	213	0	45	3	106	0	346	4	722
8:45	7	0	3	0	187	0	95	4	97	0	330	3	726
9:00	3	0	1	0	160	0	58	6	83	0	280	3	594
9:15	3	0	0	1	177	0	64	2	52	0	287	2	588
9:30	7	0	1	0	168	0	44	4	51	0	286	3	564
9:45	3	0	1	2	180	0	52	4	48	0	296	1	587

Total Volume:	95	0	20	6	2365	0	635	50	1060	0	3580	29	7840
Approach %	83%	0%	17%	0%	100%	0%	36%	3%	61%	0%	99%	1%	

Peak Hr Begin:	7:30												
PHV	51	0	12	3	863	0	215	21	431	0	1230	10	2836
PHF	0.583			0.836			0.892			0.912			0.958

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 4
North/South: SR 170 / Troost Avenue
East/West: Burbank Boulevard

Date: 10/22/19
City: North Hollywood, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	5	0	1	2	238	0	62	8	88	0	232	5	641
15:15	4	0	1	3	266	0	38	7	90	0	252	10	671
15:30	2	0	1	3	265	1	71	5	105	0	234	4	691
15:45	8	0	0	1	245	0	61	7	112	0	257	1	692
16:00	4	0	1	0	264	1	56	12	94	0	245	5	682
16:15	2	0	1	0	249	0	59	9	96	0	265	5	686
16:30	0	0	1	1	227	0	63	5	104	0	278	5	684
16:45	0	0	0	0	276	0	51	6	109	0	266	9	717
17:00	2	0	1	1	291	0	55	15	135	0	237	2	739
17:15	4	0	1	4	275	0	53	14	145	0	270	5	771
17:30	9	0	3	2	264	0	61	22	156	0	314	8	839
17:45	6	0	0	2	276	0	65	14	148	0	289	7	807

Total Volume:	46	0	11	19	3136	2	695	124	1382	0	3139	66	8620
Approach %	81%	0%	19%	1%	99%	0%	32%	6%	63%	0%	98%	2%	

Peak Hr Begin:	17:00												
PHV	21	0	5	9	1106	0	234	65	584	0	1110	22	3156
PHF	0.542			0.955			0.924			0.879			0.940

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	1	1	0	0	12	0	1	0
7:15	4	0	0	0	4	1	0	0
7:30	3	1	1	0	8	0	0	0
7:45	0	0	0	0	3	0	0	0
8:00	0	0	0	0	4	1	0	0
8:15	4	0	1	0	3	1	0	0
8:30	3	0	1	0	4	1	0	0
8:45	1	0	0	0	4	0	0	0
9:00	1	1	0	0	4	0	0	0
9:15	1	0	1	0	4	0	0	0
9:30	2	0	1	0	4	0	0	0
9:45	0	0	2	0	5	1	0	0

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	2	0	2	0	6	1	0	0
15:15	0	0	1	0	4	0	0	0
15:30	1	0	0	0	2	2	0	0
15:45	0	0	4	0	12	2	0	0
16:00	4	0	2	0	4	1	0	0
16:15	1	0	1	0	5	0	0	0
16:30	0	0	0	0	1	0	0	0
16:45	1	0	6	0	9	0	0	0
17:00	2	0	1	0	6	0	0	0
17:15	0	1	1	0	4	0	0	0
17:30	3	1	3	1	8	0	0	0
17:45	0	0	11	0	10	0	0	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd/Tujunga Ave & Burbank Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-005
Date: 9/10/2019

Total

NS/EW Streets:	Lankershim Blvd/Tujunga Ave						Lankershim Blvd/Tujunga Ave						Burbank Blvd						Burbank Blvd						
AM	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						
	1	2	0	0	0	0	1	2	0	0	0	0	1	1	0	0	0	0	1	2	0	0	0	0	
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	TOTAL
7:00 AM	23	63	7	0	16	0	14	246	5	0	67	0	29	115	134	0	20	9	19	139	4	0	21	1	932
7:15 AM	33	65	7	0	22	0	20	221	10	0	85	0	20	140	118	0	14	15	17	183	8	0	26	2	1006
7:30 AM	36	75	16	0	36	0	22	208	15	0	71	0	9	160	106	0	20	20	20	174	24	0	16	4	1032
7:45 AM	31	102	23	0	39	1	31	221	9	0	67	0	13	176	118	0	31	13	16	140	7	0	14	4	1056
8:00 AM	48	85	26	0	35	0	18	212	9	0	33	0	14	171	119	0	23	24	10	103	12	0	20	3	965
8:15 AM	30	52	11	0	30	0	23	230	3	0	68	0	11	163	105	0	15	30	19	109	9	0	15	7	930
8:30 AM	30	82	15	0	15	0	37	217	15	0	45	0	14	172	111	0	19	15	13	120	14	0	16	7	957
8:45 AM	31	65	9	0	21	0	22	159	13	0	42	0	21	166	98	0	26	21	9	157	12	0	16	7	895
9:00 AM	26	72	14	0	17	0	21	183	13	0	63	0	25	162	134	0	24	29	17	121	19	0	10	5	955
9:15 AM	27	74	14	0	23	0	22	231	12	0	35	1	22	180	125	0	18	29	12	108	22	0	12	9	976
9:30 AM	31	71	7	0	18	0	24	159	19	0	38	0	14	180	63	0	26	23	10	122	18	0	11	4	838
9:45 AM	20	63	10	0	25	1	31	128	17	0	49	0	17	176	94	0	21	23	13	99	27	0	18	8	840
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	TOTAL
TOTAL VOLUMES :	366	869	159	0	297	2	285	2415	140	0	663	1	209	1961	1325	0	257	251	175	1575	176	0	195	61	11382
APPROACH %'s :	21.62%	51.33%	9.39%	0.00%	17.54%	0.12%	8.13%	68.92%	4.00%	0.00%	18.92%	0.03%	5.22%	48.99%	33.10%	0.00%	6.42%	6.27%	8.02%	72.18%	8.07%	0.00%	8.94%	2.80%	
PEAK HR :	07:15 AM - 08:15 AM																								TOTAL
PEAK HR VOL :	148	327	72	0	132	1	91	862	43	0	256	0	56	647	461	0	88	72	63	600	51	0	76	13	4059
PEAK HR FACTOR :	0.771	0.801	0.692	0.000	0.846	0.250	0.734	0.975	0.717	0.000	0.753	0.000	0.700	0.919	0.968	0.000	0.710	0.750	0.788	0.820	0.531	0.000	0.731	0.813	0.961
	0.867						0.932						0.943						0.843						

PM	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						
	1	2	0	0	0	0	1	2	0	0	0	0	1	1	0	0	0	0	1	2	0	0	0	0	
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	TOTAL
3:00 PM	41	102	19	0	29	0	18	105	27	0	41	1	23	128	44	0	38	10	13	176	25	0	11	4	855
3:15 PM	49	126	20	0	28	1	23	99	22	0	35	0	24	157	48	0	33	9	16	161	22	0	13	4	890
3:30 PM	54	129	22	0	43	0	25	85	22	0	36	1	28	158	46	0	35	12	7	146	16	0	12	4	881
3:45 PM	45	114	16	0	28	0	18	80	27	0	37	0	28	168	53	0	40	16	16	149	14	0	11	4	864
4:00 PM	50	125	9	0	35	1	28	90	19	2	38	3	28	171	43	0	39	10	8	146	20	0	12	6	883
4:15 PM	67	156	27	0	43	1	22	99	24	0	28	0	23	161	46	0	31	12	14	173	21	0	19	5	972
4:30 PM	56	150	20	0	37	0	31	102	19	0	32	1	30	153	52	0	52	11	10	164	16	0	13	3	952
4:45 PM	79	152	20	0	57	1	24	95	27	1	37	1	20	152	57	0	35	9	8	163	28	0	12	4	982
5:00 PM	66	130	20	0	46	0	22	108	22	0	41	0	18	154	44	0	38	10	10	174	13	0	18	2	936
5:15 PM	66	168	31	0	56	0	15	102	10	0	27	1	26	166	71	0	43	16	11	161	8	0	8	5	991
5:30 PM	71	185	14	0	53	0	11	115	17	0	36	0	27	166	61	0	45	14	6	168	17	0	10	6	1022
5:45 PM	84	156	25	0	61	0	7	98	15	0	36	0	30	157	63	0	35	14	12	157	19	0	15	2	986
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	TOTAL
TOTAL VOLUMES :	728	1693	243	0	516	4	244	1178	251	3	424	8	305	1891	628	0	464	143	131	1938	219	0	154	49	11214
APPROACH %'s :	22.86%	53.17%	7.63%	0.00%	16.21%	0.13%	11.57%	55.88%	11.91%	0.14%	20.11%	0.38%	8.89%	55.12%	18.30%	0.00%	13.52%	4.17%	5.26%	77.80%	8.79%	0.00%	6.18%	1.97%	
PEAK HR :	05:00 PM - 06:00 PM																								TOTAL
PEAK HR VOL :	287	639	90	0	216	0	55	423	64	0	140	1	101	643	239	0	161	54	39	660	57	0	51	15	3935
PEAK HR FACTOR :	0.854	0.864	0.726	0.000	0.885	0.000	0.625	0.920	0.727	0.000	0.854	0.250	0.842	0.968	0.842	0.000	0.894	0.844	0.813	0.948	0.750	0.000	0.708	0.625	0.963
	0.945						0.885						0.930						0.947						

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd/Tujunga Ave & Burbank Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-005
Date: 9/10/2019

Bikes

NS/EW Streets: Lankershim Blvd/Tujunga Ave | Lankershim Blvd/Tujunga Ave | Burbank Blvd | Burbank Blvd | Tujunga Ave | Tujunga Ave

AM

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						NORTHBOUND2						SOUTHBOUND2						
	1	2	0	0	0	0	1	2	0	0	0	0	1	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
7:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	5
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	6
7:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	1	0	0	0	3	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	2	0	0	13
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	6
8:15 AM	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	9
8:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	0	10
8:45 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5
9:00 AM	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	6
9:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	8
9:30 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	5
9:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	6
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
TOTAL VOLUMES :	2	3	1	0	9	4	0	11	0	0	1	0	3	6	2	0	1	0	1	1	0	0	0	2	2	0	0	4	0	0	0	0	5	22	1	0	81
APPROACH %'s :	10.53%	15.79%	5.26%	0.00%	47.37%	21.05%	0.00%	91.67%	0.00%	0.00%	8.33%	0.00%	25.00%	50.00%	16.67%	0.00%	8.33%	0.00%	25.00%	25.00%	0.00%	0.00%	0.00%	50.00%	33.33%	0.00%	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	17.86%	78.57%	3.57%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																																				TOTAL
PEAK HR VOL :	1	0	1	0	4	1	0	3	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	2	6	0	0	27
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.333	0.250	0.000	0.375	0.000	0.000	0.000	0.000	0.250	0.313	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.750	0.000	0.000	0.519
	0.350						0.375						0.375						0.250						0.250						0.500						

PM

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND						NORTHBOUND2						SOUTHBOUND2						
	1	2	0	0	0	0	1	2	0	0	0	0	1	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
3:00 PM	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5
3:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:30 PM	0	1	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	8
4:30 PM	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7
5:15 PM	0	4	0	0	1	0	1	3	1	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	15
5:30 PM	0	3	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5:45 PM	1	1	0	0	0	0	0	1	0	0	0	0	3	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	9
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
TOTAL VOLUMES :	3	19	0	0	7	0	1	7	4	0	4	0	3	3	2	0	0	3	0	5	3	0	1	1	0	0	1	2	0	0	0	0	1	3	0	0	73
APPROACH %'s :	10.34%	65.52%	0.00%	0.00%	24.14%	0.00%	6.25%	43.75%	25.00%	0.00%	25.00%	0.00%	27.27%	27.27%	18.18%	0.00%	0.00%	27.27%	0.00%	50.00%	30.00%	0.00%	10.00%	10.00%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																																				TOTAL
PEAK HR VOL :	1	11	0	0	3	0	1	5	2	0	2	0	3	1	1	0	0	2	0	2	2	0	1	0	0	0	0	2	0	0	0	0	0	1	0	0	40
PEAK HR FACTOR :	0.25	0.688	0.000	0.000	0.750	0.000	0.250	0.417	0.500	0.000	0.500	0.000	0.250	0.250	0.250	0.000	0.000	0.250	0.000	0.500	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.667
	0.750						0.417						0.438						0.625						0.500						0.250						

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd/Tujunga Ave & Burbank Blvd
City: North Hollywood

Project ID: 19-05537-005
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Lankershim Blvd/Tujunga Ave		Lankershim Blvd/Tujunga Ave		Burbank Blvd		Burbank Blvd		Tujunga Ave		Tujunga Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NORTH LEG 2		SOUTH LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	TOTAL
7:00 AM	0	0	0	0	1	1	0	3	1	0	4	1	11
7:15 AM	0	0	5	1	3	4	1	3	1	1	2	1	22
7:30 AM	1	1	0	0	1	4	0	1	6	0	0	0	14
7:45 AM	1	2	3	1	0	1	0	2	5	1	1	1	18
8:00 AM	4	2	2	3	2	14	3	9	1	2	2	2	46
8:15 AM	0	1	0	1	0	6	0	4	1	1	0	0	14
8:30 AM	2	6	2	3	5	14	3	8	2	4	1	0	50
8:45 AM	3	1	1	0	6	8	3	3	1	0	2	0	28
9:00 AM	3	2	4	1	9	15	3	5	6	6	2	0	56
9:15 AM	4	1	2	1	3	14	2	2	1	1	0	0	31
9:30 AM	6	1	1	1	1	7	5	5	4	0	0	0	31
9:45 AM	4	0	1	1	1	4	7	5	2	0	0	0	25
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	TOTAL
TOTAL VOLUMES :	28	17	21	13	32	92	27	50	31	16	14	5	346
APPROACH %'s :	62.22%	37.78%	61.76%	38.24%	25.81%	74.19%	35.06%	64.94%	65.96%	34.04%	73.68%	26.32%	
PEAK HR :	**07:15 AM - 08:15 AM**												TOTAL
PEAK HR VOL :	6	5	10	5	6	23	4	15	13	4	5	4	100
PEAK HR FACTOR :	0.375	0.625	0.500	0.417	0.500	0.411	0.333	0.417	0.542	0.500	0.625	0.500	0.543
	0.458		0.625		0.453		0.396		0.708		0.563		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NORTH LEG 2		SOUTH LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	TOTAL
3:00 PM	4	2	4	4	7	11	5	5	1	1	0	6	50
3:15 PM	2	3	2	2	14	11	3	0	2	3	0	4	46
3:30 PM	0	4	5	3	5	3	1	4	6	7	2	2	42
3:45 PM	0	0	3	6	8	8	6	3	3	2	4	2	45
4:00 PM	0	6	2	0	10	14	3	3	3	6	5	1	53
4:15 PM	8	0	3	0	8	6	0	2	1	0	0	4	32
4:30 PM	2	0	2	8	8	11	3	3	6	7	4	8	62
4:45 PM	1	1	6	2	10	4	8	7	7	6	1	7	60
5:00 PM	3	4	2	3	8	10	4	1	3	7	1	5	51
5:15 PM	0	5	4	4	13	9	8	14	7	3	2	4	73
5:30 PM	4	3	1	6	10	6	7	4	6	4	1	4	56
5:45 PM	4	0	1	1	12	5	5	2	3	2	0	2	37
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	TOTAL
TOTAL VOLUMES :	28	28	35	39	113	98	53	48	48	48	20	49	607
APPROACH %'s :	50.00%	50.00%	47.30%	52.70%	53.55%	46.45%	52.48%	47.52%	50.00%	50.00%	28.99%	71.01%	
PEAK HR :	**05:00 PM - 06:00 PM**												TOTAL
PEAK HR VOL :	11	12	8	14	43	30	24	21	19	16	4	15	217
PEAK HR FACTOR :	0.688	0.600	0.500	0.583	0.827	0.750	0.750	0.375	0.679	0.571	0.500	0.750	0.743
	0.821		0.688		0.830		0.511		0.875		0.792		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Burbank Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-006
Date: 9/10/2019

Total

NS/EW Streets:	Vineland Ave				Vineland Ave				Burbank Blvd				Burbank Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	2	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	8	63	17	0	23	233	33	0	11	99	41	0	21	97	8	0	654
7:15 AM	21	76	8	0	32	279	25	0	15	109	35	0	18	129	4	0	751
7:30 AM	17	94	14	0	17	323	35	0	19	128	49	0	24	140	7	0	867
7:45 AM	17	158	29	0	17	300	26	0	22	137	46	0	25	116	12	0	905
8:00 AM	23	147	36	0	41	232	29	0	25	134	98	0	18	110	13	0	906
8:15 AM	19	133	35	0	37	272	32	0	14	142	63	0	19	91	15	0	872
8:30 AM	13	109	24	0	33	302	31	0	21	144	38	0	16	98	9	0	838
8:45 AM	19	90	28	0	53	263	31	0	18	152	33	0	15	118	9	0	829
9:00 AM	17	94	27	0	47	157	28	0	18	176	21	0	15	110	15	0	725
9:15 AM	17	100	18	0	30	173	22	0	13	152	27	0	17	104	10	0	683
9:30 AM	23	87	24	0	25	205	20	0	18	185	34	0	21	88	11	0	741
9:45 AM	15	110	25	0	27	238	22	0	21	176	30	0	17	94	18	0	793
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	209	1261	285	0	382	2977	334	0	215	1734	515	0	226	1295	131	0	9564
APPROACH %'s :	11.91%	71.85%	16.24%	0.00%	10.34%	80.61%	9.04%	0.00%	8.73%	70.37%	20.90%	0.00%	13.68%	78.39%	7.93%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	76	532	114	0	112	1127	122	0	80	541	256	0	86	457	47	0	3550
PEAK HR FACTOR :	0.826	0.842	0.792	0.000	0.683	0.872	0.871	0.000	0.800	0.952	0.653	0.000	0.860	0.816	0.783	0.000	0.980
	0.876				0.907				0.853				0.863				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	2	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	25	159	21	0	20	141	27	1	36	134	25	0	28	169	19	1	806
3:15 PM	28	182	31	0	30	143	27	0	24	120	21	0	26	141	18	0	791
3:30 PM	23	145	30	0	20	144	22	0	24	124	23	0	15	137	25	0	732
3:45 PM	33	177	31	0	20	142	23	0	22	143	19	0	21	130	15	0	776
4:00 PM	30	156	40	0	27	134	20	0	25	132	24	0	29	134	29	0	780
4:15 PM	35	212	32	0	20	141	25	0	15	140	19	0	18	148	13	0	818
4:30 PM	26	198	40	0	25	140	23	0	34	136	18	0	29	151	15	0	835
4:45 PM	43	195	38	0	18	159	20	0	27	148	28	0	28	138	17	0	859
5:00 PM	29	210	32	1	22	163	31	0	21	134	15	0	21	151	21	0	851
5:15 PM	31	213	39	0	21	186	27	0	29	142	14	0	27	160	14	0	903
5:30 PM	32	220	46	0	25	173	32	0	24	155	20	0	16	153	17	0	913
5:45 PM	23	230	40	0	21	161	23	0	28	136	23	0	23	152	29	0	889
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	358	2297	420	1	269	1827	300	1	309	1644	249	0	281	1764	232	1	9953
APPROACH %'s :	11.64%	74.67%	13.65%	0.03%	11.22%	76.22%	12.52%	0.04%	14.03%	74.66%	11.31%	0.00%	12.34%	77.44%	10.18%	0.04%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	115	873	157	1	89	683	113	0	102	567	72	0	87	616	81	0	3556
PEAK HR FACTOR :	0.898	0.949	0.853	0.250	0.890	0.918	0.883	0.000	0.879	0.915	0.783	0.000	0.806	0.963	0.698	0.000	0.974
	0.961				0.946				0.931				0.961				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Burbank Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-006
Date: 9/10/2019

Bikes

NS/EW Streets:	Vineland Ave				Vineland Ave				Burbank Blvd				Burbank Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	2	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
7:45 AM	1	0	0	0	1	6	0	0	0	1	0	0	0	0	1	0	10
8:00 AM	0	0	0	0	0	1	0	0	4	1	0	0	0	0	0	0	6
8:15 AM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	3
8:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4
9:00 AM	1	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	5
9:15 AM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6
9:30 AM	0	0	0	0	0	2	1	0	0	2	0	0	0	0	0	0	5
9:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	6	0	0	1	18	1	0	4	7	2	0	1	2	1	0	47
APPROACH %'s :	40.00%	60.00%	0.00%	0.00%	5.00%	90.00%	5.00%	0.00%	30.77%	53.85%	15.38%	0.00%	25.00%	50.00%	25.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	3	1	0	0	1	7	0	0	4	2	1	0	1	0	1	0	21
PEAK HR FACTOR :	0.375	0.250	0.000	0.000	0.250	0.292	0.000	0.000	0.250	0.500	0.250	0.000	0.250	0.000	0.250	0.000	0.525
	0.500				0.286				0.350				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	2	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	2	0	0	0	3	0	0	0	3	0	0	0	1	0	0	9
3:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3
3:30 PM	1	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	4
3:45 PM	1	1	3	0	0	0	0	0	0	1	1	0	1	0	1	0	9
4:00 PM	2	1	0	0	0	2	0	0	1	1	0	0	2	1	0	0	10
4:15 PM	1	0	0	0	0	2	0	0	0	0	0	0	1	3	0	0	7
4:30 PM	0	1	0	0	0	2	0	0	0	1	2	0	0	0	0	0	6
4:45 PM	0	1	0	0	2	0	0	0	0	0	1	0	0	0	0	0	4
5:00 PM	0	5	0	0	0	0	0	0	0	0	1	0	1	2	0	0	9
5:15 PM	0	0	1	0	0	1	0	0	1	2	0	0	0	1	0	0	6
5:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	16	4	0	3	12	0	0	2	10	5	0	6	8	1	0	72
APPROACH %'s :	20.00%	64.00%	16.00%	0.00%	20.00%	80.00%	0.00%	0.00%	11.76%	58.82%	29.41%	0.00%	40.00%	53.33%	6.67%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	8	1	0	1	2	0	0	1	2	1	0	1	3	0	0	20
PEAK HR FACTOR :	0.00	0.400	0.250	0.000	0.250	0.500	0.000	0.000	0.250	0.250	0.250	0.000	0.250	0.375	0.000	0.000	0.556
	0.450				0.750				0.333				0.333				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Burbank Blvd
City: North Hollywood

Project ID: 19-05537-006
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Vineland Ave		Vineland Ave		Burbank Blvd		Burbank Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	6	3	1	1	0	0	9	20
7:15 AM	2	3	2	3	3	2	4	18	37
7:30 AM	2	7	2	9	3	8	5	26	62
7:45 AM	3	15	4	12	5	13	5	64	121
8:00 AM	0	11	5	2	7	4	1	13	43
8:15 AM	2	2	4	3	3	3	0	2	19
8:30 AM	1	0	2	5	3	5	1	5	22
8:45 AM	5	2	6	3	5	3	2	3	29
9:00 AM	2	4	2	0	2	2	2	2	16
9:15 AM	1	5	6	2	1	2	0	5	22
9:30 AM	5	5	3	5	3	5	1	5	32
9:45 AM	3	3	8	2	4	4	1	6	31
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	26	63	47	47	40	51	22	158	454
APPROACH %'s :	29.21%	70.79%	50.00%	50.00%	43.96%	56.04%	12.22%	87.78%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	7	35	15	26	18	28	11	105	245
PEAK HR FACTOR :	0.583	0.583	0.750	0.542	0.643	0.538	0.550	0.410	0.506
	0.583		0.641		0.639		0.420		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	4	2	8	7	5	4	6	6	42
3:15 PM	1	4	2	2	1	1	5	2	18
3:30 PM	3	2	9	2	3	3	2	3	27
3:45 PM	3	5	1	0	2	1	0	3	15
4:00 PM	3	2	7	3	2	5	5	1	28
4:15 PM	1	3	2	0	1	0	1	3	11
4:30 PM	2	2	2	3	0	1	6	0	16
4:45 PM	3	6	5	2	8	3	9	0	36
5:00 PM	3	8	5	3	2	1	7	2	31
5:15 PM	7	2	6	3	10	5	3	6	42
5:30 PM	12	2	3	0	6	3	2	0	28
5:45 PM	6	4	3	1	1	3	3	5	26
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	48	42	53	26	41	30	49	31	320
APPROACH %'s :	53.33%	46.67%	67.09%	32.91%	57.75%	42.25%	61.25%	38.75%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	28	16	17	7	19	12	15	13	127
PEAK HR FACTOR :	0.583	0.500	0.708	0.583	0.475	0.600	0.536	0.542	0.756
	0.786		0.667		0.517		0.778		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Cumpston St
City: North Hollywood
Control: 1-Way Stop (EB)

Project ID: 19-05537-007
Date: 9/10/2019

Total

NS/EW Streets:	Tujunga Ave				Tujunga Ave				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	24	0	0	0	85	6	0	1	0	14	0	0	0	0	0	131
7:15 AM	1	41	0	0	0	111	9	0	0	0	10	0	0	0	0	0	172
7:30 AM	6	46	0	0	0	103	9	0	3	0	18	0	0	0	0	0	185
7:45 AM	13	53	0	0	0	73	8	0	2	0	12	0	0	0	1	0	162
8:00 AM	7	68	0	0	0	98	7	0	2	0	13	0	0	0	2	0	197
8:15 AM	2	56	0	2	0	92	9	0	1	0	11	0	0	0	1	0	174
8:30 AM	2	31	0	0	0	77	4	1	3	0	18	0	0	0	0	0	136
8:45 AM	2	27	0	0	1	85	7	0	4	0	8	0	0	0	0	0	134
9:00 AM	2	41	0	0	0	93	2	0	2	0	8	0	0	0	0	0	148
9:15 AM	2	24	0	0	0	75	6	0	0	0	11	0	0	0	0	0	118
9:30 AM	1	25	0	0	0	83	5	1	1	0	7	0	0	0	0	0	123
9:45 AM	1	26	1	1	0	90	3	0	3	0	15	0	0	0	0	0	140
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	40	462	1	3	1	1065	75	2	22	0	145	0	0	0	4	0	1820
APPROACH %'s :	7.91%	91.30%	0.20%	0.59%	0.09%	93.18%	6.56%	0.17%	13.17%	0.00%	86.83%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	28	223	0	2	0	366	33	0	8	0	54	0	0	0	4	0	718
PEAK HR FACTOR :	0.538	0.820	0.000	0.250	0.000	0.888	0.917	0.000	0.667	0.000	0.750	0.000	0.000	0.000	0.500	0.000	0.911
	0.843				0.891				0.738				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	6	39	0	0	0	70	5	0	3	0	6	0	1	0	0	0	130
3:15 PM	8	32	0	1	0	60	7	0	4	0	2	0	1	0	1	0	116
3:30 PM	8	53	0	1	0	59	6	0	0	0	6	0	1	0	1	0	135
3:45 PM	3	46	1	1	0	81	1	0	1	0	2	0	0	0	1	0	137
4:00 PM	7	44	1	0	0	70	5	0	1	0	4	0	1	0	0	0	133
4:15 PM	3	47	0	0	0	64	8	0	1	0	5	0	2	0	0	0	130
4:30 PM	12	46	0	0	0	65	5	0	1	0	1	0	0	0	0	0	130
4:45 PM	7	44	0	0	0	73	4	0	3	0	7	0	0	0	0	0	138
5:00 PM	2	58	0	0	0	79	11	0	0	0	10	0	0	0	1	0	161
5:15 PM	7	54	1	1	0	62	10	0	3	0	8	0	0	0	0	0	146
5:30 PM	9	58	0	0	0	65	17	0	8	0	6	0	0	0	0	0	163
5:45 PM	8	58	0	0	0	77	11	0	1	0	10	0	1	0	0	0	166
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	80	579	3	4	0	825	90	0	26	0	67	0	7	0	4	0	1685
APPROACH %'s :	12.01%	86.94%	0.45%	0.60%	0.00%	90.16%	9.84%	0.00%	27.96%	0.00%	72.04%	0.00%	63.64%	0.00%	36.36%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	26	228	1	1	0	283	49	0	12	0	34	0	1	0	1	0	636
PEAK HR FACTOR :	0.722	0.983	0.250	0.250	0.000	0.896	0.721	0.000	0.375	0.000	0.850	0.000	0.250	0.000	0.250	0.000	0.958
	0.955				0.922				0.821				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Cumpston St
City: North Hollywood
Control: 1-Way Stop (EB)

Project ID: 19-05537-007
Date: 9/10/2019

Bikes

NS/EW Streets:	Tujunga Ave				Tujunga Ave				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	2	0	0	0	2	0	0	0	0	1	0	0	0	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
9:15 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
9:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
9:45 AM	0	1	0	0	0	2	1	0	0	0	1	0	0	0	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	0	0	0	16	1	0	1	0	5	0	0	0	0	0	28
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	94.12%	5.88%	0.00%	16.67%	0.00%	83.33%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	3	0	0	0	5	0	0	0	0	1	0	0	0	0	0	9
PEAK HR FACTOR :	0.000	0.375	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.450
	0.375				0.625				0.250								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
3:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	8	1	0	0	8	1	0	0	0	1	0	0	0	0	0	20
APPROACH %'s :	10.00%	80.00%	10.00%	0.00%	0.00%	88.89%	11.11%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	5	1	0	0	0	1	0	0	0	0	0	8
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.417	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.667
	0.250				0.500				0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Cumpston St
City: North Hollywood

Project ID: 19-05537-007
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Tujunga Ave		Tujunga Ave		Cumpston St		Cumpston St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	0	1	1	0	0	1	1	5
7:15 AM	1	0	1	1	0	0	1	1	5
7:30 AM	0	0	3	0	0	0	0	11	14
7:45 AM	0	2	1	0	0	0	2	3	8
8:00 AM	0	2	3	0	1	0	3	4	13
8:15 AM	2	0	3	0	0	0	2	8	15
8:30 AM	1	0	4	0	1	2	1	5	14
8:45 AM	1	2	0	0	1	1	1	2	8
9:00 AM	0	1	2	0	3	1	3	3	13
9:15 AM	0	0	1	0	2	1	3	1	8
9:30 AM	0	1	1	0	0	1	2	2	7
9:45 AM	0	1	1	1	0	1	1	7	12
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	9	21	3	8	7	20	48	122
APPROACH %'s :	40.00%	60.00%	87.50%	12.50%	53.33%	46.67%	29.41%	70.59%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	2	4	10	0	1	0	7	26	50
PEAK HR FACTOR :	0.250	0.500	0.833		0.250		0.583	0.591	0.833
	0.750		0.833		0.250		0.750		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	1	1	0	1	0	0	3	4	10
3:15 PM	0	0	0	0	0	1	4	5	10
3:30 PM	0	0	0	0	0	1	1	2	4
3:45 PM	0	3	0	1	1	2	2	0	9
4:00 PM	1	1	1	0	1	0	1	2	7
4:15 PM	0	0	0	0	0	0	3	1	4
4:30 PM	0	0	0	0	2	0	0	0	2
4:45 PM	0	1	1	1	0	3	0	1	7
5:00 PM	1	3	0	0	1	5	3	3	16
5:15 PM	0	1	0	1	1	2	0	8	13
5:30 PM	1	1	0	2	1	3	2	1	11
5:45 PM	2	3	0	2	4	3	2	2	18
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	14	2	8	11	20	21	29	111
APPROACH %'s :	30.00%	70.00%	20.00%	80.00%	35.48%	64.52%	42.00%	58.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	4	8	0	5	7	13	7	14	58
PEAK HR FACTOR :	0.500	0.667		0.625	0.438	0.650	0.583	0.438	0.806
	0.600		0.625		0.714		0.656		

City Of Los Angeles
Department Of Transportation

MANUAL TRAFFIC COUNT SUMMARY

STREET:
North/South TUJUNGA AV

East/West CUMPSTON ST

Day: THURSDAY Date: April 3, 2008 Weather: SUNNY

Hours: 7-10AM 3-6PM Chekrs: LEE

School Day: YES District: EAST VALLEY I/S CODE 44409

	N/B	S/B	E/B	W/B
DUAL-WHEELED	29	39	0	1
BIKES	19	39	4	3
BUSES	0	0	0	0

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	70	7.45	199	7.15	14	7.45	18	8.00
PM PK 15 MIN	85	3.45	99	3.30	14	4.30	20	4.45
AM PK HOUR	207	7.15	690	7.00	46	7.15	50	7.45
PM PK HOUR	301	3.15	351	3.00	46	3.45	67	4.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	21	28	138	187
8-9	26	26	72	124
9-10	6	44	47	97
3-4	34	76	157	267
4-5	34	70	148	252
5-6	46	63	116	225
TOTAL	167	307	678	1152

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	18	654	18	690
8-9	32	400	19	451
9-10	20	308	7	335
3-4	19	327	5	351
4-5	21	255	8	284
5-6	16	294	7	317
TOTAL	126	2238	64	2428

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
877	1	0	6	1
575	5	0	7	0
432	7	0	8	0
618	5	0	7	1
536	8	2	4	1
542	8	1	4	0
3580	34	3	36	3

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	1	3	37	41
8-9	2	4	29	35
9-10	1	4	25	30
3-4	0	3	29	32
4-5	0	8	33	41
5-6	0	6	25	31
TOTAL	4	28	178	210

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	28	6	6	40
8-9	31	6	12	49
9-10	31	0	7	38
3-4	37	1	10	48
4-5	42	5	13	60
5-6	36	6	9	51
TOTAL	205	24	57	286

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
81	15	11	16	3
84	21	0	5	0
68	14	0	7	0
80	37	5	4	1
101	60	25	12	1
82	31	4	2	0
496	178	45	46	5

(Rev Oct 06)

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Cumpston St
City: North Hollywood
Control: Signalized

Project ID: 19-05537-009
Date: 9/10/2019

Total

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	62	12	0	73	311	2	0	12	11	5	0	8	7	17	0	521
7:15 AM	1	54	13	0	80	287	3	0	23	10	7	0	10	12	29	0	529
7:30 AM	5	80	9	0	56	265	6	0	31	15	10	0	25	8	39	0	549
7:45 AM	2	125	22	0	74	285	3	0	24	27	8	0	13	9	32	0	624
8:00 AM	7	126	25	0	45	296	2	0	32	28	9	0	10	7	26	0	613
8:15 AM	3	87	10	1	58	298	3	1	21	17	14	0	6	11	23	0	553
8:30 AM	3	78	13	0	57	279	2	0	17	11	12	1	9	7	29	0	518
8:45 AM	3	83	10	1	46	265	3	0	12	8	9	0	10	10	31	0	491
9:00 AM	2	86	20	0	33	269	6	0	17	12	12	0	5	5	11	0	478
9:15 AM	2	97	9	0	35	299	1	0	12	7	16	0	7	5	27	0	517
9:30 AM	5	89	6	0	25	278	3	0	8	7	6	0	7	10	21	0	465
9:45 AM	2	91	4	0	15	191	5	0	10	7	11	0	6	6	20	0	368
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	36	1058	153	2	597	3323	39	1	219	160	119	1	116	97	305	0	6226
APPROACH %'s :	2.88%	84.71%	12.25%	0.16%	15.08%	83.91%	0.98%	0.03%	43.89%	32.06%	23.85%	0.20%	22.39%	18.73%	58.88%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	17	418	66	1	233	1144	14	1	108	87	41	0	54	35	120	0	2339
PEAK HR FACTOR :	0.607	0.829	0.660	0.250	0.787	0.960	0.583	0.250	0.844	0.777	0.732	0.000	0.540	0.795	0.769	0.000	0.937
	0.794				0.961				0.855				0.726				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	5	134	10	1	25	122	7	0	19	12	6	0	6	15	26	0	388
3:15 PM	3	151	6	0	19	146	8	1	20	6	10	0	7	5	33	0	415
3:30 PM	3	171	5	0	22	117	1	1	28	18	6	0	9	8	40	0	429
3:45 PM	3	134	8	0	13	121	8	1	22	12	8	0	4	10	30	1	375
4:00 PM	3	151	11	0	22	118	3	0	19	13	6	0	2	9	36	0	393
4:15 PM	5	225	13	0	18	129	4	0	28	10	6	0	14	20	41	0	513
4:30 PM	4	172	10	0	29	133	5	1	25	17	9	0	10	19	50	0	484
4:45 PM	3	221	13	0	19	137	6	0	23	9	6	0	12	18	67	0	534
5:00 PM	4	175	11	0	33	111	8	1	31	11	4	0	10	13	46	0	458
5:15 PM	7	175	11	0	44	149	4	0	30	15	6	0	8	19	77	0	545
5:30 PM	4	203	7	0	43	136	3	0	32	20	6	0	14	34	79	0	581
5:45 PM	7	195	13	1	38	145	4	0	30	13	7	0	10	28	95	0	586
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	51	2107	118	2	325	1564	61	5	307	156	80	0	106	198	620	1	5701
APPROACH %'s :	2.24%	92.49%	5.18%	0.09%	16.62%	80.00%	3.12%	0.26%	56.54%	28.73%	14.73%	0.00%	11.46%	21.41%	67.03%	0.11%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	22	748	42	1	158	541	19	1	123	59	23	0	42	94	297	0	2170
PEAK HR FACTOR :	0.786	0.921	0.808	0.250	0.898	0.908	0.594	0.250	0.961	0.738	0.821	0.000	0.750	0.691	0.782	0.000	0.926
	0.941				0.912				0.884				0.814				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Cumpston St
City: North Hollywood
Control: Signalized

Project ID: 19-05537-009
Date: 9/10/2019

Bikes

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	2	0	0	0	3	0	0	0	0	1	0	0	0	0	0	7
7:15 AM	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	6
7:30 AM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
7:45 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1	0	6
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0	5
8:30 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	1	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	7
9:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
9:15 AM	1	1	0	0	0	4	0	0	0	1	0	0	0	0	1	0	8
9:30 AM	0	2	0	0	0	5	1	0	0	0	0	0	0	0	0	0	8
9:45 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	12	0	0	1	35	3	0	1	1	1	0	1	1	2	0	61
APPROACH %'s :	20.00%	80.00%	0.00%	0.00%	2.56%	89.74%	7.69%	0.00%	33.33%	33.33%	33.33%	0.00%	25.00%	25.00%	50.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	3	0	0	0	8	0	0	1	0	0	0	1	0	1	0	14
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.583
	0.250				0.500				0.250				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
3:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
4:15 PM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	2	0	7
4:30 PM	1	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	5
4:45 PM	0	0	1	0	0	3	0	0	0	0	0	0	0	0	1	0	5
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	1	4	0	0	0	3	0	0	0	0	1	0	0	1	0	0	10
5:30 PM	0	2	0	0	0	3	0	0	0	0	0	0	2	0	1	0	8
5:45 PM	0	3	0	0	0	3	0	0	0	0	0	0	2	0	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	15	1	0	0	19	0	0	0	1	4	0	5	1	6	0	54
APPROACH %'s :	11.11%	83.33%	5.56%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	20.00%	80.00%	0.00%	41.67%	8.33%	50.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	11	0	0	0	9	0	0	0	0	1	0	4	1	1	0	28
PEAK HR FACTOR :	0.25	0.688	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.250	0.250	0.000	0.700
	0.600				0.750				0.250				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Cumpston St
City: North Hollywood

Project ID: 19-05537-009
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Lankershim Blvd		Lankershim Blvd		Cumpston St		Cumpston St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	1	3	0	4	5	1	5	19
7:15 AM	0	0	0	5	7	14	1	7	34
7:30 AM	1	1	0	1	2	9	1	4	19
7:45 AM	1	0	1	2	7	6	2	6	25
8:00 AM	0	0	1	1	1	11	0	7	21
8:15 AM	1	1	2	6	7	9	2	2	30
8:30 AM	2	2	3	7	10	25	1	7	57
8:45 AM	1	1	2	3	7	18	4	7	43
9:00 AM	1	0	2	1	7	19	0	2	32
9:15 AM	2	1	3	1	2	11	1	8	29
9:30 AM	0	9	2	2	7	12	5	2	39
9:45 AM	1	3	0	1	3	7	2	4	21
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	10	19	19	30	64	146	20	61	369
APPROACH %'s :	34.48%	65.52%	38.78%	61.22%	30.48%	69.52%	24.69%	75.31%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	3	2	4	10	17	35	5	19	95
PEAK HR FACTOR :	0.750	0.500	0.500	0.417	0.607	0.795	0.625	0.679	0.792
	0.625		0.438		0.813		0.750		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	6	2	4	10	9	5	2	38
3:15 PM	2	0	0	2	9	5	4	1	23
3:30 PM	3	0	0	3	9	7	3	1	26
3:45 PM	0	2	2	3	10	5	6	6	34
4:00 PM	2	2	3	3	10	16	3	8	47
4:15 PM	0	0	2	4	12	6	5	3	32
4:30 PM	3	2	2	3	13	10	11	1	45
4:45 PM	2	6	1	7	16	9	9	8	58
5:00 PM	6	6	4	13	13	11	8	10	71
5:15 PM	4	1	2	4	16	14	12	1	54
5:30 PM	3	5	3	6	16	9	7	6	55
5:45 PM	3	3	1	7	10	6	7	3	40
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	28	33	22	59	144	107	80	50	523
APPROACH %'s :	45.90%	54.10%	27.16%	72.84%	57.37%	42.63%	61.54%	38.46%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	16	15	10	30	55	40	34	20	220
PEAK HR FACTOR :	0.667	0.625	0.625	0.577	0.859	0.714	0.708	0.500	0.775
	0.646		0.588		0.792		0.750		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Elmer Ave & Cumpston St
City: North Hollywood
Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-05537-010
Date: 9/10/2019

Total

NS/EW Streets:	Elmer Ave				Elmer Ave				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	7	0	2	0	8	67	0	2	0	33	3	0	122
7:15 AM	0	0	0	0	9	0	7	0	8	97	0	0	0	38	2	0	161
7:30 AM	0	0	0	0	5	0	17	0	9	78	0	1	0	39	2	0	151
7:45 AM	0	0	0	0	12	0	24	0	18	92	0	0	0	44	5	0	195
8:00 AM	0	0	0	0	4	0	2	0	34	77	0	1	0	45	1	0	164
8:15 AM	0	0	0	0	7	0	2	0	12	68	0	0	0	30	5	0	124
8:30 AM	0	0	0	0	13	0	5	0	15	73	0	0	0	38	2	0	146
8:45 AM	0	0	0	0	7	0	8	0	5	68	0	0	0	40	4	0	132
9:00 AM	0	0	0	0	6	0	7	0	8	38	0	0	0	23	7	0	89
9:15 AM	0	0	0	0	2	0	1	0	8	52	0	0	0	31	3	0	97
9:30 AM	0	0	0	0	6	0	5	0	7	42	0	1	0	35	2	0	98
9:45 AM	0	0	0	0	4	0	6	1	9	19	0	1	0	21	2	0	63
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	82	0	86	1	141	771	0	6	0	417	38	0	1542
APPROACH %'s :					48.52%	0.00%	50.89%	0.59%	15.36%	83.99%	0.00%	0.65%	0.00%	91.65%	8.35%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	30	0	50	0	69	344	0	2	0	166	10	0	671
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.000	0.521	0.000	0.507	0.887	0.000	0.500	0.000	0.922	0.500	0.000	0.860
					0.556				0.926				0.898				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	3	0	9	0	12	35	0	0	0	33	4	0	96
3:15 PM	0	0	0	0	3	0	8	0	7	21	0	3	0	32	3	0	77
3:30 PM	0	0	0	0	2	0	7	0	8	29	0	0	0	45	3	0	94
3:45 PM	0	0	0	0	2	0	10	0	14	22	0	0	0	46	3	0	97
4:00 PM	0	0	0	0	2	0	7	0	9	31	0	0	0	36	7	0	92
4:15 PM	0	0	0	0	0	0	11	0	5	34	0	0	0	53	1	0	104
4:30 PM	0	0	0	0	4	0	18	0	13	41	0	1	0	67	7	0	151
4:45 PM	0	0	0	0	4	0	10	0	8	35	0	0	0	78	4	0	139
5:00 PM	0	0	0	0	3	0	11	0	6	47	0	0	0	50	1	0	118
5:15 PM	0	0	0	0	1	0	14	0	13	46	0	1	0	76	0	0	151
5:30 PM	0	0	0	0	4	0	12	0	15	47	0	0	0	141	3	0	222
5:45 PM	0	0	0	0	1	0	10	0	16	57	0	1	0	107	0	0	192
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	29	0	127	0	126	445	0	6	0	764	36	0	1533
APPROACH %'s :					18.59%	0.00%	81.41%	0.00%	21.84%	77.12%	0.00%	1.04%	0.00%	95.50%	4.50%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	9	0	47	0	50	197	0	2	0	374	4	0	683
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.563	0.000	0.839	0.000	0.781	0.864	0.000	0.500	0.000	0.663	0.333	0.000	0.769
					0.875				0.841				0.656				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Elmer Ave & Cumpston St
City: North Hollywood
Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-05537-010
Date: 9/10/2019

Bikes

NS/EW Streets:	Elmer Ave				Elmer Ave				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	5	0	0	0	1	1	0	0	0	4	0	0	11
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	0	0	1	0	0	0	0	1	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.583
					0.625				0.250				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	1	0	0	1	0	0	0	8	3	0	15
APPROACH %'s :					66.67%	0.00%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	72.73%	27.27%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.500
														0.500			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Elmer Ave & Cumpston St
City: North Hollywood

Project ID: 19-05537-010
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Elmer Ave		Elmer Ave		Cumpston St		Cumpston St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	0	0	0	2	5	0	0	8
7:15 AM	0	0	0	0	3	6	0	0	9
7:30 AM	0	0	0	0	0	6	0	2	8
7:45 AM	3	0	0	0	2	9	0	0	14
8:00 AM	0	0	0	0	3	5	0	1	9
8:15 AM	0	0	0	0	0	3	0	0	3
8:30 AM	2	0	0	0	0	4	0	0	6
8:45 AM	2	0	0	0	2	6	0	1	11
9:00 AM	0	0	0	0	0	1	0	1	2
9:15 AM	0	0	0	0	0	2	0	0	2
9:30 AM	1	7	0	0	3	2	0	0	13
9:45 AM	0	4	0	0	2	3	0	3	12
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	9	11	0	0	17	52	0	8	97
APPROACH %'s :	45.00%	55.00%			24.64%	75.36%	0.00%	100.00%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	3	0	0	0	8	26	0	3	40
PEAK HR FACTOR :	0.250				0.667	0.722		0.375	0.714
	0.250				0.773		0.375		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	2	4	0	0	4	2	3	2	17
3:15 PM	2	0	0	0	3	3	0	0	8
3:30 PM	0	0	0	0	6	1	0	0	7
3:45 PM	0	0	0	0	0	0	0	1	1
4:00 PM	1	0	0	0	0	0	0	0	1
4:15 PM	2	2	0	0	2	2	0	0	8
4:30 PM	4	6	0	0	4	1	1	1	17
4:45 PM	1	2	0	0	0	2	0	0	5
5:00 PM	2	2	0	0	4	2	0	0	10
5:15 PM	3	0	0	0	2	2	1	0	8
5:30 PM	3	4	0	0	4	0	0	0	11
5:45 PM	4	0	0	0	0	1	0	0	5
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	24	20	0	0	29	16	5	4	98
APPROACH %'s :	54.55%	45.45%			64.44%	35.56%	55.56%	44.44%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	12	6	0	0	10	5	1	0	34
PEAK HR FACTOR :	0.750	0.375			0.625	0.625	0.250		0.773
	0.643				0.625		0.250		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Klump Ave & Cumpston St
City: North Hollywood
Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-05537-011
Date: 9/10/2019

Total

NS/EW Streets:	Klump Ave				Klump Ave				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	2	0	11	0	8	10	0	0	0	12	4	0	47
7:15 AM	0	0	0	0	2	0	8	0	5	24	0	0	0	20	5	0	64
7:30 AM	0	0	0	0	4	0	10	0	4	16	0	0	0	27	17	0	78
7:45 AM	0	0	0	0	6	0	19	0	14	23	0	0	0	38	14	0	114
8:00 AM	0	0	0	0	1	0	21	0	13	21	0	0	0	25	25	0	106
8:15 AM	0	0	0	0	4	0	5	0	4	23	0	0	0	19	11	1	67
8:30 AM	0	0	0	0	2	0	11	0	5	39	0	2	0	22	11	0	92
8:45 AM	0	0	0	0	8	0	7	0	4	32	0	0	0	26	10	0	87
9:00 AM	0	0	0	0	5	0	8	0	4	27	0	0	0	17	14	0	75
9:15 AM	0	0	0	0	2	0	5	0	5	23	0	0	0	15	6	0	56
9:30 AM	0	0	0	0	1	0	2	0	5	20	0	0	0	25	8	0	61
9:45 AM	0	0	0	0	2	0	8	0	7	10	0	1	0	11	7	0	46
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	39	0	115	0	78	268	0	3	0	257	132	1	893
APPROACH %'s :					25.32%	0.00%	74.68%	0.00%	22.35%	76.79%	0.00%	0.86%	0.00%	65.90%	33.85%	0.26%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	13	0	56	0	36	106	0	2	0	104	61	1	379
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.542	0.000	0.667	0.000	0.643	0.679	0.000	0.250	0.000	0.684	0.610	0.250	0.831
					0.690				0.783				0.798				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	5	0	9	21	0	0	0	23	9	0	67
3:15 PM	0	0	0	0	1	0	2	0	7	14	0	0	0	18	10	0	52
3:30 PM	0	0	0	0	7	0	7	0	5	19	0	0	0	28	7	0	73
3:45 PM	0	0	0	0	1	0	9	0	10	9	0	1	0	23	4	0	57
4:00 PM	0	0	0	0	4	0	5	0	9	18	0	0	0	20	10	1	67
4:15 PM	0	0	0	0	1	0	4	0	6	25	0	0	0	21	8	0	65
4:30 PM	0	0	0	0	6	0	7	0	9	18	0	0	0	31	12	0	83
4:45 PM	0	0	0	0	0	0	8	0	12	21	0	0	0	28	12	0	81
5:00 PM	0	0	0	0	1	0	5	0	8	28	0	0	0	24	6	1	73
5:15 PM	0	0	0	0	0	0	7	0	12	17	0	0	0	28	18	0	82
5:30 PM	0	0	0	0	3	0	10	1	15	28	0	0	0	48	15	0	120
5:45 PM	0	0	0	0	2	0	3	0	17	23	0	1	0	37	11	0	94
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	26	0	72	1	119	241	0	2	0	329	122	2	914
APPROACH %'s :					26.26%	0.00%	72.73%	1.01%	32.87%	66.57%	0.00%	0.55%	0.00%	72.63%	26.93%	0.44%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	6	0	25	1	52	96	0	1	0	137	50	1	369
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.625	0.250	0.765	0.857	0.000	0.250	0.000	0.714	0.694	0.250	0.769
					0.571				0.866				0.746				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Klump Ave & Cumpston St
City: North Hollywood
Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-05537-011
Date: 9/10/2019

Bikes

NS/EW Streets:	Klump Ave				Klump Ave				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	2	0	1	7	0	0	0	3	1	0	15
APPROACH %'s :					33.33%	0.00%	66.67%	0.00%	12.50%	87.50%	0.00%	0.00%	0.00%	75.00%	25.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.500
					0.250				0.375								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	3
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
3:45 PM	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	1	0	1	1	0	0	0	0	1	0	5
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	5	0	2	7	0	0	0	9	2	0	27
APPROACH %'s :					28.57%	0.00%	71.43%	0.00%	22.22%	77.78%	0.00%	0.00%	0.00%	81.82%	18.18%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	0	2	0	0	0	3	0	0	7
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.875
					0.500				0.500				0.375				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Klump Ave & Cumpston St
City: North Hollywood

Project ID: 19-05537-011
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Klump Ave		Klump Ave		Cumpston St		Cumpston St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	1	0	0	0	3	0	1	6
7:15 AM	2	1	0	0	2	2	0	4	11
7:30 AM	0	0	0	0	2	9	1	2	14
7:45 AM	2	2	0	0	3	2	0	0	9
8:00 AM	1	0	0	0	4	4	0	4	13
8:15 AM	0	1	0	0	1	8	0	0	10
8:30 AM	0	1	0	0	2	4	0	0	7
8:45 AM	3	0	0	0	0	5	0	3	11
9:00 AM	0	0	0	0	1	7	0	5	13
9:15 AM	1	1	0	0	0	2	0	4	8
9:30 AM	3	7	0	0	1	5	0	3	19
9:45 AM	0	2	0	0	0	0	0	1	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	13	16	0	0	16	51	1	27	124
APPROACH %'s :	44.83%	55.17%			23.88%	76.12%	3.57%	96.43%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	3	4	0	0	10	18	0	4	39
PEAK HR FACTOR :	0.375	0.500			0.625	0.563		0.250	0.750
	0.438				0.778		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	3	3	0	0	3	4	0	3	16
3:15 PM	2	0	0	0	5	2	1	0	10
3:30 PM	0	0	0	0	4	1	4	1	10
3:45 PM	3	2	0	0	1	4	0	0	10
4:00 PM	1	1	0	0	2	1	1	2	8
4:15 PM	1	1	0	0	2	1	0	1	6
4:30 PM	7	3	0	0	2	1	1	0	14
4:45 PM	0	3	0	0	6	1	2	0	12
5:00 PM	1	0	0	0	3	6	0	2	12
5:15 PM	4	0	0	0	2	2	3	1	12
5:30 PM	2	2	0	0	5	2	1	2	14
5:45 PM	4	1	0	0	4	3	3	1	16
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	28	16	0	0	39	28	16	13	140
APPROACH %'s :	63.64%	36.36%			58.21%	41.79%	55.17%	44.83%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	11	3	0	0	14	13	7	6	54
PEAK HR FACTOR :	0.688	0.375			0.700	0.542	0.583	0.750	0.844
	0.700				0.750		0.813		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bonner Ave/ Fair Ave & Cumpston St
City: North Hollywood
Control: 2-Way Stop (NB/SB)

Project ID: 19-05537-012
Date: 9/10/2019

Total

NS/EW Streets:	Bonner Ave/ Fair Ave				Bonner Ave/ Fair Ave				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	1	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	8	1	2	0	0	4	6	0	0	0	20	0	5	2	0	0	48
7:15 AM	16	0	2	0	3	6	9	0	0	1	23	0	7	13	0	0	80
7:30 AM	24	0	2	0	0	24	9	0	0	0	25	0	12	21	0	0	117
7:45 AM	23	0	0	0	2	10	6	0	0	6	21	0	12	9	0	0	89
8:00 AM	23	2	7	0	1	3	8	0	0	3	24	0	9	21	3	0	104
8:15 AM	10	0	5	0	0	2	5	0	0	2	27	0	2	11	2	0	66
8:30 AM	15	0	4	0	1	4	4	0	0	4	45	0	12	16	3	0	108
8:45 AM	13	0	2	1	1	1	7	0	1	4	27	0	17	15	2	0	91
9:00 AM	5	0	2	0	4	4	8	0	1	3	30	0	11	8	2	0	78
9:15 AM	8	1	3	0	0	6	7	0	0	4	18	0	5	6	0	0	58
9:30 AM	8	1	3	0	1	7	8	0	0	3	13	0	6	10	2	0	62
9:45 AM	4	0	3	0	0	7	5	0	0	2	10	0	5	10	0	0	46
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	157	5	35	1	13	78	82	0	2	32	283	0	103	142	14	0	947
APPROACH %'s :	79.29%	2.53%	17.68%	0.51%	7.51%	45.09%	47.40%	0.00%	0.63%	10.09%	89.27%	0.00%	39.77%	54.83%	5.41%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	86	2	11	0	6	43	32	0	0	10	93	0	40	64	3	0	390
PEAK HR FACTOR :	0.896	0.250	0.393	0.000	0.500	0.448	0.889	0.000	0.000	0.417	0.930	0.000	0.833	0.762	0.250	0.000	0.833
	0.773				0.614				0.954				0.811				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	1	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	13	1	4	1	1	4	9	0	0	3	16	0	6	10	0	0	68
3:15 PM	11	1	8	2	1	3	6	0	0	5	15	0	6	13	0	0	71
3:30 PM	16	1	2	0	1	3	11	0	0	1	18	0	4	8	0	0	65
3:45 PM	14	1	3	0	0	0	5	0	1	4	7	0	7	11	0	0	53
4:00 PM	17	3	4	0	0	4	5	0	1	4	16	0	6	7	1	0	68
4:15 PM	13	3	5	0	1	5	11	0	0	7	19	0	5	9	1	0	79
4:30 PM	20	1	7	0	0	5	11	0	0	8	21	0	1	18	0	0	92
4:45 PM	21	2	7	0	0	5	7	0	0	1	18	0	8	9	0	2	80
5:00 PM	21	1	3	0	1	4	6	0	0	5	21	0	10	10	0	0	82
5:15 PM	29	4	4	0	0	5	10	0	0	5	14	0	11	12	0	0	94
5:30 PM	42	3	3	0	1	4	12	0	1	4	24	0	13	8	0	0	115
5:45 PM	40	0	6	0	1	6	7	0	1	4	23	0	8	10	1	0	107
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	257	21	56	3	7	48	100	0	4	51	212	0	85	125	3	2	974
APPROACH %'s :	76.26%	6.23%	16.62%	0.89%	4.52%	30.97%	64.52%	0.00%	1.50%	19.10%	79.40%	0.00%	39.53%	58.14%	1.40%	0.93%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	132	8	16	0	3	19	35	0	2	18	82	0	42	40	1	0	398
PEAK HR FACTOR :	0.786	0.500	0.667	0.000	0.750	0.792	0.729	0.000	0.500	0.900	0.854	0.000	0.808	0.833	0.250	0.000	0.865
	0.813				0.838				0.879				0.902				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bonner Ave/ Fair Ave & Cumpston St
City: North Hollywood
Control: 2-Way Stop (NB/SB)

Project ID: 19-05537-012
Date: 9/10/2019

Bikes

NS/EW Streets:	Bonner Ave/ Fair Ave				Bonner Ave/ Fair Ave				Cumpston St				Cumpston St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	1	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3
7:30 AM	0	0	1	0	0	1	1	0	0	1	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
9:15 AM	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4
9:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
9:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	2	1	0	0	2	1	0	0	1	5	0	8	0	0	0	22
APPROACH %'s :	40.00%	40.00%	20.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	16.67%	83.33%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	1	1	0	0	1	2	0	2	0	0	0	8
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.250	0.000	0.500	0.000	0.000	0.000	0.500
	0.250				0.250				0.375				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	1	0	0	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	1	0	0	0	0	2	0	1	1	0	0	5
3:15 PM	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:45 PM	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
4:00 PM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3
5:00 PM	0	0	1	0	0	0	0	0	1	0	1	0	0	1	0	0	4
5:15 PM	1	1	1	0	0	2	0	0	0	1	0	0	0	0	0	0	6
5:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	4	4	1	0	7	1	0	1	2	5	0	1	2	0	0	35
APPROACH %'s :	43.75%	25.00%	25.00%	6.25%	0.00%	87.50%	12.50%	0.00%	12.50%	25.00%	62.50%	0.00%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	2	2	0	0	3	1	0	1	1	1	0	0	1	0	0	13
PEAK HR FACTOR :	0.25	0.500	0.500	0.000	0.000	0.375	0.250	0.000	0.250	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.542
	0.417				0.500				0.375				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bonner Ave/ Fair Ave & Cumpston St
City: North Hollywood

Project ID: 19-05537-012
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Bonner Ave/ Fair Ave		Bonner Ave/ Fair Ave		Cumpston St		Cumpston St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	0	2	6	2	4	0	2	17
7:15 AM	7	3	3	9	5	7	0	4	38
7:30 AM	11	4	3	16	4	12	1	1	52
7:45 AM	5	5	9	8	8	2	1	1	39
8:00 AM	3	3	6	3	7	5	3	2	32
8:15 AM	2	0	1	5	0	6	2	1	17
8:30 AM	6	3	1	9	3	6	2	1	31
8:45 AM	6	5	0	3	1	5	2	4	26
9:00 AM	0	3	3	1	4	1	0	3	15
9:15 AM	4	5	1	6	0	3	0	1	20
9:30 AM	3	1	2	2	4	1	2	1	16
9:45 AM	2	4	2	1	4	3	2	3	21
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	50	36	33	69	42	55	15	24	324
APPROACH %'s :	58.14%	41.86%	32.35%	67.65%	43.30%	56.70%	38.46%	61.54%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	26	15	21	36	24	26	5	8	161
PEAK HR FACTOR :	0.591	0.750	0.583	0.563	0.750	0.542	0.417	0.500	0.774
	0.683		0.750		0.781		0.650		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	2	6	9	10	7	4	1	2	41
3:15 PM	3	0	2	1	1	1	0	0	8
3:30 PM	2	1	5	1	3	1	4	1	18
3:45 PM	4	2	4	6	5	1	1	1	24
4:00 PM	4	5	5	4	5	4	0	1	28
4:15 PM	6	5	3	5	7	6	2	5	39
4:30 PM	2	5	1	3	4	1	1	0	17
4:45 PM	4	7	5	7	6	4	1	0	34
5:00 PM	1	1	1	5	1	3	2	2	16
5:15 PM	7	2	2	2	2	2	4	1	22
5:30 PM	4	1	10	3	6	4	1	0	29
5:45 PM	4	3	9	3	6	2	1	1	29
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	43	38	56	50	53	33	18	14	305
APPROACH %'s :	53.09%	46.91%	52.83%	47.17%	61.63%	38.37%	56.25%	43.75%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	16	7	22	13	15	11	8	4	96
PEAK HR FACTOR :	0.571	0.583	0.550	0.650	0.625	0.688	0.500	0.500	0.828
	0.639		0.673		0.650		0.600		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Colfax Ave & Chandler Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-014
Date: 9/10/2019

Total

NS/EW Streets:	Colfax Ave				Colfax Ave				Chandler Blvd				Chandler Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	6	69	10	0	9	124	9	0	9	85	28	5	21	44	2	2	423
7:15 AM	20	83	15	0	13	111	2	0	21	101	68	9	32	57	11	8	551
7:30 AM	21	109	16	0	25	113	8	0	23	168	61	16	25	91	22	10	708
7:45 AM	20	104	20	0	25	119	3	0	20	184	53	8	30	110	26	12	734
8:00 AM	25	106	20	0	29	113	6	0	23	225	27	6	15	71	11	13	690
8:15 AM	17	60	11	0	31	122	5	0	16	233	26	0	5	57	10	13	606
8:30 AM	12	62	13	0	32	105	14	0	16	192	24	2	7	42	10	4	535
8:45 AM	8	76	11	0	33	125	10	0	13	199	28	0	6	41	7	6	563
9:00 AM	4	46	9	0	22	107	12	0	14	207	16	3	7	37	12	3	499
9:15 AM	9	33	6	0	30	111	7	0	13	141	34	2	7	46	5	4	448
9:30 AM	8	64	11	0	21	128	7	0	6	129	33	2	7	28	9	2	455
9:45 AM	10	53	8	0	29	111	5	0	10	99	27	0	4	31	7	5	399
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	160	865	150	0	299	1389	88	0	184	1963	425	53	166	655	132	82	6611
APPROACH %'s :	13.62%	73.62%	12.77%	0.00%	16.84%	78.21%	4.95%	0.00%	7.01%	74.78%	16.19%	2.02%	16.04%	63.29%	12.75%	7.92%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	83	379	67	0	110	467	22	0	82	810	167	30	75	329	69	48	2738
PEAK HR FACTOR :	0.830	0.869	0.838	0.000	0.887	0.957	0.688	0.000	0.891	0.869	0.684	0.469	0.625	0.748	0.663	0.923	0.933
	0.876				0.948				0.969				0.732				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	13	93	10	0	5	46	14	0	14	67	24	2	4	37	16	3	348
3:15 PM	12	102	6	0	5	59	19	0	20	82	25	2	7	48	6	5	398
3:30 PM	11	111	21	0	10	56	8	0	22	84	15	3	3	71	9	2	426
3:45 PM	14	91	9	0	8	51	10	0	19	69	14	3	7	66	6	1	368
4:00 PM	18	139	10	0	6	81	8	0	21	81	17	1	6	38	13	2	441
4:15 PM	18	123	15	0	11	70	13	0	19	71	22	2	8	66	13	3	454
4:30 PM	18	132	14	0	4	85	17	0	22	111	16	4	9	60	10	1	503
4:45 PM	29	104	15	0	4	81	9	0	15	81	25	4	7	67	14	3	458
5:00 PM	10	120	9	0	9	82	11	0	26	105	25	9	2	62	18	2	490
5:15 PM	19	116	18	0	15	76	11	0	16	110	18	2	9	98	12	1	521
5:30 PM	32	126	8	0	11	79	13	0	28	97	37	4	7	110	9	1	562
5:45 PM	27	127	19	0	7	75	16	0	25	96	26	3	6	105	11	2	545
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	221	1384	154	0	95	841	149	0	247	1054	264	39	75	828	137	26	5514
APPROACH %'s :	12.56%	78.68%	8.75%	0.00%	8.76%	77.51%	13.73%	0.00%	15.40%	65.71%	16.46%	2.43%	7.04%	77.67%	12.85%	2.44%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	88	489	54	0	42	312	51	0	95	408	106	18	24	375	50	6	2118
PEAK HR FACTOR :	0.688	0.963	0.711	0.000	0.700	0.951	0.797	0.000	0.848	0.927	0.716	0.500	0.667	0.852	0.694	0.750	0.942
	0.912				0.983				0.944				0.896				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Colfax Ave & Chandler Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-014
Date: 9/10/2019

Bikes

NS/EW Streets:	Colfax Ave				Colfax Ave				Chandler Blvd				Chandler Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	2	1	0	0	6
7:30 AM	0	1	0	0	1	9	1	0	0	2	0	0	0	1	0	0	15
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	3	0	1	6
8:00 AM	0	0	1	0	1	2	0	0	0	2	0	0	0	1	0	0	7
8:15 AM	1	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	4
8:30 AM	0	1	0	0	0	1	0	0	0	5	1	0	0	0	0	0	8
8:45 AM	0	0	0	0	0	0	0	0	0	4	1	0	0	2	0	0	7
9:00 AM	0	0	0	0	0	1	1	0	0	4	0	0	0	1	0	0	7
9:15 AM	0	0	1	0	1	0	0	0	1	1	0	0	0	1	0	0	5
9:30 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	4
9:45 AM	0	0	0	0	0	1	0	0	0	2	0	0	0	3	1	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	2	2	0	3	16	3	0	1	29	3	0	3	15	1	1	80
APPROACH %'s :	20.00%	40.00%	40.00%	0.00%	13.64%	72.73%	13.64%	0.00%	3.03%	87.88%	9.09%	0.00%	15.00%	75.00%	5.00%	5.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	1	1	0	2	12	1	0	0	7	0	0	1	5	0	1	32
PEAK HR FACTOR :	0.250	0.250	0.250	0.000	0.500	0.333	0.250	0.000	0.000	0.875	0.000	0.000	0.250	0.417	0.000	0.250	0.533
	0.750				0.341				0.875				0.350				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	3	0	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	4
3:15 PM	1	0	0	0	0	1	0	0	0	3	1	0	0	1	0	0	7
3:30 PM	0	1	0	0	0	0	0	0	0	3	0	0	0	1	0	0	5
3:45 PM	0	1	1	0	1	2	1	0	0	4	0	0	0	2	0	0	12
4:00 PM	0	0	0	0	0	1	0	0	1	3	0	0	0	4	1	0	10
4:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	1	2	1	0	8
4:30 PM	1	2	3	0	0	0	0	0	0	1	0	0	1	0	1	0	9
4:45 PM	1	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	5
5:00 PM	1	0	0	0	1	0	0	0	0	4	0	0	0	4	0	0	10
5:15 PM	0	0	2	0	0	0	0	0	0	3	0	0	0	5	0	0	10
5:30 PM	1	0	0	0	0	0	0	0	0	3	2	0	0	1	1	0	8
5:45 PM	0	1	0	0	0	0	0	0	0	6	1	0	0	3	0	0	11
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	7	6	0	2	4	1	0	1	36	5	0	2	25	4	0	99
APPROACH %'s :	31.58%	36.84%	31.58%	0.00%	28.57%	57.14%	14.29%	0.00%	2.38%	85.71%	11.90%	0.00%	6.45%	80.65%	12.90%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	1	2	0	1	0	0	0	0	16	3	0	0	13	1	0	39
PEAK HR FACTOR :	0.50	0.250	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.667	0.375	0.000	0.000	0.650	0.250	0.000	0.886
	0.625				0.250				0.679				0.700				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Colfax Ave & Chandler Blvd
City: North Hollywood

Project ID: 19-05537-014
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Colfax Ave		Colfax Ave		Chandler Blvd		Chandler Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	1	2	0	3	0	6	12
7:15 AM	0	9	0	12	0	11	1	35	68
7:30 AM	0	17	1	25	1	35	1	77	157
7:45 AM	0	11	3	31	1	28	1	77	152
8:00 AM	3	7	2	3	1	5	1	8	30
8:15 AM	0	1	1	9	1	0	1	1	14
8:30 AM	0	0	1	2	0	1	0	5	9
8:45 AM	0	1	1	2	0	1	1	1	7
9:00 AM	0	0	1	1	0	0	0	0	2
9:15 AM	0	0	1	1	1	1	0	0	4
9:30 AM	1	0	0	1	0	2	0	2	6
9:45 AM	0	1	0	3	0	1	0	2	7
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	4	47	12	92	5	88	6	214	468
APPROACH %'s :	7.84%	92.16%	11.54%	88.46%	5.38%	94.62%	2.73%	97.27%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	3	36	7	68	4	68	4	163	353
PEAK HR FACTOR :	0.250	0.529	0.583	0.548	1.000	0.486	1.000	0.529	0.562
	0.574		0.551		0.500		0.535		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	1	1	2	1	3	0	4	0	12
3:15 PM	1	2	6	0	4	1	9	0	23
3:30 PM	1	0	5	1	1	1	12	2	23
3:45 PM	0	0	2	7	0	0	1	1	11
4:00 PM	0	0	0	2	0	0	1	0	3
4:15 PM	0	2	3	2	2	1	5	1	16
4:30 PM	0	1	2	3	0	0	2	1	9
4:45 PM	1	1	3	2	1	0	4	2	14
5:00 PM	0	3	1	2	1	0	6	1	14
5:15 PM	1	0	5	4	1	4	1	1	17
5:30 PM	0	3	2	1	0	2	1	1	10
5:45 PM	1	1	2	1	0	1	2	1	9
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	14	33	26	13	10	48	11	161
APPROACH %'s :	30.00%	70.00%	55.93%	44.07%	56.52%	43.48%	81.36%	18.64%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	2	7	10	8	2	7	10	4	50
PEAK HR FACTOR :	0.500	0.583	0.500	0.500	0.500	0.438	0.417	1.000	0.735
	0.750		0.500		0.450		0.500		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Chandler Blvd WB
City: North Hollywood
Control: Signalized

Project ID: 19-05537-015
Date: 9/10/2019

Total

NS/EW Streets:	Tujunga Ave				Tujunga Ave				Chandler Blvd WB				Chandler Blvd WB				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	1	0	0	0	0	0	0	0.5	1.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	28	23	0	0	0	74	18	0	0	0	0	0	4	7	6	0	160
7:15 AM	27	35	0	0	0	112	26	0	0	0	0	0	6	17	5	0	228
7:30 AM	46	54	0	0	0	85	11	0	0	0	0	0	8	13	2	0	219
7:45 AM	56	57	0	0	0	97	9	0	0	0	0	0	8	26	7	0	260
8:00 AM	51	67	0	0	0	89	9	1	0	0	0	0	2	19	8	0	246
8:15 AM	38	40	0	0	0	98	6	0	0	0	0	0	6	15	3	0	206
8:30 AM	26	24	0	0	0	76	9	0	0	0	0	0	6	9	5	0	155
8:45 AM	16	27	0	0	0	92	10	0	0	0	0	0	7	3	2	0	157
9:00 AM	33	35	0	0	0	90	5	0	0	0	0	0	13	9	3	0	188
9:15 AM	31	25	0	0	0	89	9	0	0	0	0	0	1	5	3	0	163
9:30 AM	17	18	0	0	0	84	11	0	0	0	0	0	2	3	3	0	138
9:45 AM	23	20	0	0	0	109	9	0	0	0	0	0	3	7	1	0	172
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	392	425	0	0	0	1095	132	1	0	0	0	0	66	133	48	0	2292
APPROACH %'s :	47.98%	52.02%	0.00%	0.00%	0.00%	89.17%	10.75%	0.08%					26.72%	53.85%	19.43%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	180	213	0	0	0	383	55	1	0	0	0	0	24	75	22	0	953
PEAK HR FACTOR :	0.804	0.795	0.000	0.000	0.000	0.855	0.529	0.250	0.000	0.000	0.000	0.000	0.750	0.721	0.688	0.000	0.916
	0.833				0.795								0.738				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	1	0	0	0	0	0	0	0.5	1.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	31	40	0	0	0	66	10	0	0	0	0	0	5	10	6	0	168
3:15 PM	43	41	0	0	0	56	12	0	0	0	0	0	0	4	4	0	160
3:30 PM	48	52	0	0	0	48	11	0	0	0	0	0	3	10	7	0	179
3:45 PM	50	40	0	0	0	69	14	0	0	0	0	0	3	9	2	0	187
4:00 PM	34	48	0	0	0	58	10	0	0	0	0	0	2	6	2	0	160
4:15 PM	59	48	0	0	0	60	11	0	0	0	0	0	3	9	3	0	193
4:30 PM	45	52	0	0	0	54	20	0	0	0	0	0	0	15	4	0	190
4:45 PM	51	52	0	0	0	63	16	0	0	0	0	0	3	14	3	0	202
5:00 PM	51	52	0	0	0	64	13	0	0	0	0	0	3	12	7	0	202
5:15 PM	54	58	0	0	0	68	14	0	0	0	0	0	2	26	4	0	226
5:30 PM	62	64	0	0	0	54	17	0	0	0	0	0	3	10	4	0	214
5:45 PM	65	55	0	0	0	59	26	0	0	0	0	0	6	21	7	0	239
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	593	602	0	0	0	719	174	0	0	0	0	0	33	146	53	0	2320
APPROACH %'s :	49.62%	50.38%	0.00%	0.00%	0.00%	80.52%	19.48%	0.00%					14.22%	62.93%	22.84%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	232	229	0	0	0	245	70	0	0	0	0	0	14	69	22	0	881
PEAK HR FACTOR :	0.892	0.895	0.000	0.000	0.000	0.901	0.673	0.000	0.000	0.000	0.000	0.000	0.583	0.663	0.786	0.000	0.922
	0.915				0.926								0.772				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Chandler Blvd WB
City: North Hollywood
Control: Signalized

Project ID: 19-05537-015
Date: 9/10/2019

Bikes

NS/EW Streets:	Tujunga Ave				Tujunga Ave				Chandler Blvd WB				Chandler Blvd WB				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	1	0	0	0	0	0	0	0.5	1.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	4
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:45 AM	2	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4
8:00 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	1	0	4
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
9:00 AM	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	4
9:15 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
9:45 AM	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	4	0	0	4	17	0	0	0	0	0	0	0	5	1	0	41
APPROACH %'s :	71.43%	28.57%	0.00%	0.00%	19.05%	80.95%	0.00%	0.00%					0.00%	83.33%	16.67%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	3	2	0	0	0	6	0	0	0	0	0	0	0	3	0	0	14
PEAK HR FACTOR :	0.375	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.875
	0.625				0.500								0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	1	0	0	0	0	0	0	0.5	1.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:15 PM	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	4
3:30 PM	1	2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	5
3:45 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	4
4:00 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	5
4:15 PM	3	1	0	0	0	1	0	0	0	0	0	0	1	2	0	0	8
4:30 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
5:00 PM	2	0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	6
5:15 PM	3	0	0	0	0	2	2	0	0	0	0	0	0	1	0	0	8
5:30 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
5:45 PM	2	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	15	7	2	0	0	7	4	0	0	2	1	0	1	13	3	0	55
APPROACH %'s :	62.50%	29.17%	8.33%	0.00%	0.00%	63.64%	36.36%	0.00%	0.00%	66.67%	33.33%	0.00%	5.88%	76.47%	17.65%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	7	1	0	0	0	5	2	0	0	2	1	0	0	5	0	0	23
PEAK HR FACTOR :	0.58	0.250	0.000	0.000	0.000	0.625	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.417	0.000	0.000	0.719
	0.667				0.438				0.375				0.417				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Chandler Blvd WB
City: North Hollywood

Project ID: 19-05537-015
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Tujunga Ave		Tujunga Ave		Chandler Blvd WB		Chandler Blvd WB		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	6	0	3	0	1	1	1	2	14
7:15 AM	1	3	0	0	1	4	1	3	13
7:30 AM	9	2	0	0	2	12	2	21	48
7:45 AM	6	1	0	0	2	7	6	3	25
8:00 AM	8	0	0	1	3	4	3	2	21
8:15 AM	7	2	0	0	1	4	2	5	21
8:30 AM	5	1	2	0	2	6	2	4	22
8:45 AM	6	0	0	1	3	1	3	0	14
9:00 AM	2	0	1	0	1	3	3	3	13
9:15 AM	0	3	0	0	3	1	3	1	11
9:30 AM	1	0	2	0	0	2	2	4	11
9:45 AM	5	4	0	1	3	4	1	4	22
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	56	16	8	3	22	49	29	52	235
APPROACH %'s :	77.78%	22.22%	72.73%	27.27%	30.99%	69.01%	35.80%	64.20%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	24	6	0	1	8	27	12	29	107
PEAK HR FACTOR :	0.667	0.500		0.250	0.667	0.563	0.500	0.345	0.557
	0.682		0.250		0.625		0.446		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	2	1	0	0	0	1	2	0	6
3:15 PM	1	2	1	0	1	0	2	5	12
3:30 PM	0	5	1	0	1	1	0	2	10
3:45 PM	1	4	0	0	4	2	2	2	15
4:00 PM	0	0	0	0	1	1	2	2	6
4:15 PM	0	7	0	0	4	1	3	0	15
4:30 PM	6	0	0	0	2	1	1	4	14
4:45 PM	1	1	0	1	0	0	4	1	8
5:00 PM	3	5	0	2	0	0	3	2	15
5:15 PM	4	5	0	1	3	1	1	5	20
5:30 PM	0	14	0	0	7	0	1	2	24
5:45 PM	0	8	0	0	2	2	3	3	18
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	18	52	2	4	25	10	24	28	163
APPROACH %'s :	25.71%	74.29%	33.33%	66.67%	71.43%	28.57%	46.15%	53.85%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	7	32	0	3	12	3	8	12	77
PEAK HR FACTOR :	0.438	0.571		0.375	0.429	0.375	0.667	0.600	0.802
	0.696		0.375		0.536		0.833		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Chandler Blvd WB
City: North Hollywood
Control: Signalized

Project ID: 19-05537-016
Date: 9/10/2019

Total

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Chandler Blvd WB				Chandler Blvd WB				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	6	89	0	0	0	282	17	0	0	0	0	0	0	0	0	0	394
7:15 AM	6	66	0	0	0	297	16	0	0	0	0	0	0	0	0	0	385
7:30 AM	14	91	0	0	0	284	17	0	0	0	0	0	0	0	0	0	406
7:45 AM	18	144	0	0	0	299	26	0	0	0	0	0	0	0	0	0	487
8:00 AM	19	162	0	0	0	274	11	1	0	0	0	0	0	0	0	0	467
8:15 AM	9	105	0	0	0	323	15	0	0	0	0	0	0	0	0	0	452
8:30 AM	3	98	0	0	0	278	18	0	0	0	0	0	0	0	0	0	397
8:45 AM	2	90	0	0	0	300	11	0	0	0	0	0	0	0	0	0	403
9:00 AM	14	109	0	1	0	256	15	0	0	0	0	0	0	0	0	0	395
9:15 AM	4	119	0	0	0	316	7	0	0	0	0	0	0	0	0	0	446
9:30 AM	4	89	0	1	0	300	3	0	0	0	0	0	0	0	0	0	397
9:45 AM	7	103	0	0	0	218	4	0	0	0	0	0	0	0	0	0	332
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	106	1265	0	2	0	3427	160	1	0	0	0	0	0	0	0	0	4961
APPROACH %'s :	7.72%	92.13%	0.00%	0.15%	0.00%	95.51%	4.46%	0.03%									
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	60	502	0	0	0	1180	69	1	0	0	0	0	0	0	0	0	1812
PEAK HR FACTOR :	0.789	0.775	0.000	0.000	0.000	0.913	0.663	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.930
	0.776				0.925												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	8	160	0	0	0	125	7	0	0	0	0	0	0	0	0	0	300
3:15 PM	10	150	0	0	0	141	3	0	0	0	0	0	0	0	0	0	304
3:30 PM	9	182	0	0	0	139	6	0	0	0	0	0	0	0	0	0	336
3:45 PM	7	147	0	0	0	124	3	0	0	0	0	0	0	0	0	0	281
4:00 PM	11	150	0	0	0	120	4	0	0	0	0	0	0	0	0	0	285
4:15 PM	8	237	0	0	0	138	4	0	0	0	0	0	0	0	0	0	387
4:30 PM	10	217	0	0	0	164	8	1	0	0	0	0	0	0	0	0	400
4:45 PM	5	224	0	0	0	122	13	0	0	0	0	0	0	0	0	0	364
5:00 PM	11	204	0	0	0	139	10	0	0	0	0	0	0	0	0	0	364
5:15 PM	13	185	0	0	0	133	15	0	0	0	0	0	0	0	0	0	346
5:30 PM	11	237	0	0	0	161	11	0	0	0	0	0	0	0	0	0	420
5:45 PM	20	202	0	0	0	133	10	0	0	0	0	0	0	0	0	0	365
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	123	2295	0	0	0	1639	94	1	0	0	0	0	0	0	0	0	4152
APPROACH %'s :	5.09%	94.91%	0.00%	0.00%	0.00%	94.52%	5.42%	0.06%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	34	882	0	0	0	563	35	1	0	0	0	0	0	0	0	0	1515
PEAK HR FACTOR :	0.773	0.930	0.000	0.000	0.000	0.858	0.673	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.947
	0.935				0.866												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Chandler Blvd WB
City: North Hollywood
Control: Signalized

Project ID: 19-05537-016
Date: 9/10/2019

Bikes

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Chandler Blvd WB				Chandler Blvd WB				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3
7:15 AM	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
7:30 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	2	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	6
8:00 AM	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
8:30 AM	0	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	1	0	0	3	8	0	0	0	0	0	0	0	0	1	0	13
9:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:15 AM	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
9:30 AM	0	2	0	0	0	5	0	0	0	0	0	0	0	0	1	0	8
9:45 AM	0	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	8	0	0	7	26	3	0	0	1	1	0	0	0	3	0	55
APPROACH %'s :	42.86%	57.14%	0.00%	0.00%	19.44%	72.22%	8.33%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	3	2	0	0	1	5	0	0	0	1	0	0	0	0	1	0	13
PEAK HR FACTOR :	0.375	0.250	0.000	0.000	0.250	0.625	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.542
	0.313				0.750				0.250				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	4
3:45 PM	0	1	0	0	1	1	0	0	1	0	0	0	1	0	0	0	5
4:00 PM	1	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	5
4:15 PM	1	1	0	0	3	2	1	0	0	1	0	0	0	1	0	0	10
4:30 PM	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4
4:45 PM	1	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5
5:00 PM	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
5:15 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
5:30 PM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	10	0	0	5	19	4	0	2	1	1	0	1	3	0	0	52
APPROACH %'s :	37.50%	62.50%	0.00%	0.00%	17.86%	67.86%	14.29%	0.00%	50.00%	25.00%	25.00%	0.00%	25.00%	75.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	3	5	0	0	3	5	3	0	0	1	1	0	0	1	0	0	22
PEAK HR FACTOR :	0.75	0.625	0.000	0.000	0.250	0.625	0.750	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.550
	1.000				0.458				0.500				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Chandler Blvd WB
City: North Hollywood

Project ID: 19-05537-016
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Lankershim Blvd		Lankershim Blvd		Chandler Blvd WB		Chandler Blvd WB		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	8	7	0	0	0	0	5	29	49
7:15 AM	8	12	0	0	0	0	5	28	53
7:30 AM	7	19	0	0	0	0	4	38	68
7:45 AM	2	21	1	1	0	0	5	33	63
8:00 AM	10	17	0	0	0	0	8	38	73
8:15 AM	9	20	0	0	0	0	8	33	70
8:30 AM	5	18	1	0	0	0	9	34	67
8:45 AM	9	16	0	0	0	0	15	35	75
9:00 AM	6	15	1	0	0	0	6	19	47
9:15 AM	1	14	0	0	0	0	2	22	39
9:30 AM	2	11	1	0	0	0	13	16	43
9:45 AM	2	8	0	0	0	0	7	11	28
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	69	178	4	1	0	0	87	336	675
APPROACH %'s :	27.94%	72.06%	80.00%	20.00%			20.57%	79.43%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	28	77	1	1	0	0	25	142	274
PEAK HR FACTOR :	0.700	0.917	0.250	0.250			0.781	0.934	0.938
	0.905		0.250				0.908		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	7	15	0	2	0	0	11	24	59
3:15 PM	1	7	0	1	0	0	5	11	25
3:30 PM	6	9	0	1	0	0	10	14	40
3:45 PM	8	11	0	2	0	0	19	20	60
4:00 PM	6	13	0	0	0	0	12	23	54
4:15 PM	8	8	0	0	0	0	15	15	46
4:30 PM	4	8	0	1	0	0	9	9	31
4:45 PM	9	16	0	1	0	0	16	23	65
5:00 PM	9	8	0	0	0	0	7	22	46
5:15 PM	8	8	1	0	0	0	7	10	34
5:30 PM	4	6	1	2	0	0	14	10	37
5:45 PM	9	16	0	0	0	0	17	13	55
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	79	125	2	10	0	0	142	194	552
APPROACH %'s :	38.73%	61.27%	16.67%	83.33%			42.26%	57.74%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	30	40	0	2	0	0	47	69	188
PEAK HR FACTOR :	0.833	0.625		0.500			0.734	0.750	0.723
	0.700		0.500				0.744		

Turning Movement Count Report AM

Location ID: 17
North/South: Tujunga Avenue
East/West: Orange Line Busway

Date: 10/22/19
City: North Hollywood, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	1	75	0	0	0	0	0	31	1	0	0	3	111
7:15	0	88	0	0	0	0	0	45	4	0	0	2	139
7:30	0	108	1	0	0	0	0	80	2	0	0	4	195
7:45	0	91	0	0	0	0	0	108	1	1	0	3	204
8:00	0	94	0	0	0	0	2	102	1	0	0	4	203
8:15	0	82	0	0	0	0	2	65	1	0	0	2	152
8:30	0	87	0	0	0	0	0	49	0	0	0	3	139
8:45	0	78	0	0	0	0	1	44	0	0	0	2	125
9:00	0	98	0	0	0	0	0	51	0	0	0	4	153
9:15	0	77	0	0	0	0	0	54	2	0	0	4	137
9:30	0	81	0	0	0	0	0	39	0	0	0	3	123
9:45	0	98	0	0	0	0	1	57	0	0	0	1	157

Total Volume:	1	1057	1	0	0	0	6	725	12	1	0	35	1838
Approach %	0%	100%	0%	0%	0%	0%	1%	98%	2%	3%	0%	97%	

Peak Hr Begin:	7:30												
PHV	0	375	1	0	0	0	4	355	5	1	0	13	754
PHF	0.862			0.000			0.835			0.875			0.924

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 17
North/South: Tujunga Avenue
East/West: Orange Line Busway

Date: 10/22/19
City: North Hollywood, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	0	67	0	0	0	0	0	79	0	0	0	3	149
15:15	0	59	0	0	0	2	0	87	1	0	0	4	153
15:30	0	85	0	0	0	1	0	94	0	0	0	1	181
15:45	0	45	0	0	0	0	0	77	0	1	0	2	125
16:00	0	67	0	0	0	1	0	86	0	0	0	5	159
16:15	0	74	0	0	0	0	0	86	0	0	0	2	162
16:30	0	72	0	0	0	0	0	106	0	1	0	3	182
16:45	0	73	0	0	0	0	0	101	0	0	0	3	177
17:00	0	59	0	1	0	0	1	101	0	0	0	3	165
17:15	0	50	0	0	0	0	0	111	0	0	0	3	164
17:30	0	65	0	0	0	0	0	138	0	0	0	2	205
17:45	0	56	0	0	0	0	0	127	0	1	0	4	188

Total Volume:	0	772	0	1	0	4	1	1193	1	3	0	35	2010
Approach %	0%	100%	0%	20%	0%	80%	0%	100%	0%	8%	0%	92%	

Peak Hr Begin:	17:00												
PHV	0	230	0	1	0	0	1	477	0	1	0	12	722
PHF	0.885			0.250			0.866			0.650			0.880

Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	0	0	7	0
7:15	4	0	1	0	0	0	3	0
7:30	1	0	7	0	0	0	4	0
7:45	1	0	5	0	0	0	11	0
8:00	1	0	5	0	0	0	2	0
8:15	1	0	3	0	0	0	2	0
8:30	1	0	2	0	0	0	3	0
8:45	1	0	5	0	0	0	2	0
9:00	0	0	2	0	0	0	6	1
9:15	1	0	2	0	0	0	3	1
9:30	0	0	2	0	0	0	6	0
9:45	1	0	2	0	0	0	4	1

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	0	0	0	0	0	0	3	0
15:15	1	0	0	0	0	0	7	4
15:30	0	0	4	0	0	0	3	1
15:45	1	0	3	0	0	0	9	1
16:00	0	0	1	0	0	0	7	0
16:15	1	0	1	0	1	0	4	0
16:30	0	0	2	0	1	0	9	0
16:45	1	0	2	0	0	0	6	0
17:00	0	0	4	0	0	0	5	0
17:15	0	0	8	2	0	1	12	0
17:30	1	1	3	2	0	0	11	2
17:45	1	0	4	0	0	0	14	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Chandler Blvd EB
City: North Hollywood
Control: Signalized

Project ID: 19-05537-018
Date: 9/10/2019

Total

NS/EW Streets:	Tujunga Ave				Tujunga Ave				Chandler Blvd EB				Chandler Blvd EB				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	1	0	0	2	2	1	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	14	19	0	3	87	0	0	2	51	25	0	10	0	20	0	231
7:15 AM	0	36	7	0	6	91	0	0	9	69	29	0	20	0	17	0	284
7:30 AM	0	54	22	0	5	113	0	0	9	90	44	0	26	0	24	1	388
7:45 AM	0	68	26	0	10	82	0	0	22	160	51	0	15	0	20	0	454
8:00 AM	0	69	29	0	11	107	0	0	26	171	57	0	24	0	26	1	521
8:15 AM	0	39	27	0	5	86	0	0	24	165	75	0	25	0	28	0	474
8:30 AM	0	24	19	0	12	73	0	0	11	163	66	0	23	0	17	0	408
8:45 AM	0	21	18	0	5	99	0	0	10	151	54	0	19	0	9	0	386
9:00 AM	0	34	21	0	8	100	0	0	13	128	64	0	19	0	24	0	411
9:15 AM	0	23	15	0	11	77	0	0	12	132	72	0	13	0	19	2	376
9:30 AM	0	26	17	0	8	96	0	0	5	104	41	0	10	0	10	0	317
9:45 AM	0	16	19	0	6	77	0	0	5	103	46	0	16	0	14	0	302
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	424	239	0	90	1088	0	0	148	1487	624	0	220	0	228	4	4552
APPROACH %'s :	0.00%	63.95%	36.05%	0.00%	7.64%	92.36%	0.00%	0.00%	6.55%	65.83%	27.62%	0.00%	48.67%	0.00%	50.44%	0.88%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	200	101	0	38	348	0	0	83	659	249	0	87	0	91	1	1857
PEAK HR FACTOR :	0.000	0.725	0.871	0.000	0.792	0.813	0.000	0.000	0.798	0.963	0.830	0.000	0.870	0.000	0.813	0.250	0.891
	0.768				0.818				0.938				0.844				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	1	0	0	2	2	1	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	45	25	0	7	65	0	0	15	55	13	0	20	0	22	0	267
3:15 PM	0	38	25	0	4	58	0	0	14	75	24	0	24	0	27	0	289
3:30 PM	0	60	20	0	4	54	0	0	18	83	15	0	21	0	22	0	297
3:45 PM	0	58	24	0	9	58	0	0	9	73	15	0	26	0	26	0	298
4:00 PM	0	48	31	0	8	58	0	0	5	69	25	0	19	0	22	0	285
4:15 PM	0	56	39	0	11	55	0	0	16	87	16	0	19	0	33	0	332
4:30 PM	0	57	36	0	8	53	0	0	10	79	27	0	23	0	36	0	329
4:45 PM	0	58	29	0	4	54	0	0	12	97	25	0	26	0	31	0	336
5:00 PM	0	61	33	0	11	63	0	1	15	80	13	0	35	0	31	0	343
5:15 PM	0	63	37	0	8	48	0	0	15	101	23	0	23	0	26	0	344
5:30 PM	0	66	25	0	7	60	0	0	15	104	24	0	31	0	42	0	374
5:45 PM	0	66	19	0	8	49	0	0	15	113	30	0	27	0	34	0	361
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	676	343	0	89	675	0	1	159	1016	250	0	294	0	352	0	3855
APPROACH %'s :	0.00%	66.34%	33.66%	0.00%	11.63%	88.24%	0.00%	0.13%	11.16%	71.30%	17.54%	0.00%	45.51%	0.00%	54.49%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	256	114	0	34	220	0	1	60	398	90	0	116	0	133	0	1422
PEAK HR FACTOR :	0.000	0.970	0.770	0.000	0.773	0.873	0.000	0.250	1.000	0.881	0.750	0.000	0.829	0.000	0.792	0.000	0.951
	0.925				0.850				0.867				0.853				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Chandler Blvd EB
City: North Hollywood
Control: Signalized

Project ID: 19-05537-018
Date: 9/10/2019

Bikes

NS/EW Streets:	Tujunga Ave				Tujunga Ave				Chandler Blvd EB				Chandler Blvd EB				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	1	0	0	2	2	1	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	2	0	0	0	0	1	0	4
7:15 AM	0	0	1	0	0	0	0	0	0	3	1	0	0	0	0	0	5
7:30 AM	0	1	0	0	0	1	2	0	0	2	0	0	0	0	0	0	6
7:45 AM	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	4
8:00 AM	0	0	0	0	0	2	0	0	1	3	0	0	0	0	0	0	6
8:15 AM	0	2	0	0	0	1	0	0	0	7	0	0	0	0	1	0	11
8:30 AM	0	0	1	0	1	0	0	0	0	3	0	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	1	0	0	0	4	0	0	0	1	1	0	7
9:00 AM	0	0	2	0	0	1	0	0	0	6	1	0	0	0	3	0	13
9:15 AM	0	0	0	0	0	3	0	0	1	1	0	0	1	0	0	0	6
9:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
9:45 AM	0	3	0	0	0	3	0	0	0	1	1	0	0	1	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	8	4	0	2	12	2	0	2	35	4	0	1	2	6	0	78
APPROACH %'s :	0.00%	66.67%	33.33%	0.00%	12.50%	75.00%	12.50%	0.00%	4.88%	85.37%	9.76%	0.00%	11.11%	22.22%	66.67%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	4	1	0	1	3	0	0	1	14	1	0	0	0	1	0	26
PEAK HR FACTOR :	0.000	0.500	0.250	0.000	0.250	0.375	0.000	0.000	0.250	0.500	0.250	0.000	0.000	0.000	0.250	0.000	0.591
	0.625				0.500				0.571				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	1	0	0	2	2	1	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:15 PM	0	1	1	0	0	0	0	0	1	2	0	0	1	0	1	0	7
3:30 PM	0	1	0	0	0	0	1	0	1	5	0	0	1	0	0	0	9
3:45 PM	0	1	1	0	0	0	0	0	0	4	0	0	0	0	2	0	8
4:00 PM	0	1	0	0	0	0	0	0	0	1	3	0	0	1	0	1	7
4:15 PM	0	0	2	0	0	0	0	0	0	2	0	0	1	0	3	0	8
4:30 PM	0	1	0	0	0	0	1	0	0	6	1	0	1	0	1	0	11
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
5:00 PM	0	0	1	0	0	0	0	0	0	3	0	0	0	1	2	0	7
5:15 PM	0	1	0	0	0	2	0	0	0	3	0	0	1	0	1	0	8
5:30 PM	0	0	1	0	0	3	0	0	0	3	0	0	0	0	0	0	7
5:45 PM	0	1	1	0	0	1	0	0	0	2	0	0	4	0	1	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	7	0	0	6	2	0	3	33	4	0	9	3	11	1	86
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	0.00%	75.00%	25.00%	0.00%	7.50%	82.50%	10.00%	0.00%	37.50%	12.50%	45.83%	4.17%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	2	3	0	0	6	0	0	0	11	0	0	5	1	4	0	32
PEAK HR FACTOR :	0.00	0.500	0.750	0.000	0.000	0.500	0.000	0.000	0.000	0.917	0.000	0.000	0.313	0.250	0.500	0.000	0.800
	0.625				0.500				0.917				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Chandler Blvd EB
City: North Hollywood

Project ID: 19-05537-018
Date: 9/10/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Tujunga Ave		Tujunga Ave		Chandler Blvd EB		Chandler Blvd EB		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	6	0	1	2	4	1	1	2	17
7:15 AM	0	0	4	8	1	2	1	4	20
7:30 AM	3	0	10	7	2	4	3	13	42
7:45 AM	1	1	22	26	4	17	6	10	87
8:00 AM	2	0	4	7	5	3	4	3	28
8:15 AM	2	0	10	5	8	2	1	3	31
8:30 AM	2	0	7	1	10	6	6	3	35
8:45 AM	2	0	4	5	1	3	3	4	22
9:00 AM	0	1	5	3	7	2	3	3	24
9:15 AM	1	0	6	5	4	5	5	3	29
9:30 AM	1	0	7	0	3	2	2	2	17
9:45 AM	0	0	2	5	0	3	1	3	14
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	20	2	82	74	49	50	36	53	366
APPROACH %'s :	90.91%	9.09%	52.56%	47.44%	49.49%	50.51%	40.45%	59.55%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	7	1	43	39	27	28	17	19	181
PEAK HR FACTOR :	0.875	0.250	0.489	0.375	0.675	0.412	0.708	0.475	0.520
	1.000		0.427		0.655		0.563		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	8	4	2	4	3	3	24
3:15 PM	0	1	6	5	5	3	2	5	27
3:30 PM	0	0	5	10	0	2	3	3	23
3:45 PM	3	0	10	3	2	3	2	4	27
4:00 PM	1	0	7	6	7	6	5	5	37
4:15 PM	1	1	7	4	7	1	4	3	28
4:30 PM	0	0	3	5	1	7	4	1	21
4:45 PM	0	1	3	9	3	5	2	3	26
5:00 PM	0	0	8	7	1	6	3	5	30
5:15 PM	1	0	12	8	3	2	1	2	29
5:30 PM	0	0	4	11	6	3	4	4	32
5:45 PM	3	3	8	10	5	10	7	4	50
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	9	6	81	82	42	52	40	42	354
APPROACH %'s :	60.00%	40.00%	49.69%	50.31%	44.68%	55.32%	48.78%	51.22%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	4	3	32	36	15	21	15	15	141
PEAK HR FACTOR :	0.333	0.250	0.667	0.818	0.625	0.525	0.536	0.750	0.705
	0.292		0.850		0.600		0.682		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bakman Ave & Chandler Blvd
City: North Hollywood
Control: 1-Way Stop (NB)

Project ID: 19-05537-019
Date: 9/11/2019

Total

NS/EW Streets:	Bakman Ave				Bakman Ave				Chandler Blvd				Chandler Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	5	1	0	0	0	0	0	69	2	0	11	44	0	0	133
7:15 AM	4	0	9	0	0	0	0	0	0	104	4	1	14	58	0	0	194
7:30 AM	3	0	13	1	0	0	0	0	0	121	5	1	49	51	0	1	245
7:45 AM	2	0	28	0	0	0	0	0	0	164	11	2	53	67	0	1	328
8:00 AM	0	0	24	0	0	0	0	0	0	192	17	0	28	72	0	1	334
8:15 AM	2	0	15	0	0	0	0	0	0	179	10	1	19	48	0	0	274
8:30 AM	1	0	15	0	0	0	0	0	0	131	17	1	26	35	0	0	226
8:45 AM	0	0	3	1	0	0	0	0	0	177	18	0	8	32	0	1	240
9:00 AM	2	0	5	0	0	0	0	0	0	158	11	0	18	37	0	0	231
9:15 AM	0	0	10	1	0	0	0	0	0	116	14	0	10	39	0	0	190
9:30 AM	4	0	8	0	0	0	0	0	0	105	14	0	9	31	0	0	171
9:45 AM	1	0	9	0	0	0	0	0	0	120	7	0	7	32	0	0	176
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	20	0	144	4	0	0	0	0	0	1636	130	6	252	546	0	4	2742
APPROACH %'s :	11.90%	0.00%	85.71%	2.38%					0.00%	92.33%	7.34%	0.34%	31.42%	68.08%	0.00%	0.50%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	7	0	80	1	0	0	0	0	0	656	43	4	149	238	0	3	1181
PEAK HR FACTOR :	0.583	0.000	0.714	0.250	0.000	0.000	0.000	0.000	0.000	0.854	0.632	0.500	0.703	0.826	0.000	0.750	0.884
	0.733								0.841				0.806				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	4	0	15	0	0	0	0	0	0	104	4	0	13	54	0	1	195
3:15 PM	1	0	12	0	0	0	0	0	0	142	13	0	14	54	0	0	236
3:30 PM	4	0	24	0	0	0	0	0	0	176	4	0	10	40	0	0	258
3:45 PM	5	0	15	0	0	0	0	0	0	185	4	0	9	67	0	0	285
4:00 PM	2	0	16	1	0	0	0	0	0	111	9	0	8	67	0	0	214
4:15 PM	2	0	7	0	0	0	0	0	0	109	4	1	2	60	0	0	185
4:30 PM	4	0	9	0	0	0	0	0	0	81	7	0	13	38	0	1	153
4:45 PM	2	0	13	0	0	0	0	0	0	127	13	0	6	67	0	1	229
5:00 PM	2	0	23	0	0	0	0	0	0	129	8	3	7	54	0	0	226
5:15 PM	3	0	18	0	0	0	0	0	0	129	6	0	7	70	0	0	233
5:30 PM	1	0	20	0	0	0	0	0	0	121	8	1	5	56	0	0	212
5:45 PM	5	0	24	0	0	0	0	0	0	138	8	1	10	74	0	0	260
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	35	0	196	1	0	0	0	0	0	1552	88	6	104	701	0	3	2686
APPROACH %'s :	15.09%	0.00%	84.48%	0.43%					0.00%	94.29%	5.35%	0.36%	12.87%	86.76%	0.00%	0.37%	
PEAK HR :	03:15 PM - 04:15 PM																TOTAL
PEAK HR VOL :	12	0	67	1	0	0	0	0	0	614	30	0	41	228	0	0	993
PEAK HR FACTOR :	0.600	0.000	0.698	0.250	0.000	0.000	0.000	0.000	0.000	0.830	0.577	0.000	0.732	0.851	0.000	0.000	0.871
	0.714								0.852				0.885				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bakman Ave & Chandler Blvd
City: North Hollywood
Control: 1-Way Stop (NB)

Project ID: 19-05537-019
Date: 9/11/2019

Bikes

NS/EW Streets:	Bakman Ave				Bakman Ave				Chandler Blvd				Chandler Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	2	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
8:00 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4
8:15 AM	1	0	1	0	0	0	0	0	2	2	0	0	0	1	0	0	7
8:30 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5
9:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3
9:15 AM	0	0	2	0	0	0	0	0	1	0	0	0	0	1	0	0	4
9:30 AM	0	0	0	0	0	0	1	0	1	2	0	0	0	1	0	0	5
9:45 AM	0	0	1	0	0	0	0	0	0	3	0	0	0	1	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	6	0	0	0	1	0	5	24	1	0	0	15	0	0	53
APPROACH %'s :	14.29%	0.00%	85.71%	0.00%	0.00%	0.00%	100.00%	0.00%	16.67%	80.00%	3.33%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	0	1	0	0	0	0	0	3	8	0	0	0	5	0	0	18
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.375	1.000	0.000	0.000	0.000	0.625	0.000	0.000	0.643
	0.250								0.688				0.625				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	3	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	1	0	0	0	0	0	0	7	0	0	0	1	0	0	9
3:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	4	0	0	7
4:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	3	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
5:45 PM	0	0	1	0	0	0	0	0	1	2	0	0	2	3	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	2	25	0	0	4	25	0	0	58
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					7.41%	92.59%	0.00%	0.00%	13.79%	86.21%	0.00%	0.00%	
PEAK HR :	03:15 PM - 04:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	7	0	0	1	13	0	0	22
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.583	0.000	0.000	0.250	0.813	0.000	0.000	0.786
									0.667				0.700				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bakman Ave & Chandler Blvd
City: North Hollywood

Project ID: 19-05537-019
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Bakman Ave		Bakman Ave		Chandler Blvd		Chandler Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	1	3	0	0	3	1	8
7:15 AM	0	0	1	6	4	2	4	1	18
7:30 AM	0	0	2	18	3	3	3	0	29
7:45 AM	0	0	2	9	2	6	2	4	25
8:00 AM	0	0	7	9	2	4	0	1	23
8:15 AM	0	0	4	2	10	2	0	4	22
8:30 AM	0	0	7	4	3	2	0	3	19
8:45 AM	0	0	6	4	5	1	1	0	17
9:00 AM	0	0	6	3	5	2	5	6	27
9:15 AM	0	0	3	2	6	2	5	4	22
9:30 AM	0	0	6	2	6	1	1	3	19
9:45 AM	0	0	4	3	1	2	2	1	13
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	49	65	47	27	26	28	242
APPROACH %'s :			42.98%	57.02%	63.51%	36.49%	48.15%	51.85%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	15	38	17	15	5	9	99
PEAK HR FACTOR :			0.536	0.528	0.425	0.625	0.417	0.563	0.853
			0.663		0.667		0.583		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	5	9	0	2	0	3	19
3:15 PM	0	0	6	2	0	1	1	2	12
3:30 PM	0	0	26	7	2	3	1	4	43
3:45 PM	0	0	9	2	0	1	2	3	17
4:00 PM	0	0	10	8	0	0	5	0	23
4:15 PM	0	0	13	8	0	1	1	0	23
4:30 PM	0	0	2	7	2	1	0	0	12
4:45 PM	0	0	7	8	0	2	2	0	19
5:00 PM	0	0	8	11	4	2	1	2	28
5:15 PM	0	0	8	3	1	1	3	4	20
5:30 PM	0	0	6	4	0	3	1	1	15
5:45 PM	0	0	9	5	3	0	4	3	24
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	109	74	12	17	21	22	255
APPROACH %'s :			59.56%	40.44%	41.38%	58.62%	48.84%	51.16%	
PEAK HR :	03:15 PM - 04:15 PM								TOTAL
PEAK HR VOL :	0	0	51	19	2	5	9	9	95
PEAK HR FACTOR :			0.490	0.594	0.250	0.417	0.450	0.563	0.552
			0.530		0.350		0.900		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Chandler Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-020
Date: 9/11/2019

Total

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Chandler Blvd				Chandler Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	32	10	0	17	182	8	0	7	56	16	0	9	37	16	0	391
7:15 AM	9	45	12	0	29	230	11	0	16	67	25	0	17	47	25	0	533
7:30 AM	11	40	10	0	22	237	29	0	22	94	22	0	26	54	26	0	593
7:45 AM	14	74	13	0	29	224	53	0	41	115	28	0	32	62	34	0	719
8:00 AM	16	87	12	0	28	194	32	0	63	136	27	0	18	50	43	0	706
8:15 AM	9	96	12	0	33	219	22	0	39	122	30	1	17	38	35	0	673
8:30 AM	3	50	10	0	25	209	16	0	20	101	33	0	14	43	34	0	558
8:45 AM	3	64	13	0	24	261	18	0	14	104	54	0	17	25	23	0	620
9:00 AM	4	76	18	0	23	260	11	0	22	99	48	0	20	32	23	0	636
9:15 AM	7	84	9	0	32	209	10	0	16	67	37	0	14	34	23	0	542
9:30 AM	3	105	18	0	18	212	7	0	14	62	38	0	16	34	23	0	550
9:45 AM	8	106	15	0	24	267	8	0	12	73	38	0	16	26	18	0	611
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	88	859	152	0	304	2704	225	0	286	1096	396	1	216	482	323	0	7132
APPROACH %'s :	8.01%	78.16%	13.83%	0.00%	9.40%	83.64%	6.96%	0.00%	16.08%	61.61%	22.26%	0.06%	21.16%	47.21%	31.64%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	50	297	47	0	112	874	136	0	165	467	107	1	93	204	138	0	2691
PEAK HR FACTOR :	0.781	0.773	0.904	0.000	0.848	0.922	0.642	0.000	0.655	0.858	0.892	0.250	0.727	0.823	0.802	0.000	0.936
	0.842				0.917				0.819				0.850				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	11	117	27	0	20	73	2	0	31	74	23	0	15	50	34	0	477
3:15 PM	10	134	20	0	15	108	12	0	20	103	22	0	13	51	27	0	535
3:30 PM	15	132	27	0	26	89	8	0	58	116	32	0	12	31	30	0	576
3:45 PM	12	137	40	0	25	95	5	0	50	116	30	1	12	45	34	0	602
4:00 PM	8	129	30	0	22	113	9	0	29	86	20	1	12	59	46	0	564
4:15 PM	9	148	22	0	28	116	9	0	18	81	21	0	16	53	44	0	565
4:30 PM	10	156	28	0	30	112	9	0	21	56	13	0	18	26	33	0	512
4:45 PM	9	139	36	0	22	100	10	0	31	82	22	0	17	50	29	0	547
5:00 PM	7	150	32	0	23	103	12	0	29	105	20	0	13	50	37	0	581
5:15 PM	11	113	27	0	33	109	2	0	23	100	21	0	15	52	44	0	550
5:30 PM	10	172	32	3	30	103	6	0	31	98	19	0	17	52	47	0	620
5:45 PM	16	149	19	1	32	98	8	0	24	108	22	0	20	68	38	0	603
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	128	1676	340	4	306	1219	92	0	365	1125	265	2	180	587	443	0	6732
APPROACH %'s :	5.96%	78.03%	15.83%	0.19%	18.92%	75.39%	5.69%	0.00%	20.77%	64.03%	15.08%	0.11%	14.88%	48.51%	36.61%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	44	584	110	4	118	413	28	0	107	411	82	0	65	222	166	0	2354
PEAK HR FACTOR :	0.688	0.849	0.859	0.333	0.894	0.947	0.583	0.000	0.863	0.951	0.932	0.000	0.813	0.816	0.883	0.000	0.949
	0.855				0.970				0.974				0.899				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Chandler Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-020
Date: 9/11/2019

Bikes

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Chandler Blvd				Chandler Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0	0	6
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	4	0	0	7
7:45 AM	0	2	1	0	0	1	0	0	1	2	0	0	0	1	0	0	8
8:00 AM	0	1	0	0	0	3	0	0	1	2	0	0	0	0	0	0	7
8:15 AM	0	0	0	0	0	1	1	0	1	2	0	0	0	1	0	0	6
8:30 AM	0	0	1	0	0	0	0	0	2	2	0	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
9:00 AM	0	1	0	0	1	2	0	0	1	2	0	0	0	0	0	0	7
9:15 AM	0	1	0	0	0	1	1	0	0	0	0	0	0	2	0	0	5
9:30 AM	0	1	0	0	0	2	1	0	0	4	0	0	0	0	0	0	8
9:45 AM	0	0	0	0	1	4	0	0	0	3	2	0	0	1	1	0	12
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	2	0	5	14	3	0	7	21	2	0	0	12	1	0	74
APPROACH %'s :	0.00%	77.78%	22.22%	0.00%	22.73%	63.64%	13.64%	0.00%	23.33%	70.00%	6.67%	0.00%	0.00%	92.31%	7.69%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	3	1	0	3	5	1	0	3	6	0	0	0	6	0	0	28
PEAK HR FACTOR :	0.000	0.375	0.250	0.000	0.250	0.417	0.250	0.000	0.750	0.750	0.000	0.000	0.000	0.375	0.000	0.000	0.875
	0.333				0.750				0.750				0.375				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	2	2	0	0	4	1	0	9
3:15 PM	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	5
3:30 PM	0	1	0	0	0	1	1	0	0	1	1	0	0	2	1	0	8
3:45 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	3	0	0	5
4:00 PM	0	2	0	0	0	1	1	0	0	2	1	0	0	0	0	0	7
4:15 PM	0	2	0	0	0	0	0	0	2	0	0	0	0	1	1	0	6
4:30 PM	0	2	0	0	2	2	1	0	1	0	0	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	4	0	1	0	1	0	0	0	0	0	0	6
5:00 PM	0	6	0	0	2	2	0	0	0	1	0	0	0	2	0	0	13
5:15 PM	0	1	0	0	0	2	0	0	1	1	0	0	0	0	2	0	7
5:30 PM	0	2	0	0	1	0	0	2	1	0	2	0	1	7	1	0	17
5:45 PM	0	0	0	0	2	2	4	0	1	1	4	0	0	0	1	0	15
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	17	0	0	7	15	9	3	7	10	10	0	1	20	7	0	106
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	20.59%	44.12%	26.47%	8.82%	25.93%	37.04%	37.04%	0.00%	3.57%	71.43%	25.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	9	0	0	5	6	4	2	3	3	6	0	1	9	4	0	52
PEAK HR FACTOR :	0.00	0.375	0.000	0.000	0.625	0.750	0.250	0.250	0.750	0.750	0.375	0.000	0.250	0.321	0.500	0.000	0.765
	0.375				0.531				0.500				0.389				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Chandler Blvd
City: North Hollywood

Project ID: 19-05537-020
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Lankershim Blvd		Lankershim Blvd		Chandler Blvd		Chandler Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	7	35	0	8	12	12	8	11	93
7:15 AM	9	36	4	9	18	14	11	27	128
7:30 AM	5	34	8	21	23	28	17	31	167
7:45 AM	12	24	8	6	19	11	24	12	116
8:00 AM	12	17	1	5	27	22	28	4	116
8:15 AM	5	20	4	1	20	16	13	8	87
8:30 AM	11	18	5	1	17	15	15	18	100
8:45 AM	12	24	7	6	17	29	16	4	115
9:00 AM	11	16	5	3	12	17	11	8	83
9:15 AM	4	20	0	0	10	10	4	9	57
9:30 AM	8	17	5	6	10	16	12	6	80
9:45 AM	6	6	5	7	16	14	15	11	80
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	102	267	52	73	201	204	174	149	1222
APPROACH %'s :	27.64%	72.36%	41.60%	58.40%	49.63%	50.37%	53.87%	46.13%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	34	95	21	33	89	77	82	55	486
PEAK HR FACTOR :	0.708	0.699	0.656	0.393	0.824	0.688	0.732	0.444	0.728
	0.827		0.466		0.814		0.714		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	9	14	4	2	18	22	22	15	106
3:15 PM	13	10	5	6	29	26	17	13	119
3:30 PM	46	25	5	11	19	25	26	10	167
3:45 PM	14	28	7	7	23	37	20	22	158
4:00 PM	14	21	4	7	18	20	22	24	130
4:15 PM	12	29	1	8	25	40	19	15	149
4:30 PM	12	20	7	3	14	35	16	31	138
4:45 PM	3	22	2	10	26	37	17	25	142
5:00 PM	25	19	6	6	20	22	26	11	135
5:15 PM	10	29	4	7	29	29	13	15	136
5:30 PM	10	28	7	7	37	49	15	26	179
5:45 PM	8	26	13	13	43	47	17	34	201
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	176	271	65	87	301	389	230	241	1760
APPROACH %'s :	39.37%	60.63%	42.76%	57.24%	43.62%	56.38%	48.83%	51.17%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	53	102	30	33	129	147	71	86	651
PEAK HR FACTOR :	0.530	0.879	0.577	0.635	0.750	0.750	0.683	0.632	0.810
	0.881		0.606		0.767		0.770		

Turning Movement Count Report AM

Location ID: 21
North/South: Alleyway / Klump Ave (Between Lankershim & Blakeslee Avenue)
East/West: Chandler Boulevard

Date: 10/22/19
City: North Hollywood, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	0	54	3	4	0	0	5	43	0	109
7:15	0	0	0	0	93	4	4	0	0	6	78	0	185
7:30	0	0	0	0	112	1	6	0	0	5	98	0	222
7:45	0	0	0	0	110	4	8	0	0	9	156	1	288
8:00	0	0	0	0	78	2	4	0	0	8	137	0	229
8:15	0	0	0	0	101	6	3	0	1	5	140	0	256
8:30	0	0	0	0	51	1	5	0	0	9	121	0	187
8:45	0	0	0	0	61	5	5	0	0	11	148	1	231
9:00	0	0	0	0	53	6	4	0	0	6	115	0	184
9:15	0	0	0	0	54	3	1	0	2	4	117	0	181
9:30	0	0	0	0	54	2	3	0	1	6	72	0	138
9:45	0	0	0	0	43	4	8	0	1	3	110	0	169

Total Volume:	0	0	0	0	864	41	55	0	5	77	1335	2	2379
Approach %	0%	0%	0%	0%	95%	5%	92%	0%	8%	5%	94%	0%	

Peak Hr Begin:	7:30												
PHV	0	0	0	0	401	13	21	0	1	27	531	1	995
PHF	0.000			0.908			0.688			0.842			0.864

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 21
North/South: Alleyway / Klump Ave (Between Lankershim & Blakeslee Avenue)
East/West: Chandler Boulevard

Date: 10/22/19
City: North Hollywood, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	0	0	0	0	64	4	3	0	2	7	99	0	179
15:15	0	0	0	0	67	5	3	0	2	7	110	0	194
15:30	0	0	0	0	56	1	1	0	2	6	100	0	166
15:45	0	0	0	0	65	8	2	0	1	3	112	0	191
16:00	0	0	0	0	65	8	9	0	1	4	83	0	170
16:15	0	0	0	0	88	4	3	0	3	15	124	1	238
16:30	0	0	0	0	57	6	5	0	1	9	106	0	184
16:45	0	0	0	0	66	11	6	0	2	11	111	0	207
17:00	0	0	0	0	84	0	8	0	1	6	119	1	219
17:15	0	0	0	0	92	2	7	0	2	11	153	1	268
17:30	0	0	0	0	88	4	6	0	1	10	140	0	249
17:45	0	0	0	0	88	7	5	0	2	18	162	1	283

Total Volume:	0	0	0	0	880	60	58	0	20	107	1419	4	2548
Approach %	0%	0%	0%	0%	94%	6%	74%	0%	26%	7%	93%	0%	

Peak Hr Begin:	17:00												
PHV	0	0	0	0	352	13	26	0	6	45	574	3	1019
PHF	0.000			0.961			0.889			0.859			0.900

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	0	0	0	0	6	0	3	0
7:15	0	0	0	0	4	0	4	0
7:30	0	0	0	0	10	0	2	0
7:45	0	0	0	0	13	0	2	0
8:00	0	0	0	0	6	0	1	0
8:15	0	0	0	0	2	0	3	0
8:30	0	0	0	0	7	0	1	0
8:45	0	0	0	0	14	1	0	0
9:00	0	0	0	0	12	0	0	0
9:15	0	0	0	0	6	0	1	0
9:30	0	0	0	0	7	0	0	0
9:45	0	0	0	0	10	0	1	0

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	0	0	0	0	17	1	2	0
15:15	0	0	0	0	12	1	0	0
15:30	0	0	0	0	18	0	1	1
15:45	0	0	0	0	15	2	0	0
16:00	0	0	0	0	15	0	5	0
16:15	0	0	0	0	22	0	0	0
16:30	0	0	0	0	23	2	1	0
16:45	0	0	0	0	10	1	0	0
17:00	0	0	0	0	20	1	3	0
17:15	0	0	0	0	24	0	2	0
17:30	0	0	0	0	11	1	4	0
17:45	0	0	0	0	32	1	2	1

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fair Ave & Chandler Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-022
Date: 9/11/2019

Total

NS/EW Streets:	Fair Ave				Fair Ave				Chandler Blvd				Chandler Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	3	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	3	0	15	0	32	0	6	53	0	0	1	50	9	0	170
7:15 AM	3	0	1	0	11	0	28	0	14	70	0	0	0	70	13	0	210
7:30 AM	2	0	1	0	17	0	39	0	17	72	1	1	0	62	22	0	234
7:45 AM	0	1	1	0	28	0	47	0	25	117	0	0	0	86	51	0	356
8:00 AM	1	0	2	0	22	0	31	0	37	130	2	1	0	78	36	0	340
8:15 AM	0	0	3	0	24	0	32	0	28	134	2	0	0	65	23	1	312
8:30 AM	1	0	0	0	23	1	38	0	13	105	1	0	0	54	11	1	248
8:45 AM	1	0	5	0	24	1	25	0	12	128	2	0	2	54	13	0	267
9:00 AM	4	0	1	0	27	1	35	0	16	104	1	0	1	52	13	0	255
9:15 AM	3	0	1	0	22	0	28	0	9	80	1	0	0	50	18	1	213
9:30 AM	1	0	3	0	16	0	17	0	7	79	0	0	0	38	12	0	173
9:45 AM	1	1	2	0	19	0	26	0	9	94	0	0	2	34	7	0	195
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	18	2	23	0	248	3	378	0	193	1166	10	2	6	693	228	3	2973
APPROACH %'s :	41.86%	4.65%	53.49%	0.00%	39.43%	0.48%	60.10%	0.00%	14.08%	85.05%	0.73%	0.15%	0.65%	74.52%	24.52%	0.32%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	2	1	6	0	97	1	148	0	103	486	5	1	0	283	121	2	1256
PEAK HR FACTOR :	0.500	0.250	0.500	0.000	0.866	0.250	0.787	0.000	0.696	0.907	0.625	0.250	0.000	0.823	0.593	0.500	0.882
	0.750				0.820				0.875				0.741				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	3	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	1	0	10	0	18	0	8	85	2	0	0	56	18	0	198
3:15 PM	0	0	3	0	15	0	18	0	15	95	3	0	2	65	15	0	231
3:30 PM	1	0	1	0	20	0	14	0	29	151	3	1	0	57	17	1	295
3:45 PM	4	0	1	0	19	0	15	0	25	151	3	0	3	78	22	0	321
4:00 PM	1	0	3	0	17	0	26	0	18	113	2	0	0	78	18	0	276
4:15 PM	3	0	1	0	26	0	23	0	16	102	3	0	2	73	20	0	269
4:30 PM	1	1	0	0	14	1	19	0	13	99	3	0	0	50	19	0	220
4:45 PM	0	0	4	0	16	0	22	0	25	97	1	0	0	74	19	0	258
5:00 PM	0	0	1	0	15	0	29	0	19	149	1	0	1	57	21	1	294
5:15 PM	1	0	1	0	17	0	25	0	18	125	0	0	1	87	20	1	296
5:30 PM	0	0	3	0	21	0	26	0	19	122	4	2	0	69	23	0	289
5:45 PM	1	0	0	0	26	0	28	0	12	113	2	0	0	86	22	0	290
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	12	1	19	0	216	1	263	0	217	1402	27	3	9	830	234	3	3237
APPROACH %'s :	37.50%	3.13%	59.38%	0.00%	45.00%	0.21%	54.79%	0.00%	13.16%	85.02%	1.64%	0.18%	0.84%	77.14%	21.75%	0.28%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	0	5	0	79	0	108	0	68	509	7	2	2	299	86	2	1169
PEAK HR FACTOR :	0.500	0.000	0.417	0.000	0.760	0.000	0.931	0.000	0.895	0.854	0.438	0.250	0.500	0.859	0.935	0.500	0.987
	0.583				0.866				0.867				0.892				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fair Ave & Chandler Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-022
Date: 9/11/2019

Bikes

NS/EW Streets:	Fair Ave				Fair Ave				Chandler Blvd				Chandler Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	3	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
7:15 AM	0	0	0	0	0	0	1	0	1	2	0	0	0	4	1	0	9
7:30 AM	0	0	0	0	0	0	2	0	1	2	0	0	0	1	5	0	11
7:45 AM	0	0	0	0	2	0	0	0	1	1	0	0	0	2	1	0	7
8:00 AM	0	0	0	0	1	0	2	0	1	4	0	0	0	1	0	0	9
8:15 AM	0	0	0	0	2	0	0	0	0	2	0	0	0	2	2	0	8
8:30 AM	0	0	0	0	2	0	1	0	0	3	0	0	0	2	2	0	10
8:45 AM	0	0	0	0	2	0	0	0	0	5	0	0	0	1	0	0	8
9:00 AM	0	0	0	0	3	0	0	0	0	1	0	0	0	3	2	0	9
9:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	4
9:30 AM	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	4
9:45 AM	0	0	0	0	0	0	1	0	0	6	0	0	0	1	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	16	0	7	0	4	27	0	0	0	22	14	0	90
APPROACH %'s :					69.57%	0.00%	30.43%	0.00%	12.90%	87.10%	0.00%	0.00%	0.00%	61.11%	38.89%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	7	0	3	0	2	10	0	0	0	7	5	0	34
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.875	0.000	0.375	0.000	0.500	0.625	0.000	0.000	0.000	0.875	0.625	0.000	0.850
					0.833				0.600				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	3	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	5	0	2	0	4	3	0	0	0	2	5	0	21
3:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
3:30 PM	0	0	0	0	1	0	1	0	0	1	0	0	0	6	1	0	10
3:45 PM	0	0	0	0	5	0	2	0	0	1	0	0	0	2	1	0	11
4:00 PM	0	0	0	0	3	0	2	0	1	3	0	0	0	3	3	0	15
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	4
4:45 PM	0	0	0	0	2	0	2	0	2	1	0	0	0	0	2	0	9
5:00 PM	0	0	0	0	0	0	0	0	1	2	0	1	0	1	3	0	8
5:15 PM	0	0	0	0	1	0	1	0	0	5	0	0	0	1	2	0	10
5:30 PM	0	0	0	0	2	0	1	0	0	2	0	0	0	3	4	0	12
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	23	0	11	0	8	23	0	1	0	22	25	0	113
APPROACH %'s :					67.65%	0.00%	32.35%	0.00%	25.00%	71.88%	0.00%	3.13%	0.00%	46.81%	53.19%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	3	0	2	0	1	10	0	1	0	6	11	0	34
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.375	0.000	0.500	0.000	0.250	0.500	0.000	0.250	0.000	0.500	0.688	0.000	0.708
					0.417				0.600				0.607				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Fair Ave & Chandler Blvd
City: North Hollywood

Project ID: 19-05537-022
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Fair Ave		Fair Ave		Chandler Blvd		Chandler Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	5	4	1	1	0	5	1	2	19
7:15 AM	1	7	1	0	0	0	1	3	13
7:30 AM	0	5	2	3	1	3	2	6	22
7:45 AM	3	7	4	4	2	2	3	4	29
8:00 AM	4	9	9	5	2	2	3	2	36
8:15 AM	5	5	2	3	2	0	6	2	25
8:30 AM	3	8	1	0	1	1	1	1	16
8:45 AM	1	11	3	4	1	3	2	2	27
9:00 AM	5	6	6	9	1	1	3	3	34
9:15 AM	5	10	1	4	1	1	1	4	27
9:30 AM	0	5	8	6	2	2	3	2	28
9:45 AM	2	4	8	3	2	1	0	1	21
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	34	81	46	42	15	21	26	32	297
APPROACH %'s :	29.57%	70.43%	52.27%	47.73%	41.67%	58.33%	44.83%	55.17%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	15	29	16	12	7	5	13	9	106
PEAK HR FACTOR :	0.750	0.806	0.444	0.600	0.875	0.625	0.542	0.563	0.736
	0.846		0.500		0.750		0.688		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	7	4	4	5	1	2	1	2	26
3:15 PM	2	8	6	5	4	1	2	0	28
3:30 PM	2	4	5	9	2	4	3	1	30
3:45 PM	3	5	8	4	4	1	5	5	35
4:00 PM	6	5	5	15	4	3	9	1	48
4:15 PM	1	3	7	7	2	1	7	3	31
4:30 PM	11	3	4	4	2	4	3	4	35
4:45 PM	5	4	7	3	3	4	2	0	28
5:00 PM	2	7	3	14	4	10	5	4	49
5:15 PM	10	12	9	5	4	5	0	6	51
5:30 PM	10	6	11	3	2	4	6	8	50
5:45 PM	7	7	5	7	2	5	1	6	40
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	66	68	74	81	34	44	44	40	451
APPROACH %'s :	49.25%	50.75%	47.74%	52.26%	43.59%	56.41%	52.38%	47.62%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	29	32	28	29	12	24	12	24	190
PEAK HR FACTOR :	0.725	0.667	0.636	0.518	0.750	0.600	0.500	0.750	0.931
	0.693		0.838		0.643		0.643		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Chandler Blvd (West Leg)
City: North Hollywood
Control: Signalized

Project ID: 19-05537-023
Date: 9/11/2019

Total

NS/EW Streets:	Vineland Ave				Vineland Ave				Chandler Blvd (West Leg)				Chandler Blvd (West Leg)				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	3	0	0	2	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	23	87	0	0	0	234	45	0	31	0	26	0	0	0	0	0	446
7:15 AM	10	72	0	0	0	291	57	0	45	0	32	0	0	0	0	0	507
7:30 AM	15	102	0	0	0	256	67	0	44	0	35	0	0	0	0	0	519
7:45 AM	33	128	0	0	0	255	88	0	82	0	57	0	0	0	0	0	643
8:00 AM	20	140	0	0	0	265	80	0	83	0	65	0	0	0	0	0	653
8:15 AM	21	127	0	0	0	259	59	0	102	0	64	0	2	0	4	0	638
8:30 AM	14	125	0	0	0	284	49	0	66	0	52	0	0	0	0	0	590
8:45 AM	17	126	0	0	0	246	46	0	83	0	49	0	0	0	0	0	567
9:00 AM	10	116	1	0	1	231	48	0	82	0	39	0	0	0	0	0	528
9:15 AM	17	107	0	0	0	198	46	0	53	0	43	0	0	0	0	0	464
9:30 AM	12	125	1	0	0	230	30	0	54	0	27	0	0	0	0	0	479
9:45 AM	16	120	0	0	0	236	23	0	68	0	46	0	0	0	0	0	509
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	208	1375	2	0	1	2985	638	0	793	0	535	0	2	0	4	0	6543
APPROACH %'s :	13.12%	86.75%	0.13%	0.00%	0.03%	82.37%	17.60%	0.00%	59.71%	0.00%	40.29%	0.00%	33.33%	0.00%	66.67%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	88	520	0	0	0	1063	276	0	333	0	238	0	2	0	4	0	2524
PEAK HR FACTOR :	0.667	0.929	0.000	0.000	0.000	0.936	0.784	0.000	0.816	0.000	0.915	0.000	0.250	0.000	0.250	0.000	0.966
	0.944				0.970				0.860				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	3	0	0	2	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	16	178	0	2	0	179	46	0	49	0	30	0	0	0	0	0	500
3:15 PM	18	184	0	0	0	162	44	0	71	0	43	0	0	0	0	0	522
3:30 PM	23	185	1	1	1	171	39	0	94	0	59	0	0	0	0	0	574
3:45 PM	24	205	1	2	0	227	80	0	123	0	54	0	0	0	2	0	718
4:00 PM	23	213	1	0	0	199	67	0	83	0	34	0	1	0	0	0	621
4:15 PM	25	191	0	1	0	191	41	0	70	0	46	0	0	0	0	0	565
4:30 PM	26	205	0	0	0	161	42	0	56	0	31	0	0	0	0	0	521
4:45 PM	19	209	1	0	1	181	50	0	75	0	35	0	0	0	1	0	572
5:00 PM	27	221	0	0	0	160	48	0	98	0	49	0	0	0	1	0	604
5:15 PM	23	218	0	0	0	184	66	0	106	0	44	0	0	0	0	0	641
5:30 PM	27	216	0	1	0	206	60	0	90	0	37	0	0	0	0	0	637
5:45 PM	35	221	0	2	0	193	51	0	97	0	50	0	0	0	0	0	649
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	286	2446	4	9	2	2214	634	0	1012	0	512	0	1	0	4	0	7124
APPROACH %'s :	10.42%	89.11%	0.15%	0.33%	0.07%	77.68%	22.25%	0.00%	66.40%	0.00%	33.60%	0.00%	20.00%	0.00%	80.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	112	876	0	3	0	743	225	0	391	0	180	0	0	0	1	0	2531
PEAK HR FACTOR :	0.800	0.991	0.000	0.375	0.000	0.902	0.852	0.000	0.922	0.000	0.900	0.000	0.000	0.000	0.250	0.000	0.975
	0.960				0.910				0.952				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Chandler Blvd (West Leg)
City: North Hollywood
Control: Signalized

Project ID: 19-05537-023
Date: 9/11/2019

Bikes

NS/EW Streets:	Vineland Ave				Vineland Ave				Chandler Blvd (West Leg)				Chandler Blvd (West Leg)				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	3	0	0	2	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	8
7:15 AM	1	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	5
7:30 AM	1	2	0	0	0	0	3	0	5	0	1	0	0	0	0	0	12
7:45 AM	0	1	0	0	0	3	5	0	5	0	1	0	0	0	0	0	15
8:00 AM	0	3	0	0	0	0	2	0	3	0	0	0	0	0	0	0	8
8:15 AM	0	0	0	0	0	1	3	0	2	0	0	0	0	0	0	0	6
8:30 AM	0	2	0	0	0	2	4	0	3	0	1	0	0	0	0	0	12
8:45 AM	0	0	0	0	0	1	2	0	4	0	0	0	0	0	0	0	7
9:00 AM	1	2	0	0	0	1	2	0	2	0	0	0	0	0	0	0	8
9:15 AM	0	1	0	0	0	3	3	0	1	0	0	0	0	0	0	0	8
9:30 AM	0	4	0	0	0	1	1	0	1	0	0	0	0	0	0	0	7
9:45 AM	0	3	0	0	0	0	0	0	5	0	0	0	0	0	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	19	0	0	0	12	34	0	32	0	3	0	0	0	0	0	104
APPROACH %'s :	17.39%	82.61%	0.00%	0.00%	0.00%	26.09%	73.91%	0.00%	91.43%	0.00%	8.57%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	6	0	0	0	6	14	0	13	0	2	0	0	0	0	0	41
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.500	0.700	0.000	0.650	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.683
	0.500				0.625				0.625								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	0	3	0	0	2	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	3	0	0	0	3	5	0	0	0	1	0	0	0	0	0	12
3:15 PM	0	0	0	0	0	1	3	0	1	0	2	0	0	0	0	0	7
3:30 PM	0	0	0	0	0	0	6	0	2	0	0	0	0	0	0	0	8
3:45 PM	0	1	0	0	0	6	3	0	2	0	2	0	0	0	0	0	14
4:00 PM	5	3	0	0	0	0	1	0	4	0	2	0	0	0	0	0	15
4:15 PM	0	1	0	0	0	4	1	0	0	0	0	0	0	0	0	0	6
4:30 PM	1	1	0	0	0	5	0	0	4	0	0	0	0	0	0	0	11
4:45 PM	0	2	0	0	0	0	2	0	3	0	1	0	0	0	0	0	8
5:00 PM	0	1	0	0	0	1	2	0	3	0	0	0	0	0	0	0	7
5:15 PM	1	4	0	0	0	3	2	0	4	0	2	0	0	0	0	0	16
5:30 PM	2	0	0	0	0	1	5	1	2	0	1	0	0	0	0	0	12
5:45 PM	0	3	0	0	0	5	4	0	1	0	0	0	0	0	0	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	9	19	0	0	0	29	34	1	26	0	11	0	0	0	0	0	129
APPROACH %'s :	32.14%	67.86%	0.00%	0.00%	0.00%	45.31%	53.13%	1.56%	70.27%	0.00%	29.73%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	3	8	0	0	0	10	13	1	10	0	3	0	0	0	0	0	48
PEAK HR FACTOR :	0.38	0.500	0.000	0.000	0.000	0.500	0.650	0.250	0.625	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.750
	0.550				0.667				0.542								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Chandler Blvd (West Leg)
City: North Hollywood

Project ID: 19-05537-023
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Vineland Ave		Vineland Ave		Chandler Blvd (West Leg)		Chandler Blvd (West Leg)		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	1	0	0	0	1	2
7:15 AM	0	0	1	1	0	2	2	0	6
7:30 AM	0	0	1	2	2	1	4	1	11
7:45 AM	0	0	0	1	3	3	10	2	19
8:00 AM	0	0	3	0	3	0	2	3	11
8:15 AM	0	0	0	3	0	0	5	1	9
8:30 AM	0	0	0	1	1	3	0	2	7
8:45 AM	0	0	1	4	4	3	1	4	17
9:00 AM	0	0	1	3	0	4	0	5	13
9:15 AM	1	0	0	3	0	2	4	2	12
9:30 AM	0	0	3	5	1	3	2	1	15
9:45 AM	1	0	6	2	0	0	4	3	16
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	0	16	26	14	21	34	25	138
APPROACH %'s :	100.00%	0.00%	38.10%	61.90%	40.00%	60.00%	57.63%	42.37%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	3	5	7	6	17	8	46
PEAK HR FACTOR :			0.250	0.417	0.583	0.500	0.425	0.667	0.605
			0.667		0.542		0.521		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	3	2	5	2	1	16	29
3:15 PM	0	0	1	2	2	2	3	2	12
3:30 PM	0	0	2	1	4	1	0	5	13
3:45 PM	0	0	2	1	2	0	1	2	8
4:00 PM	0	0	4	5	5	4	4	3	25
4:15 PM	0	0	1	0	1	2	3	2	9
4:30 PM	0	0	3	4	5	1	0	8	21
4:45 PM	0	0	4	1	1	0	8	5	19
5:00 PM	0	0	0	2	3	4	5	5	19
5:15 PM	0	0	5	0	3	1	2	9	20
5:30 PM	1	0	5	6	3	6	10	5	36
5:45 PM	0	0	3	3	1	1	2	4	14
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	33	27	35	24	39	66	225
APPROACH %'s :	100.00%	0.00%	55.00%	45.00%	59.32%	40.68%	37.14%	62.86%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	1	0	13	11	10	12	19	23	89
PEAK HR FACTOR :	0.250		0.650	0.458	0.833	0.500	0.475	0.639	0.618
	0.250		0.545		0.611		0.700		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Chandler Blvd (East Leg)
City: North Hollywood
Control: Signalized

Project ID: 19-05537-024
Date: 9/11/2019

Total

NS/EW Streets:	Vineland Ave				Vineland Ave				Chandler Blvd (East Leg)				Chandler Blvd (East Leg)				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	3	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	98	15	0	3	296	0	0	0	0	0	0	18	0	5	0	435
7:15 AM	0	119	10	0	8	299	0	0	0	0	0	0	28	0	7	0	471
7:30 AM	0	148	25	0	0	326	0	0	0	0	0	0	29	0	6	0	534
7:45 AM	0	178	38	0	17	297	0	0	0	0	0	0	21	0	6	0	557
8:00 AM	0	207	29	0	11	347	0	0	0	0	0	0	14	0	8	0	616
8:15 AM	0	166	43	0	12	319	0	2	0	0	0	0	16	0	8	0	566
8:30 AM	0	149	40	0	5	301	0	0	0	0	0	0	19	0	4	0	518
8:45 AM	0	147	65	0	9	257	0	0	0	0	0	0	17	0	2	0	497
9:00 AM	0	144	42	0	13	282	0	0	0	0	0	0	19	0	12	0	512
9:15 AM	0	128	29	0	11	209	0	0	0	0	0	0	10	0	6	0	393
9:30 AM	0	150	38	0	7	261	0	0	0	0	0	0	14	0	12	0	482
9:45 AM	0	158	36	0	11	238	0	0	0	0	0	0	11	0	5	0	459
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1792	410	0	107	3432	0	2	0	0	0	0	216	0	81	0	6040
APPROACH %'s :	0.00%	81.38%	18.62%	0.00%	3.02%	96.92%	0.00%	0.06%					72.73%	0.00%	27.27%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	699	135	0	40	1289	0	2	0	0	0	0	80	0	28	0	2273
PEAK HR FACTOR :	0.000	0.844	0.785	0.000	0.588	0.929	0.000	0.250	0.000	0.000	0.000	0.000	0.690	0.000	0.875	0.000	0.922
	0.883				0.929								0.771				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	3	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	187	39	0	10	189	0	0	0	0	0	0	32	0	18	0	475
3:15 PM	0	233	30	0	5	185	0	0	0	0	0	0	23	0	11	0	487
3:30 PM	0	262	34	0	13	190	0	0	0	0	0	0	25	0	7	0	531
3:45 PM	0	262	51	0	9	266	0	2	0	0	0	0	37	0	12	0	639
4:00 PM	0	260	33	0	10	233	0	0	0	0	0	0	39	0	13	0	588
4:15 PM	0	232	34	0	7	192	0	0	0	0	0	0	24	0	7	0	496
4:30 PM	0	239	35	0	8	191	0	0	0	0	0	0	28	0	12	0	513
4:45 PM	0	252	27	0	7	180	0	0	0	0	0	0	41	0	8	0	515
5:00 PM	0	283	47	0	6	191	0	0	0	0	0	0	30	0	13	0	570
5:15 PM	0	266	53	1	7	190	0	0	0	0	0	0	50	0	9	0	576
5:30 PM	0	279	37	0	5	230	0	0	0	0	0	0	41	0	6	0	598
5:45 PM	0	274	46	0	19	197	0	0	0	0	0	0	39	0	13	0	588
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3029	466	1	106	2434	0	2	0	0	0	0	409	0	129	0	6576
APPROACH %'s :	0.00%	86.64%	13.33%	0.03%	4.17%	95.75%	0.00%	0.08%					76.02%	0.00%	23.98%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1102	183	1	37	808	0	0	0	0	0	0	160	0	41	0	2332
PEAK HR FACTOR :	0.000	0.973	0.863	0.250	0.487	0.878	0.000	0.000	0.000	0.000	0.000	0.000	0.800	0.000	0.788	0.000	0.975
	0.974				0.899								0.852				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Chandler Blvd (East Leg)
City: North Hollywood
Control: Signalized

Project ID: 19-05537-024
Date: 9/11/2019

Bikes

NS/EW Streets:	Vineland Ave				Vineland Ave				Chandler Blvd (East Leg)				Chandler Blvd (East Leg)				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	3	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4
7:15 AM	0	0	3	0	0	1	0	0	0	0	0	0	2	0	0	0	6
7:30 AM	0	1	4	0	0	2	0	0	0	0	0	0	5	0	0	0	12
7:45 AM	0	0	6	1	1	1	0	0	0	0	0	0	2	0	0	0	11
8:00 AM	0	1	4	0	0	0	0	0	0	0	0	0	1	0	0	3	9
8:15 AM	0	0	3	0	0	3	0	0	0	0	0	0	6	0	2	0	14
8:30 AM	0	1	6	0	0	1	0	0	0	0	0	0	2	0	0	2	12
8:45 AM	0	0	3	0	1	2	0	0	0	0	0	0	1	0	0	2	9
9:00 AM	0	1	2	0	0	2	0	0	0	0	0	0	4	0	0	1	10
9:15 AM	0	0	4	0	1	1	0	0	0	0	0	0	4	0	1	1	12
9:30 AM	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	2	6
9:45 AM	0	3	8	0	0	0	0	0	0	0	0	0	2	0	0	2	15
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	8	45	1	4	13	0	0	0	0	0	0	33	0	3	13	120
APPROACH %'s :	0.00%	14.81%	83.33%	1.85%	23.53%	76.47%	0.00%	0.00%					67.35%	0.00%	6.12%	26.53%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	2	17	1	1	6	0	0	0	0	0	0	14	0	2	3	46
PEAK HR FACTOR :	0.000	0.500	0.708	0.250	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.250	0.250	0.821
		0.714				0.583								0.594			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	1	3	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	2	1	0	2	3	0	0	0	0	0	0	8	0	0	0	16
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	5	0	1	0	7
3:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	4	0	1	0	7
3:45 PM	0	3	5	0	2	7	0	0	0	0	0	0	2	0	0	0	19
4:00 PM	0	2	2	0	0	0	0	0	0	0	0	0	2	0	1	0	7
4:15 PM	0	2	1	0	3	4	0	0	0	0	0	0	0	0	0	0	10
4:30 PM	0	5	0	0	0	3	0	0	0	0	0	0	0	0	1	0	9
4:45 PM	0	2	3	0	0	1	0	0	0	0	0	0	3	0	0	0	9
5:00 PM	0	2	2	0	1	1	0	0	0	0	0	0	3	0	0	0	9
5:15 PM	0	2	4	0	1	2	0	0	0	0	0	0	1	0	1	0	11
5:30 PM	0	3	4	0	0	3	0	0	0	0	0	0	8	0	2	0	20
5:45 PM	0	1	1	0	0	1	0	0	0	0	0	0	6	0	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	26	23	0	9	26	0	0	0	0	0	0	42	0	7	0	133
APPROACH %'s :	0.00%	53.06%	46.94%	0.00%	25.71%	74.29%	0.00%	0.00%					85.71%	0.00%	14.29%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	8	11	0	2	7	0	0	0	0	0	0	18	0	3	0	49
PEAK HR FACTOR :	0.00	0.667	0.688	0.000	0.500	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.563	0.000	0.375	0.000	0.613
		0.679				0.750								0.525			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Chandler Blvd (East Leg)
City: North Hollywood

Project ID: 19-05537-024
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Vineland Ave		Vineland Ave		Chandler Blvd (East Leg)		Chandler Blvd (East Leg)		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	1	1	10	1	0	0	0	13
7:15 AM	0	0	3	7	1	0	0	0	11
7:30 AM	0	5	3	4	7	0	0	0	19
7:45 AM	0	2	2	13	0	1	0	0	18
8:00 AM	0	1	2	5	0	1	0	0	9
8:15 AM	0	0	5	5	1	0	0	0	11
8:30 AM	1	2	4	4	2	0	0	0	13
8:45 AM	0	0	5	8	3	0	0	0	16
9:00 AM	0	0	2	4	0	1	0	0	7
9:15 AM	2	0	3	6	0	2	0	0	13
9:30 AM	0	0	5	4	1	1	0	0	11
9:45 AM	0	0	2	1	4	1	0	0	8
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	11	37	71	20	7	0	0	149
APPROACH %'s :	21.43%	78.57%	34.26%	65.74%	74.07%	25.93%			
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	8	12	27	8	2	0	0	57
PEAK HR FACTOR :		0.400	0.600	0.519	0.286	0.500			0.750
	0.400		0.650		0.357				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	13	1	17	4	1	2	0	0	38
3:15 PM	0	0	5	4	1	0	0	0	10
3:30 PM	0	4	5	1	0	2	0	0	12
3:45 PM	0	1	4	0	2	1	0	0	8
4:00 PM	1	1	9	2	0	1	0	0	14
4:15 PM	2	0	1	5	1	1	0	0	10
4:30 PM	0	0	6	4	0	0	0	0	10
4:45 PM	2	0	5	4	1	1	0	0	13
5:00 PM	0	2	2	7	2	0	0	0	13
5:15 PM	0	0	4	10	2	1	0	0	17
5:30 PM	2	0	19	4	3	0	0	0	28
5:45 PM	1	0	12	1	2	0	0	0	16
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	21	9	89	46	15	9	0	0	189
APPROACH %'s :	70.00%	30.00%	65.93%	34.07%	62.50%	37.50%			
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	3	2	37	22	9	1	0	0	74
PEAK HR FACTOR :	0.375	0.250	0.487	0.550	0.750	0.250			0.661
	0.625		0.641		0.833				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bakman Ave & Weddington St
City: North Hollywood
Control: 4-Way Stop

Project ID: 19-05537-025
Date: 9/11/2019

Total

NS/EW Streets:	Bakman Ave				Bakman Ave				Weddington St				Weddington St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	7	2	0	0	8	4	0	2	3	2	0	4	3	2	0	38
7:15 AM	3	9	3	0	3	16	7	0	3	7	3	0	10	4	0	0	68
7:30 AM	5	16	12	0	2	52	9	0	0	3	4	0	24	16	0	0	143
7:45 AM	15	25	17	1	4	42	9	0	3	9	13	0	42	17	4	0	201
8:00 AM	3	17	8	0	1	38	3	0	3	11	12	0	28	20	2	0	146
8:15 AM	1	19	7	0	3	23	3	1	1	9	1	0	15	8	1	1	93
8:30 AM	1	9	6	0	4	16	11	0	2	10	7	0	5	5	0	0	76
8:45 AM	1	5	5	0	6	28	0	0	0	10	6	0	7	2	1	0	71
9:00 AM	1	7	1	0	3	16	5	0	3	12	2	0	6	10	2	0	68
9:15 AM	0	5	2	0	2	19	7	0	2	8	4	0	4	10	2	0	65
9:30 AM	1	8	4	0	6	16	3	1	2	10	3	0	5	11	0	1	71
9:45 AM	1	8	9	0	3	12	2	1	1	8	2	0	8	13	2	0	70
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	33	135	76	1	37	286	63	3	22	100	59	0	158	119	16	2	1110
APPROACH %'s :	13.47%	55.10%	31.02%	0.41%	9.51%	73.52%	16.20%	0.77%	12.15%	55.25%	32.60%	0.00%	53.56%	40.34%	5.42%	0.68%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	24	77	44	1	10	155	24	1	7	32	30	0	109	61	7	1	583
PEAK HR FACTOR :	0.400	0.770	0.647	0.250	0.625	0.745	0.667	0.250	0.583	0.727	0.577	0.000	0.649	0.763	0.438	0.250	0.725
	0.629				0.754				0.663				0.706				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	2	14	5	0	3	15	4	0	3	8	3	0	8	9	3	1	78
3:15 PM	7	15	6	1	2	13	4	0	3	8	3	0	12	13	3	0	90
3:30 PM	3	10	7	0	4	16	1	0	6	9	0	0	12	13	4	0	85
3:45 PM	1	15	6	0	2	13	2	0	2	4	0	0	9	9	0	0	63
4:00 PM	2	12	7	1	0	15	2	0	1	6	0	0	6	13	2	0	67
4:15 PM	1	6	4	0	0	3	1	0	3	7	0	0	6	10	1	0	42
4:30 PM	0	10	5	0	1	23	6	0	4	4	0	0	9	14	4	0	80
4:45 PM	1	13	6	0	0	14	4	0	1	8	1	0	11	11	1	0	71
5:00 PM	3	19	6	1	0	13	3	0	3	10	2	0	17	12	4	1	94
5:15 PM	0	7	13	0	2	10	0	0	8	9	2	0	7	12	9	0	79
5:30 PM	2	17	5	1	0	13	2	0	3	13	4	0	10	10	3	1	84
5:45 PM	3	23	3	0	0	14	4	0	3	13	3	0	6	12	3	0	87
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	25	161	73	4	14	162	33	0	40	99	18	0	113	138	37	3	920
APPROACH %'s :	9.51%	61.22%	27.76%	1.52%	6.70%	77.51%	15.79%	0.00%	25.48%	63.06%	11.46%	0.00%	38.83%	47.42%	12.71%	1.03%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	8	66	27	2	2	50	9	0	17	45	11	0	40	46	19	2	344
PEAK HR FACTOR :	0.667	0.717	0.519	0.500	0.250	0.893	0.563	0.000	0.531	0.865	0.688	0.000	0.588	0.958	0.528	0.500	0.915
	0.888				0.847				0.913				0.787				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bakman Ave & Weddington St
City: North Hollywood
Control: 4-Way Stop

Project ID: 19-05537-025
Date: 9/11/2019

Bikes

NS/EW Streets:	Bakman Ave				Bakman Ave				Weddington St				Weddington St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	6	0	0	0	2	0	0	1	2	0	0	1	1	0	0	13
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	2	0	0	0	2	0	0	0	0	0	0	1	0	0	0	5
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.417
	0.500				0.250								0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3	0	0	0	2	2	0	0	1	0	0	0	3	0	0	11
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.500
					0.500				0.250				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bakman Ave & Weddington St
City: North Hollywood

Project ID: 19-05537-025
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Bakman Ave		Bakman Ave		Weddington St		Weddington St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	8	0	3	1	12
7:15 AM	1	1	3	0	7	12	2	4	30
7:30 AM	0	0	30	3	17	30	4	15	99
7:45 AM	0	1	28	20	21	27	10	13	120
8:00 AM	0	0	6	2	13	6	4	2	33
8:15 AM	1	1	0	0	7	2	0	2	13
8:30 AM	2	0	1	1	9	2	4	2	21
8:45 AM	0	0	1	1	4	1	3	1	11
9:00 AM	1	1	1	1	9	4	0	3	20
9:15 AM	0	1	0	0	7	0	3	3	14
9:30 AM	1	3	0	0	4	1	0	0	9
9:45 AM	2	0	1	0	5	1	1	3	13
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	8	8	71	28	111	86	34	49	395
APPROACH %'s :	50.00%	50.00%	71.72%	28.28%	56.35%	43.65%	40.96%	59.04%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	1	2	64	25	58	65	18	32	265
PEAK HR FACTOR :	0.250	0.500	0.533	0.313	0.690	0.542	0.450	0.533	0.552
	0.375		0.464		0.641		0.543		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	1	0	0	0	8	1	0	2	12
3:15 PM	1	1	1	0	2	3	3	1	12
3:30 PM	0	5	1	3	2	2	5	9	27
3:45 PM	1	0	3	2	7	1	6	3	23
4:00 PM	0	0	1	0	5	2	6	4	18
4:15 PM	0	1	2	5	5	1	3	1	18
4:30 PM	0	0	3	1	6	2	4	5	21
4:45 PM	1	0	2	1	3	3	2	0	12
5:00 PM	2	2	2	3	2	5	3	3	22
5:15 PM	0	0	3	1	7	4	1	5	21
5:30 PM	0	0	1	0	2	3	0	3	9
5:45 PM	0	1	1	0	11	4	2	2	21
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	10	20	16	60	31	35	38	216
APPROACH %'s :	37.50%	62.50%	55.56%	44.44%	65.93%	34.07%	47.95%	52.05%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	2	3	7	4	22	16	6	13	73
PEAK HR FACTOR :	0.250	0.375	0.583	0.333	0.500	0.800	0.500	0.650	0.830
	0.313		0.550		0.633		0.792		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Weddington St
City: North Hollywood
Control: Signalized

Project ID: 19-05537-026
Date: 9/11/2019

Total

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Weddington St				Weddington St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	2	0	0	0	1	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	38	15	0	5	208	2	0	0	3	2	0	11	5	10	0	299
7:15 AM	3	53	9	1	6	253	4	0	1	2	3	0	6	2	9	0	352
7:30 AM	14	59	11	0	8	269	12	0	5	6	1	0	9	9	3	0	406
7:45 AM	23	83	5	0	13	230	31	1	8	6	4	0	8	13	4	0	429
8:00 AM	12	102	20	1	13	221	12	1	3	13	9	0	4	20	14	0	445
8:15 AM	19	94	11	0	26	222	11	1	1	13	3	1	6	15	13	0	436
8:30 AM	1	58	17	0	19	237	5	0	3	10	9	0	5	8	7	0	379
8:45 AM	3	75	26	0	18	309	3	0	2	10	7	0	16	6	8	0	483
9:00 AM	7	75	16	0	15	316	5	1	2	12	7	0	14	9	16	0	495
9:15 AM	3	79	21	0	17	240	2	0	1	6	2	0	11	7	18	0	407
9:30 AM	5	112	18	0	16	249	6	0	1	9	6	0	16	12	17	0	467
9:45 AM	3	110	26	2	6	305	6	0	1	7	8	0	9	16	13	0	512
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	93	938	195	4	162	3059	99	4	28	97	61	1	115	122	132	0	5110
APPROACH %'s :	7.56%	76.26%	15.85%	0.33%	4.87%	92.03%	2.98%	0.12%	14.97%	51.87%	32.62%	0.53%	31.17%	33.06%	35.77%	0.00%	
PEAK HR :	09:00 AM - 10:00 AM																TOTAL
PEAK HR VOL :	18	376	81	2	54	1110	19	1	5	34	23	0	50	44	64	0	1881
PEAK HR FACTOR :	0.643	0.839	0.779	0.250	0.794	0.878	0.792	0.250	0.625	0.708	0.719	0.000	0.781	0.688	0.889	0.000	0.918
	0.846				0.878				0.738				0.878				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	2	0	0	0	1	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	5	147	16	1	9	107	4	0	2	5	8	0	12	9	19	0	344
3:15 PM	2	133	25	0	16	130	5	0	2	9	3	0	12	14	23	0	374
3:30 PM	11	146	32	3	10	114	3	0	5	7	10	0	13	15	28	0	397
3:45 PM	12	159	16	1	14	119	8	0	7	12	5	0	18	9	20	0	400
4:00 PM	6	147	41	0	11	125	2	0	0	8	8	0	15	5	15	0	383
4:15 PM	8	148	34	1	15	127	3	1	4	6	0	0	18	12	28	0	405
4:30 PM	10	160	30	1	6	138	6	1	2	6	3	0	23	10	24	0	420
4:45 PM	10	159	19	0	9	123	2	1	3	5	3	0	21	15	24	0	394
5:00 PM	10	150	18	2	12	114	13	3	2	7	8	0	14	16	25	0	394
5:15 PM	12	121	25	1	7	127	4	1	2	11	8	0	15	10	23	0	367
5:30 PM	6	190	13	3	6	130	4	4	3	13	3	0	18	15	22	0	430
5:45 PM	7	167	16	2	9	130	3	1	2	12	7	0	17	14	22	0	409
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	99	1827	285	15	124	1484	57	12	34	101	66	0	196	144	273	0	4717
APPROACH %'s :	4.45%	82.08%	12.80%	0.67%	7.39%	88.49%	3.40%	0.72%	16.92%	50.25%	32.84%	0.00%	31.97%	23.49%	44.54%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	38	617	101	4	42	502	24	6	11	24	14	0	76	53	101	0	1613
PEAK HR FACTOR :	0.950	0.964	0.743	0.500	0.700	0.909	0.462	0.500	0.688	0.857	0.438	0.000	0.826	0.828	0.902	0.000	0.960
	0.945				0.950				0.721				0.958				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Weddington St
City: North Hollywood
Control: Signalized

Project ID: 19-05537-026
Date: 9/11/2019

Bikes

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Weddington St				Weddington St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	2	0	0	0	1	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	2	0	0	0	2	0	0	1	0	0	0	0	0	0	0	5
8:15 AM	0	1	0	0	1	2	0	0	0	0	0	0	1	1	0	0	6
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	4
9:30 AM	0	2	1	0	0	2	0	0	0	0	0	0	0	0	0	0	5
9:45 AM	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	9	2	0	1	14	0	0	2	1	0	0	1	2	0	0	32
APPROACH %'s :	0.00%	81.82%	18.18%	0.00%	6.67%	93.33%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	09:00 AM - 10:00 AM																TOTAL
PEAK HR VOL :	0	2	2	0	0	6	0	0	1	1	0	0	0	0	0	0	12
PEAK HR FACTOR :	0.000	0.250	0.500	0.000	0.000	0.500	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.600
	0.333				0.500				0.500								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	3	0	0	1	2	0	0	0	1	0	0	0.5	0.5	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	3
3:15 PM	0	1	0	0	0	3	0	0	1	0	0	0	1	0	0	0	6
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	1	0	0	0	3	0	0	0	0	0	0	0	1	0	0	5
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	4	0	0	0	3	0	0	0	1	0	0	0	0	1	0	9
5:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	1	0	0	1	3	0	0	0	0	0	0	0	0	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	16	0	0	1	25	1	0	1	2	0	0	1	2	1	0	50
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	3.70%	92.59%	3.70%	0.00%	33.33%	66.67%	0.00%	0.00%	25.00%	50.00%	25.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	6	0	0	0	10	0	0	0	0	0	0	0	0	0	0	16
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.800
	0.500				0.625												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Weddington St
City: North Hollywood

Project ID: 19-05537-026
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Lankershim Blvd		Lankershim Blvd		Weddington St		Weddington St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	8	4	4	2	18
7:15 AM	0	1	1	1	12	4	2	2	23
7:30 AM	2	2	0	3	10	5	1	2	25
7:45 AM	2	1	3	7	13	7	5	3	41
8:00 AM	4	3	2	0	10	4	10	1	34
8:15 AM	6	1	2	1	18	14	7	4	53
8:30 AM	1	3	0	0	18	12	4	2	40
8:45 AM	3	3	1	0	16	14	5	6	48
9:00 AM	0	1	4	2	23	21	5	5	61
9:15 AM	2	2	1	0	4	14	6	4	33
9:30 AM	2	1	1	2	14	10	0	6	36
9:45 AM	2	2	2	0	7	12	6	2	33
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	24	20	17	16	153	121	55	39	445
APPROACH %'s :	54.55%	45.45%	51.52%	48.48%	55.84%	44.16%	58.51%	41.49%	
PEAK HR :	09:00 AM - 10:00 AM								TOTAL
PEAK HR VOL :	6	6	8	4	48	57	17	17	163
PEAK HR FACTOR :	0.750	0.750	0.500	0.500	0.522	0.679	0.708	0.708	0.668
	0.750		0.500		0.597		0.850		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	7	2	5	1	16	13	12	7	63
3:15 PM	7	8	2	1	13	14	15	7	67
3:30 PM	3	3	3	2	20	20	3	4	58
3:45 PM	2	14	0	2	28	24	3	6	79
4:00 PM	1	0	7	4	18	24	13	7	74
4:15 PM	5	3	3	5	21	14	6	11	68
4:30 PM	3	2	2	2	18	24	4	8	63
4:45 PM	4	3	5	1	28	33	5	10	89
5:00 PM	0	3	2	7	22	37	8	11	90
5:15 PM	5	5	0	4	18	20	10	10	72
5:30 PM	1	0	2	0	22	18	6	4	53
5:45 PM	7	8	2	3	25	29	7	15	96
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	45	51	33	32	249	270	92	100	872
APPROACH %'s :	46.88%	53.13%	50.77%	49.23%	47.98%	52.02%	47.92%	52.08%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	12	11	12	15	89	108	23	40	310
PEAK HR FACTOR :	0.600	0.917	0.600	0.536	0.795	0.730	0.719	0.909	0.861
	0.719		0.750		0.807		0.829		

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 SB Ramps & Magnolia Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-027
Date: 9/11/2019

Total

NS/EW Streets:	SR-170 SB Ramps				SR-170 SB Ramps				Magnolia Blvd				Magnolia Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.3	0.3	0.3	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	212	121	53	0	0	93	114	0	18	124	0	1	736
7:15 AM	0	0	0	0	205	112	72	0	0	103	124	0	19	211	0	0	846
7:30 AM	0	0	0	0	207	68	85	0	0	134	138	0	12	256	0	0	900
7:45 AM	0	0	0	0	207	81	71	0	0	141	149	0	16	241	0	0	906
8:00 AM	0	0	0	0	118	83	39	0	0	172	176	0	24	212	0	0	824
8:15 AM	0	0	0	0	100	70	38	0	0	151	143	0	37	258	0	0	797
8:30 AM	0	0	0	0	102	70	20	0	0	191	145	0	14	203	0	0	745
8:45 AM	0	0	0	0	103	66	15	0	0	168	150	0	21	162	0	0	685
9:00 AM	0	0	0	0	68	58	11	0	0	141	169	0	33	159	0	0	639
9:15 AM	0	0	0	0	121	59	20	0	0	159	152	0	29	143	0	0	683
9:30 AM	0	0	0	0	113	55	21	0	0	173	160	0	20	158	0	0	700
9:45 AM	0	0	0	0	125	45	29	0	0	169	154	0	21	147	0	1	691
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1681	888	474	0	0	1795	1774	0	264	2274	0	2	9152
APPROACH %'s :					55.24%	29.18%	15.58%	0.00%	0.00%	50.29%	49.71%	0.00%	10.39%	89.53%	0.00%	0.08%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	737	344	267	0	0	550	587	0	71	920	0	0	3476
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.890	0.768	0.785	0.000	0.000	0.799	0.834	0.000	0.740	0.898	0.000	0.000	0.959
					0.866				0.817				0.924				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.3	0.3	0.3	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	77	0	29	0	0	214	120	0	44	226	0	0	710
3:15 PM	0	0	0	0	84	3	40	0	0	189	116	0	34	198	0	0	664
3:30 PM	0	0	0	0	75	0	30	0	0	220	141	0	41	216	0	0	723
3:45 PM	0	0	0	0	84	0	28	0	0	237	141	0	38	218	0	0	746
4:00 PM	0	0	0	0	63	0	29	0	0	170	109	0	56	145	0	0	572
4:15 PM	0	0	0	0	74	0	29	0	0	197	115	0	56	234	0	0	705
4:30 PM	0	0	0	0	102	2	33	0	0	192	103	0	52	220	0	0	704
4:45 PM	0	0	0	0	89	0	18	0	0	178	110	0	41	266	0	0	702
5:00 PM	0	0	0	0	89	0	33	0	0	163	132	0	55	290	0	0	762
5:15 PM	0	0	0	0	91	0	42	0	0	163	123	0	53	298	0	0	770
5:30 PM	0	0	0	0	105	2	22	0	0	192	125	0	45	300	0	0	791
5:45 PM	0	0	0	0	93	0	30	0	0	191	107	0	50	277	0	0	748
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1026	7	363	0	0	2306	1442	0	565	2888	0	0	8597
APPROACH %'s :					73.50%	0.50%	26.00%	0.00%	0.00%	61.53%	38.47%	0.00%	16.36%	83.64%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	378	2	127	0	0	709	487	0	203	1165	0	0	3071
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.900	0.250	0.756	0.000	0.000	0.923	0.922	0.000	0.923	0.971	0.000	0.000	0.971
					0.953				0.943				0.974				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 SB Ramps & Magnolia Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-027
Date: 9/11/2019

Bikes

NS/EW Streets:	SR-170 SB Ramps				SR-170 SB Ramps				Magnolia Blvd				Magnolia Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.3	0.3	0.3	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:00 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
8:45 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
9:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
9:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	2	0	1	0	0	0	1	5	0	0	1	9	0	0	19
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	16.67%	83.33%	0.00%	0.00%	10.00%	90.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	3	0	0	0	6	0	0	10
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.750	0.000	0.000	0.625
	0.250								0.375				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.3	0.3	0.3	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	15	0	0	0	9	0	0	24
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	0	12
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.750	0.000	0.000	0.600
									0.500				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 SB Ramps & Magnolia Blvd
City: North Hollywood

Project ID: 19-05537-027
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR-170 SB Ramps		SR-170 SB Ramps		Magnolia Blvd		Magnolia Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	3	0	0	0	0	3
7:15 AM	3	5	5	7	0	0	0	1	21
7:30 AM	4	8	3	6	0	0	0	0	21
7:45 AM	1	12	1	4	0	0	0	0	18
8:00 AM	2	13	2	4	0	0	1	3	25
8:15 AM	1	15	3	0	0	0	0	0	19
8:30 AM	1	5	0	1	0	0	0	1	8
8:45 AM	2	5	0	2	0	0	1	0	10
9:00 AM	0	2	0	1	0	0	0	0	3
9:15 AM	1	2	1	4	0	0	1	0	9
9:30 AM	4	1	1	4	0	0	0	0	10
9:45 AM	6	4	2	2	0	0	0	0	14
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	25	72	18	38	0	0	3	5	161
APPROACH %'s :	25.77%	74.23%	32.14%	67.86%			37.50%	62.50%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	10	38	11	21	0	0	1	4	85
PEAK HR FACTOR :	0.625	0.731	0.550	0.750			0.250	0.333	0.850
	0.800		0.667				0.313		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	1	4	3	0	0	0	0	8
3:15 PM	21	2	18	1	0	0	0	0	42
3:30 PM	38	3	16	2	0	1	0	0	60
3:45 PM	6	3	21	1	0	0	0	0	31
4:00 PM	8	2	5	4	0	0	0	0	19
4:15 PM	2	2	8	6	0	0	0	0	18
4:30 PM	4	2	0	4	0	0	0	0	10
4:45 PM	1	5	1	23	0	0	0	0	30
5:00 PM	3	2	10	1	0	0	0	4	20
5:15 PM	3	0	5	4	0	0	0	0	12
5:30 PM	3	1	3	2	0	0	1	0	10
5:45 PM	4	2	12	1	0	0	1	0	20
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	93	25	103	52	0	1	2	4	280
APPROACH %'s :	78.81%	21.19%	66.45%	33.55%	0.00%	100.00%	33.33%	66.67%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	13	5	30	8	0	0	2	4	62
PEAK HR FACTOR :	0.813	0.625	0.625	0.500			0.500	0.250	0.775
	0.750		0.731				0.375		

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 NB Ramps & Magnolia Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-028
Date: 9/11/2019

Total

NS/EW Streets:	SR-170 NB Ramps				SR-170 NB Ramps				Magnolia Blvd				Magnolia Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.3	0.3	0.3	0	0	0	0	0	1	2	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	53	0	48	0	0	0	0	0	33	263	0	0	0	101	102	0	600
7:15 AM	90	1	41	0	0	0	0	0	45	276	0	0	0	138	108	0	699
7:30 AM	119	0	43	0	0	0	0	0	34	295	0	0	0	164	90	0	745
7:45 AM	89	2	33	0	0	0	0	0	41	318	0	0	0	150	82	0	715
8:00 AM	101	0	38	0	0	0	0	0	20	260	0	0	0	150	80	0	649
8:15 AM	120	0	55	0	0	0	0	0	18	240	0	0	0	163	91	0	687
8:30 AM	90	0	42	0	0	0	0	0	29	268	0	0	0	123	93	0	645
8:45 AM	58	0	73	0	0	0	0	0	31	239	0	0	0	128	98	0	627
9:00 AM	55	0	71	0	0	0	0	0	18	183	0	0	0	135	79	0	541
9:15 AM	54	0	73	0	0	0	0	0	23	259	0	0	0	119	67	0	595
9:30 AM	43	0	64	0	0	0	0	0	32	256	0	0	0	132	78	0	605
9:45 AM	47	1	57	0	0	0	0	0	27	263	0	0	0	123	77	0	595
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	919	4	638	0	0	0	0	0	351	3120	0	0	0	1626	1045	0	7703
APPROACH %'s :	58.87%	0.26%	40.87%	0.00%					10.11%	89.89%	0.00%	0.00%	0.00%	60.88%	39.12%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	399	3	155	0	0	0	0	0	140	1149	0	0	0	602	360	0	2808
PEAK HR FACTOR :	0.838	0.375	0.901	0.000	0.000	0.000	0.000	0.000	0.778	0.903	0.000	0.000	0.000	0.918	0.833	0.000	0.942
	0.860								0.898				0.947				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.3	0.3	0.3	0	0	0	0	0	1	2	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	67	1	46	0	0	0	0	0	57	230	0	1	0	197	111	0	710
3:15 PM	66	0	42	0	0	0	0	0	34	243	0	0	0	174	125	1	685
3:30 PM	66	3	46	0	0	0	0	0	44	248	0	0	0	189	109	1	706
3:45 PM	67	0	46	0	0	0	0	0	38	288	0	0	0	171	123	0	733
4:00 PM	49	2	58	0	0	0	0	0	53	174	0	0	0	162	106	0	604
4:15 PM	76	0	37	0	0	0	0	0	52	223	0	0	0	212	136	0	736
4:30 PM	86	0	42	0	0	0	0	0	50	239	0	0	0	195	116	0	728
4:45 PM	92	1	49	0	0	0	0	0	38	236	0	0	0	209	104	0	729
5:00 PM	112	1	43	0	0	0	0	0	34	204	0	0	0	242	137	0	773
5:15 PM	114	2	64	0	0	0	0	0	40	225	0	0	0	226	123	0	794
5:30 PM	116	0	40	0	0	0	0	0	36	242	0	0	0	224	145	0	803
5:45 PM	102	1	46	0	0	0	0	0	28	269	0	0	0	231	109	0	786
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1013	11	559	0	0	0	0	0	504	2821	0	1	0	2432	1444	2	8787
APPROACH %'s :	63.99%	0.69%	35.31%	0.00%					15.15%	84.82%	0.00%	0.03%	0.00%	62.71%	37.24%	0.05%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	444	4	193	0	0	0	0	0	138	940	0	0	0	923	514	0	3156
PEAK HR FACTOR :	0.957	0.500	0.754	0.000	0.000	0.000	0.000	0.000	0.863	0.874	0.000	0.000	0.000	0.954	0.886	0.000	0.983
	0.890								0.907				0.948				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 NB Ramps & Magnolia Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-028
Date: 9/11/2019

Bikes

NS/EW Streets:	SR-170 NB Ramps				SR-170 NB Ramps				Magnolia Blvd				Magnolia Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.3	0.3	0.3	0	0	0	0	0	1	2	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	8	0	0	0	10	0	0	18
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	4	0	0	0	7	0	0	11
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.000	0.000	0.583	0.000	0.000	0.458
										0.333				0.583			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.3	0.3	0.3	0	0	0	0	0	1	2	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	15	0	0	0	9	0	0	25
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	6	0	0	0	6	0	0	13
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.750	0.000	0.000	0.813
			0.250							0.500				0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-170 NB Ramps & Magnolia Blvd
City: North Hollywood

Project ID: 19-05537-028
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR-170 NB Ramps		SR-170 NB Ramps		Magnolia Blvd		Magnolia Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	1	5	4	5	1	1	0	0	17
7:30 AM	1	11	3	9	4	0	0	0	28
7:45 AM	0	11	0	3	1	0	0	0	15
8:00 AM	3	10	5	2	0	2	0	0	22
8:15 AM	1	14	3	0	2	0	0	0	20
8:30 AM	1	3	0	1	0	0	0	0	5
8:45 AM	2	5	0	1	0	0	0	0	8
9:00 AM	0	1	0	2	0	2	0	0	5
9:15 AM	1	3	0	3	1	0	0	0	8
9:30 AM	3	0	1	4	0	1	0	0	9
9:45 AM	5	4	2	1	0	0	0	0	12
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	18	67	18	31	9	6	0	0	149
APPROACH %'s :	21.18%	78.82%	36.73%	63.27%	60.00%	40.00%			
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	5	37	12	19	6	3	0	0	82
PEAK HR FACTOR :	0.417	0.841	0.600	0.528	0.375	0.375			0.732
	0.808		0.646		0.563				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	3	3	5	3	0	2	0	0	16
3:15 PM	18	1	14	1	0	0	0	0	34
3:30 PM	30	2	2	1	2	0	0	0	37
3:45 PM	6	2	17	1	1	0	0	0	27
4:00 PM	6	2	2	0	0	0	0	0	10
4:15 PM	4	1	9	7	1	1	0	0	23
4:30 PM	1	3	0	0	2	0	0	0	6
4:45 PM	0	5	0	1	0	0	0	0	6
5:00 PM	3	2	5	1	2	1	0	0	14
5:15 PM	3	1	0	2	0	0	0	0	6
5:30 PM	2	1	2	1	0	0	0	0	6
5:45 PM	3	1	2	0	0	1	0	0	7
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	79	24	58	18	8	5	0	0	192
APPROACH %'s :	76.70%	23.30%	76.32%	23.68%	61.54%	38.46%			
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	11	5	9	4	2	2	0	0	33
PEAK HR FACTOR :	0.917	0.625	0.450	0.500	0.250	0.500			0.589
	0.800		0.542		0.333				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Magnolia Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-029
Date: 9/11/2019

Total

NS/EW Streets:	Tujunga Ave				Tujunga Ave				Magnolia Blvd				Magnolia Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	17	29	11	0	7	85	28	0	12	152	147	0	50	138	2	0	678
7:15 AM	14	32	18	0	8	103	34	0	18	167	125	0	58	201	5	0	783
7:30 AM	20	45	24	0	13	118	53	0	25	183	142	0	52	175	3	0	853
7:45 AM	28	54	21	0	8	111	44	0	27	180	125	0	56	171	7	0	832
8:00 AM	30	50	26	0	13	126	29	0	28	180	113	0	44	162	4	0	805
8:15 AM	29	39	20	0	14	139	37	0	18	156	100	0	52	182	5	0	791
8:30 AM	18	24	17	0	10	146	17	0	16	213	90	0	58	190	5	0	804
8:45 AM	22	39	32	0	3	149	19	0	20	199	85	0	58	190	5	0	821
9:00 AM	15	39	23	0	19	117	25	0	21	173	75	0	51	161	8	0	727
9:15 AM	15	27	21	0	14	129	31	0	17	216	80	0	69	169	7	0	795
9:30 AM	16	36	21	0	11	134	22	0	21	222	71	0	51	153	5	0	763
9:45 AM	16	32	26	0	6	119	26	0	18	237	71	0	38	156	9	0	754
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	240	446	260	0	126	1476	365	0	241	2278	1224	0	637	2048	65	0	9406
APPROACH %'s :	25.37%	47.15%	27.48%	0.00%	6.41%	75.04%	18.56%	0.00%	6.44%	60.86%	32.70%	0.00%	23.16%	74.47%	2.36%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	107	188	91	0	48	494	163	0	98	699	480	0	204	690	19	0	3281
PEAK HR FACTOR :	0.892	0.870	0.875	0.000	0.857	0.888	0.769	0.000	0.875	0.955	0.845	0.000	0.911	0.948	0.679	0.000	0.962
	0.910				0.928				0.912				0.955				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	31	38	20	0	4	82	45	0	33	201	37	1	58	223	12	0	785
3:15 PM	28	65	18	0	6	72	47	0	51	195	45	0	62	229	19	0	837
3:30 PM	34	56	19	0	14	77	39	0	45	193	50	0	57	247	16	0	847
3:45 PM	23	44	25	0	12	78	39	0	48	229	60	1	57	220	15	0	851
4:00 PM	26	49	25	0	5	60	39	0	31	162	38	1	45	186	15	0	682
4:15 PM	31	57	15	0	12	59	47	0	29	202	35	0	48	262	4	0	801
4:30 PM	29	66	19	0	11	52	35	0	31	204	43	0	31	241	10	0	772
4:45 PM	21	54	24	0	7	68	46	2	41	206	41	2	28	260	7	0	807
5:00 PM	33	61	30	0	8	56	52	0	34	177	40	0	37	274	10	0	812
5:15 PM	28	51	20	0	7	51	44	1	42	200	44	1	42	292	15	0	838
5:30 PM	27	71	39	0	14	57	45	0	36	205	43	0	35	265	17	1	855
5:45 PM	18	67	16	0	13	60	45	0	31	235	46	0	42	306	10	0	889
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	329	679	270	0	113	772	523	3	452	2409	522	6	542	3005	150	1	9776
APPROACH %'s :	25.74%	53.13%	21.13%	0.00%	8.01%	54.71%	37.07%	0.21%	13.34%	71.08%	15.40%	0.18%	14.66%	81.26%	4.06%	0.03%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	106	250	105	0	42	224	186	1	143	817	173	1	156	1137	52	1	3394
PEAK HR FACTOR :	0.803	0.880	0.673	0.000	0.750	0.933	0.894	0.250	0.851	0.869	0.940	0.250	0.929	0.929	0.765	0.250	0.954
	0.841				0.960				0.909				0.940				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Magnolia Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-029
Date: 9/11/2019

Bikes

NS/EW Streets:	Tujunga Ave				Tujunga Ave				Magnolia Blvd				Magnolia Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	3	0	1	0	0	0	0	0	0	0	5
7:30 AM	0	0	0	0	0	1	2	0	1	4	0	0	0	4	0	0	12
7:45 AM	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	3
8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	0	0	0	0	1	3	0	0	1	2	0	0	8
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2
8:45 AM	0	0	0	0	0	1	1	0	0	1	0	0	0	2	1	0	6
9:00 AM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	3
9:30 AM	0	1	0	0	0	2	0	0	1	1	0	0	0	0	0	0	5
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3	0	0	0	5	10	0	8	9	1	0	2	9	1	0	48
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%	44.44%	50.00%	5.56%	0.00%	16.67%	75.00%	8.33%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	3	0	4	7	0	0	1	7	0	0	24
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.250	0.375	0.000	0.500	0.438	0.000	0.000	0.250	0.438	0.000	0.000	0.500
	0.250				0.333				0.550				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	4
3:15 PM	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	3
3:30 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	3
3:45 PM	0	3	0	0	0	0	1	0	1	4	1	0	0	1	0	0	11
4:00 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	3
4:15 PM	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	3	0	0	0	0	0	0	0	3	0	0	0	1	0	0	7
5:15 PM	0	2	0	0	0	0	0	0	0	2	0	0	0	1	0	0	5
5:30 PM	1	0	0	0	0	2	1	0	1	1	0	0	0	2	1	0	9
5:45 PM	0	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	10	1	0	3	6	2	0	4	21	1	0	0	7	2	0	58
APPROACH %'s :	8.33%	83.33%	8.33%	0.00%	27.27%	54.55%	18.18%	0.00%	15.38%	80.77%	3.85%	0.00%	0.00%	77.78%	22.22%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	6	0	0	0	2	1	0	2	9	0	0	0	4	1	0	26
PEAK HR FACTOR :	0.25	0.500	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.750	0.000	0.000	0.000	0.500	0.250	0.000	0.722
	0.583				0.250				0.688				0.417				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Magnolia Blvd
City: North Hollywood

Project ID: 19-05537-029
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Tujunga Ave		Tujunga Ave		Magnolia Blvd		Magnolia Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	2	2	9	3	1	2	0	19
7:15 AM	3	6	1	3	4	3	1	1	22
7:30 AM	1	6	3	9	6	3	0	0	28
7:45 AM	1	8	7	7	3	8	1	1	36
8:00 AM	3	7	3	2	9	5	2	1	32
8:15 AM	0	3	6	4	6	2	1	4	26
8:30 AM	4	3	10	1	12	5	1	0	36
8:45 AM	3	3	2	4	3	7	2	0	24
9:00 AM	3	3	2	2	5	6	4	1	26
9:15 AM	3	4	4	1	6	5	0	3	26
9:30 AM	1	2	4	3	1	0	0	0	11
9:45 AM	6	4	10	8	3	3	2	7	43
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	28	51	54	53	61	48	16	18	329
APPROACH %'s :	35.44%	64.56%	50.47%	49.53%	55.96%	44.04%	47.06%	52.94%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	5	24	19	22	24	18	4	6	122
PEAK HR FACTOR :	0.417	0.750	0.679	0.611	0.667	0.563	0.500	0.375	0.847
	0.725		0.732		0.750		0.500		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	3	4	6	5	7	2	0	3	30
3:15 PM	3	2	9	7	4	5	3	1	34
3:30 PM	21	2	30	10	5	10	3	1	82
3:45 PM	15	8	11	13	5	10	2	1	65
4:00 PM	3	1	10	6	9	3	6	0	38
4:15 PM	6	0	5	8	2	4	2	3	30
4:30 PM	3	2	3	8	4	5	4	3	32
4:45 PM	2	4	0	10	1	6	3	3	29
5:00 PM	1	4	6	3	5	6	1	4	30
5:15 PM	5	2	9	7	2	2	4	3	34
5:30 PM	6	5	6	6	8	6	4	4	45
5:45 PM	3	3	11	13	6	6	6	2	50
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	71	37	106	96	58	65	38	28	499
APPROACH %'s :	65.74%	34.26%	52.48%	47.52%	47.15%	52.85%	57.58%	42.42%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	15	14	32	29	21	20	15	13	159
PEAK HR FACTOR :	0.625	0.700	0.727	0.558	0.656	0.833	0.625	0.813	0.795
	0.659		0.635		0.732		0.875		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Magnolia Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-030
Date: 9/11/2019

Total

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Magnolia Blvd				Magnolia Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	1	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	20	35	5	0	12	193	15	0	15	68	74	0	10	162	11	0	620
7:15 AM	23	29	4	0	15	240	22	0	13	75	82	0	7	205	16	0	731
7:30 AM	17	59	6	1	14	199	30	0	13	87	52	2	17	160	18	0	675
7:45 AM	16	68	3	0	21	189	50	0	12	100	58	0	22	133	33	0	705
8:00 AM	12	67	7	0	26	166	24	0	14	125	59	0	15	136	52	0	703
8:15 AM	22	83	10	0	29	181	27	0	9	112	32	0	25	135	33	0	698
8:30 AM	26	43	7	0	32	213	32	0	32	113	50	0	29	196	21	0	794
8:45 AM	19	66	16	0	20	269	30	0	27	121	45	0	17	169	26	0	825
9:00 AM	20	53	12	0	22	235	52	0	39	124	55	0	14	213	12	0	851
9:15 AM	22	61	9	0	23	217	27	0	46	106	43	0	11	200	12	0	777
9:30 AM	18	82	10	0	26	200	26	0	46	114	51	0	9	171	18	0	771
9:45 AM	24	84	13	0	20	253	28	0	53	139	60	0	16	151	20	0	861
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	239	730	102	1	260	2555	363	0	319	1284	661	2	192	2031	272	0	9011
APPROACH %'s :	22.29%	68.10%	9.51%	0.09%	8.18%	80.40%	11.42%	0.00%	14.08%	56.66%	29.17%	0.09%	7.70%	81.40%	10.90%	0.00%	
PEAK HR :	09:00 AM - 10:00 AM																TOTAL
PEAK HR VOL :	84	280	44	0	91	905	133	0	184	483	209	0	50	735	62	0	3260
PEAK HR FACTOR :	0.875	0.833	0.846	0.000	0.875	0.894	0.639	0.000	0.868	0.869	0.871	0.000	0.781	0.863	0.775	0.000	0.947
	0.843				0.913				0.869				0.886				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	1	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	44	102	13	0	21	81	17	0	31	148	36	0	21	234	22	0	770
3:15 PM	26	124	8	0	33	97	24	0	21	108	41	0	10	188	27	0	707
3:30 PM	39	126	12	1	21	81	24	0	25	139	42	0	15	230	36	0	791
3:45 PM	45	123	14	0	29	103	21	0	34	129	62	0	25	207	33	0	825
4:00 PM	25	118	13	0	22	100	15	0	46	140	42	0	22	204	26	0	773
4:15 PM	26	145	15	0	30	109	29	0	35	111	33	0	12	203	22	0	770
4:30 PM	40	123	13	0	26	90	21	0	28	145	40	0	14	215	30	0	785
4:45 PM	41	126	21	0	13	109	31	0	31	147	44	0	26	189	29	0	807
5:00 PM	36	123	11	0	17	92	27	0	27	160	35	0	15	245	20	0	808
5:15 PM	28	120	21	0	22	114	38	0	27	120	39	0	13	231	33	0	806
5:30 PM	40	125	21	0	30	88	31	0	30	146	61	0	16	271	28	0	887
5:45 PM	48	164	19	0	24	110	33	0	21	125	72	0	20	248	25	0	909
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	438	1519	181	1	288	1174	311	0	356	1618	547	0	209	2665	331	0	9638
APPROACH %'s :	20.48%	71.01%	8.46%	0.05%	16.24%	66.22%	17.54%	0.00%	14.12%	64.18%	21.70%	0.00%	6.52%	83.15%	10.33%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	152	532	72	0	93	404	129	0	105	551	207	0	64	995	106	0	3410
PEAK HR FACTOR :	0.792	0.811	0.857	0.000	0.775	0.886	0.849	0.000	0.875	0.861	0.719	0.000	0.800	0.918	0.803	0.000	0.938
	0.818				0.899				0.910				0.925				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Magnolia Blvd
City: North Hollywood
Control: Signalized

Project ID: 19-05537-030
Date: 9/11/2019

Bikes

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Magnolia Blvd				Magnolia Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	1	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	3
7:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
7:45 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	0	1	0	0	0	2	1	0	0	1	0	0	0	1	0	0	6
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	3
9:00 AM	1	0	0	0	0	0	1	0	0	2	0	0	0	1	0	0	5
9:15 AM	0	0	0	0	1	1	1	0	0	0	0	0	1	1	0	0	5
9:30 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
9:45 AM	0	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	6	0	0	2	10	4	0	1	6	0	0	2	6	0	1	39
APPROACH %'s :	14.29%	85.71%	0.00%	0.00%	12.50%	62.50%	25.00%	0.00%	14.29%	85.71%	0.00%	0.00%	22.22%	66.67%	0.00%	11.11%	
PEAK HR :	09:00 AM - 10:00 AM																TOTAL
PEAK HR VOL :	1	1	0	0	1	5	2	0	1	3	0	0	1	2	0	0	17
PEAK HR FACTOR :	0.250	0.250	0.000	0.000	0.250	0.625	0.500	0.000	0.250	0.375	0.000	0.000	0.250	0.500	0.000	0.000	0.850
	0.500				0.667				0.500				0.375				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	1	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	4
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	1	1	0	0	0	1	0	0	1	0	0	0	4
4:00 PM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	2	0	0	1	0	0	0	1	0	0	0	0	3	0	0	7
4:30 PM	0	0	1	0	0	3	0	0	0	1	1	0	0	0	0	0	6
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	4
5:15 PM	0	3	0	0	0	3	0	0	2	2	0	0	0	0	0	0	10
5:30 PM	0	0	0	0	1	2	0	0	0	0	0	0	0	3	2	0	8
5:45 PM	2	0	0	0	2	2	0	0	0	0	0	0	1	0	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	5	1	0	6	17	0	0	3	8	2	0	2	6	2	0	55
APPROACH %'s :	33.33%	55.56%	11.11%	0.00%	26.09%	73.91%	0.00%	0.00%	23.08%	61.54%	15.38%	0.00%	20.00%	60.00%	20.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	3	0	0	3	9	0	0	2	3	1	0	1	3	2	0	29
PEAK HR FACTOR :	0.25	0.250	0.000	0.000	0.375	0.750	0.000	0.000	0.250	0.375	0.250	0.000	0.250	0.250	0.250	0.000	0.725
	0.417				0.750				0.375				0.300				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Magnolia Blvd
City: North Hollywood

Project ID: 19-05537-030
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Lankershim Blvd		Lankershim Blvd		Magnolia Blvd		Magnolia Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	6	0	5	2	10	6	6	36
7:15 AM	3	6	5	6	9	4	3	5	41
7:30 AM	4	5	2	11	11	6	6	3	48
7:45 AM	5	16	13	8	17	12	9	6	86
8:00 AM	7	4	10	5	12	8	18	5	69
8:15 AM	1	0	14	12	15	7	3	3	55
8:30 AM	1	6	12	11	25	14	6	8	83
8:45 AM	1	4	10	13	23	17	3	4	75
9:00 AM	2	5	11	14	20	16	5	9	82
9:15 AM	2	6	4	10	11	18	8	5	64
9:30 AM	4	4	17	9	20	13	1	6	74
9:45 AM	2	11	9	24	17	25	4	4	96
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	33	73	107	128	182	150	72	64	809
APPROACH %'s :	31.13%	68.87%	45.53%	54.47%	54.82%	45.18%	52.94%	47.06%	
PEAK HR :	09:00 AM - 10:00 AM								TOTAL
PEAK HR VOL :	10	26	41	57	68	72	18	24	316
PEAK HR FACTOR :	0.625	0.591	0.603	0.594	0.850	0.720	0.563	0.667	0.823
	0.692		0.742		0.833		0.750		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	3	6	26	16	11	22	7	11	102
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	7	7	21	17	19	19	2	6	98
3:45 PM	6	3	28	16	10	31	5	5	104
4:00 PM	11	8	13	17	25	38	7	9	128
4:15 PM	15	5	15	10	21	24	4	3	97
4:30 PM	6	8	23	6	20	21	4	9	97
4:45 PM	6	12	28	8	22	23	4	14	117
5:00 PM	2	10	19	19	17	23	5	10	105
5:15 PM	4	10	9	16	10	20	6	11	86
5:30 PM	9	5	10	11	16	26	6	4	87
5:45 PM	8	3	17	7	17	34	9	15	110
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	77	77	209	143	188	281	59	97	1131
APPROACH %'s :	50.00%	50.00%	59.38%	40.63%	40.09%	59.91%	37.82%	62.18%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	23	28	55	53	60	103	26	40	388
PEAK HR FACTOR :	0.639	0.700	0.724	0.697	0.882	0.757	0.722	0.667	0.882
	0.911		0.711		0.799		0.688		

Turning Movement Count Report AM

Location ID: 31
North/South: Vineland Avenue
East/West: Magnolia Blvd

Date: 11/19/19
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	14	186	28	20	140	17	5	51	15	5	60	9	550
7:15	36	221	34	34	157	12	9	62	27	11	82	9	694
7:30	40	214	44	27	180	16	9	68	36	10	98	8	750
7:45	48	179	64	25	168	24	13	107	52	8	115	15	818
8:00	39	225	70	27	144	24	19	85	28	11	117	11	800
8:15	51	205	62	27	124	18	19	77	20	9	125	24	761
8:30	42	176	59	27	156	21	16	92	36	7	113	15	760
8:45	45	219	59	18	159	23	16	85	29	9	117	11	790
9:00	23	197	48	21	139	26	24	96	28	14	125	19	760
9:15	28	179	53	32	137	28	15	82	32	10	126	15	737
9:30	36	172	57	31	125	23	17	81	37	8	131	11	729
9:45	37	161	82	26	118	25	17	109	28	12	120	14	749

Total Volume:	439	2334	660	315	1747	257	179	995	368	114	1329	161	8898
Approach %	13%	68%	19%	14%	75%	11%	12%	65%	24%	7%	83%	10%	

Peak Hr Begin:	7:45												
PHV	180	785	255	106	592	87	67	361	136	35	470	65	3139
PHF	0.913			0.904			0.820			0.902			0.959

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 31
North/South: Vineland Avenue
East/West: Magnolia Blvd

Date: 11/19/19
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	29	123	43	40	153	29	34	157	42	18	123	19	810
15:15	40	111	70	37	159	28	32	163	52	13	120	11	836
15:30	37	147	57	37	168	30	32	130	34	7	121	11	811
15:45	36	113	60	30	165	30	38	169	45	9	115	23	833
16:00	45	116	63	36	160	39	19	174	41	12	113	18	836
16:15	35	110	81	38	166	24	37	178	39	5	131	13	857
16:30	35	147	62	24	178	24	28	174	45	14	119	13	863
16:45	40	138	69	27	162	22	28	164	43	11	136	17	857
17:00	41	141	67	27	211	23	25	169	50	10	143	23	930
17:15	43	137	58	43	224	23	34	159	49	11	149	16	946
17:30	42	161	62	36	183	27	38	166	39	9	139	13	915
17:45	34	120	73	36	188	28	33	178	46	3	140	13	892
Total Volume:	457	1564	765	411	2117	327	378	1981	525	122	1549	190	10386
Approach %	16%	56%	27%	14%	74%	11%	13%	69%	18%	7%	83%	10%	

Peak Hr Begin:	17:00												
PHV	160	559	260	142	806	101	130	672	184	33	571	65	3683
PHF	0.924			0.904			0.959			0.950			0.973

Prepared by City Count, LLC. (www.citycount.com)

Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	12	0	5	1	5	2	5	0
7:15	16	4	4	1	5	0	1	0
7:30	8	1	7	0	4	0	2	1
7:45	13	0	17	0	10	0	8	0
8:00	8	0	10	0	8	0	2	0
8:15	10	1	13	1	11	3	5	1
8:30	6	0	11	2	8	3	2	2
8:45	5	1	12	0	10	1	12	0
9:00	14	0	9	0	12	1	2	0
9:15	17	1	9	1	7	0	3	0
9:30	10	0	8	0	5	0	9	0
9:45	18	0	12	1	11	1	6	0

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	13	1	18	1	12	0	11	1
15:15	20	1	22	1	17	2	8	2
15:30	18	0	18	0	24	0	13	1
15:45	16	2	22	0	13	1	13	1
16:00	15	0	19	0	24	1	18	0
16:15	17	1	12	2	17	2	18	0
16:30	28	2	21	0	19	1	5	3
16:45	19	1	12	1	20	2	24	2
17:00	28	2	16	3	17	2	13	0
17:15	22	0	14	0	26	0	12	0
17:30	28	0	23	0	19	1	15	1
17:45	34	1	29	1	17	3	5	0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Camarillo St/ Riverside Dr
City: North Hollywood
Control: Signalized

Project ID: 19-05537-032
Date: 9/11/2019

Total

NS/EW Streets:	Tujunga Ave					Tujunga Ave					Riverside Dr					Riverside Dr					Camarillo St					
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2					
	1	2	0	0	0	1	2	0	0	0	1	0.5	1.5	0	0	1.5	1.5	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2	W2U	W2L2	W2T2	W2R2	W2U2	TOTAL
7:00 AM	2	58	3	0	5	65	222	9	2	1	22	92	33	0	27	6	22	4	0	3	0	54	62	21	9	722
7:15 AM	5	91	10	0	18	40	272	12	4	3	31	95	24	0	31	7	22	9	0	1	0	47	71	19	5	817
7:30 AM	10	90	11	0	17	46	234	9	0	0	43	98	30	0	55	31	37	22	0	2	0	56	101	23	3	918
7:45 AM	3	131	14	0	23	51	296	13	2	3	38	87	33	0	42	35	32	30	0	3	0	51	87	36	1	1011
8:00 AM	4	115	9	0	17	33	262	12	1	2	49	110	20	0	72	40	46	36	0	2	0	51	124	23	6	1034
8:15 AM	3	65	6	0	15	66	257	12	7	7	22	105	24	0	50	20	31	20	0	1	0	47	108	32	10	908
8:30 AM	3	71	18	0	20	69	205	18	3	9	20	93	17	0	69	15	22	14	0	3	0	50	80	23	6	828
8:45 AM	6	59	7	0	21	85	221	8	2	9	24	95	32	0	87	6	26	23	0	5	0	36	74	24	4	854
9:00 AM	2	68	9	0	24	52	192	11	1	8	18	85	19	0	59	10	28	10	0	2	0	42	60	27	6	733
9:15 AM	4	66	6	1	21	51	208	11	0	5	20	108	18	0	74	8	34	10	0	5	0	54	59	28	9	800
9:30 AM	5	69	10	0	17	79	181	8	0	5	18	89	15	0	73	9	33	13	0	1	0	45	44	10	6	730
9:45 AM	5	61	6	0	7	55	156	17	0	8	23	101	24	0	64	14	24	15	0	2	0	55	69	21	2	729
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2	W2U	W2L2	W2T2	W2R2	W2U2	TOTAL
TOTAL VOLUMES :	52	944	109	1	205	692	2706	140	22	60	328	1158	289	0	703	201	357	206	0	30	0	588	939	287	67	10084
APPROACH %'s :	3.97%	72.01%	8.31%	0.08%	15.64%	19.12%	74.75%	3.87%	0.61%	1.66%	13.24%	46.73%	11.66%	0.00%	28.37%	25.31%	44.96%	25.94%	0.00%	3.78%	0.00%	31.26%	49.92%	15.26%	3.56%	
PEAK HR :	07:30 AM - 08:30 AM																									TOTAL
PEAK HR VOL :	20	401	40	0	72	196	1049	46	10	12	152	400	107	0	219	126	146	108	0	8	0	205	420	114	20	3871
PEAK HR FACTOR :	0.500	0.765	0.714	0.000	0.783	0.742	0.886	0.885	0.357	0.429	0.776	0.909	0.811	0.000	0.760	0.788	0.793	0.750	0.000	0.667	0.000	0.915	0.847	0.792	0.500	0.936
			0.779					0.899					0.875					0.782					0.930			

PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2					
	1	2	0	0	0	1	2	0	0	0	1	0.5	1.5	0	0	1.5	1.5	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2	W2U	W2L2	W2T2	W2R2	W2U2	TOTAL
3:00 PM	1	97	4	0	26	20	129	18	2	3	33	63	32	0	85	12	72	21	0	5	0	47	75	33	6	784
3:15 PM	2	124	1	0	16	12	129	11	1	10	32	57	24	0	82	14	67	37	0	2	0	43	74	36	2	776
3:30 PM	2	112	6	0	13	13	112	14	1	6	43	58	33	0	83	6	53	22	0	7	0	42	68	29	2	725
3:45 PM	2	109	6	0	20	22	122	15	1	1	33	47	33	0	73	6	55	26	0	4	0	35	58	36	6	710
4:00 PM	5	116	3	1	19	18	99	14	2	1	33	55	20	0	95	7	46	32	0	0	0	43	55	28	2	694
4:15 PM	1	127	3	0	14	17	79	15	2	1	32	66	33	0	91	8	71	30	0	4	0	40	78	28	0	740
4:30 PM	1	122	4	0	19	15	77	20	0	8	33	60	30	0	92	9	89	38	0	3	0	30	60	30	1	741
4:45 PM	5	102	3	0	21	13	65	11	2	3	43	63	24	0	96	6	62	36	0	4	0	37	90	34	5	725
5:00 PM	3	89	4	0	29	17	76	25	2	4	37	56	30	0	86	12	88	38	0	2	0	33	90	24	2	747
5:15 PM	1	108	4	0	16	7	82	22	1	8	43	55	39	0	124	10	108	29	0	3	0	21	86	41	1	809
5:30 PM	2	108	6	0	26	9	88	27	1	1	35	53	30	1	103	9	96	48	0	8	0	37	103	22	4	817
5:45 PM	8	128	5	0	21	12	104	19	2	7	38	45	28	0	89	10	95	39	0	1	0	37	76	27	4	795
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2	W2U	W2L2	W2T2	W2R2	W2U2	TOTAL
TOTAL VOLUMES :	33	1342	49	1	240	175	1162	211	17	53	435	678	356	1	1099	109	902	396	0	43	0	445	913	368	35	9063
APPROACH %'s :	1.98%	80.60%	2.94%	0.06%	14.41%	10.82%	71.82%	13.04%	1.05%	3.28%	16.93%	26.39%	13.86%	0.04%	42.78%	7.52%	62.21%	27.31%	0.00%	2.97%	0.00%	25.27%	51.85%	20.90%	1.99%	
PEAK HR :	05:00 PM - 06:00 PM																									TOTAL
PEAK HR VOL :	14	433	19	0	92	45	350	93	6	20	153	209	127	1	402	41	387	154	0	14	0	128	355	114	11	3168
PEAK HR FACTOR :	0.438	0.846	0.792	0.000	0.793	0.662	0.841	0.861	0.750	0.625	0.890	0.933	0.814	0.250	0.810	0.854	0.896	0.802	0.000	0.438	0.000	0.865	0.862	0.695	0.688	0.969
			0.861					0.892					0.854					0.925					0.916			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Camarillo St/ Riverside Dr
City: North Hollywood
Control: Signalized

Project ID: 19-05537-032
Date: 9/11/2019

Bikes

NS/EW Streets:	Tujunga Ave					Tujunga Ave					Riverside Dr					Riverside Dr					Camarillo St					
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2					
	1	2	0	0	0	1	2	0	0	0	1	0.5	1.5	0	0	1.5	1.5	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2	W2U	W2L2	W2T2	W2R2	W2U2	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	4
9:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:30 AM	0	1	0	0	0	2	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	6
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2	W2U	W2L2	W2T2	W2R2	W2U2	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	2	2	5	0	0	1	3	1	0	5	0	2	0	0	0	0	0	2	1	0	25
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	22.22%	22.22%	55.56%	0.00%	0.00%	10.00%	30.00%	10.00%	0.00%	50.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																									TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	1	0	0	1	2	0	0	2	0	0	0	0	0	0	0	0	1	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.583
								0.250					0.625										0.250			

PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2					
	1	2	0	0	0	1	2	0	0	0	1	0.5	1.5	0	0	1.5	1.5	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2	W2U	W2L2	W2T2	W2R2	W2U2	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	1	0	0	0	0	0	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	5
5:00 PM	0	0	1	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2	W2U	W2L2	W2T2	W2R2	W2U2	TOTAL
TOTAL VOLUMES :	0	1	1	0	0	0	3	3	0	1	7	3	2	0	1	0	2	2	0	0	0	0	3	2	0	31
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	42.86%	42.86%	0.00%	14.29%	53.85%	23.08%	15.38%	0.00%	7.69%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	60.00%	40.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																									TOTAL
PEAK HR VOL :	0	0	1	0	0	0	3	2	0	0	2	1	1	0	0	0	1	1	0	0	0	0	1	0	0	13
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.000	0.375	0.250	0.000	0.000	0.500	0.250	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.542
			0.250					0.625					0.500					0.500					0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & Camarillo St/ Riverside Dr
City: North Hollywood

Project ID: 19-05537-032
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Tujunga Ave		Tujunga Ave		Riverside Dr		Riverside Dr		Camarillo St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL
7:00 AM	0	2	0	0	0	0	0	2	0	0	4
7:15 AM	0	2	1	0	1	0	0	4	1	0	9
7:30 AM	1	2	0	1	0	1	2	2	4	2	15
7:45 AM	1	1	0	0	0	0	1	2	1	0	6
8:00 AM	0	2	1	0	0	0	2	2	0	0	7
8:15 AM	0	0	0	0	0	0	0	0	0	2	2
8:30 AM	1	1	1	0	0	0	5	0	0	1	9
8:45 AM	5	1	1	0	0	0	5	1	2	0	15
9:00 AM	2	1	1	0	1	1	1	1	0	1	9
9:15 AM	1	3	3	0	2	1	0	4	1	2	17
9:30 AM	0	0	2	0	3	0	2	2	3	2	14
9:45 AM	0	3	2	1	1	1	0	1	0	0	9
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	11	18	12	2	8	4	18	21	12	10	116
APPROACH %'s :	37.93%	62.07%	85.71%	14.29%	66.67%	33.33%	46.15%	53.85%	54.55%	45.45%	
PEAK HR :	07:30 AM - 08:30 AM										TOTAL
PEAK HR VOL :	2	5	1	1	0	1	5	6	5	4	30
PEAK HR FACTOR :	0.500	0.625	0.250	0.250		0.250	0.625	0.750	0.313	0.500	0.500
	0.583		0.500		0.250		0.688		0.375		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	0	1	1	2	0	0	2	2	8
3:15 PM	4	0	1	0	1	0	7	1	2	1	17
3:30 PM	2	0	9	0	9	0	0	0	0	0	20
3:45 PM	0	0	1	0	1	0	2	3	7	0	14
4:00 PM	2	0	2	1	2	1	3	0	4	1	16
4:15 PM	2	0	2	1	0	1	1	1	0	0	8
4:30 PM	0	0	1	0	2	0	1	1	1	4	10
4:45 PM	1	2	1	3	2	3	0	2	0	1	15
5:00 PM	0	0	1	1	2	0	1	1	0	5	11
5:15 PM	0	4	1	1	1	2	3	3	2	0	17
5:30 PM	0	1	1	2	0	2	0	0	0	0	6
5:45 PM	1	3	0	1	0	0	1	0	1	3	10
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	12	10	20	11	21	11	19	12	19	17	152
APPROACH %'s :	54.55%	45.45%	64.52%	35.48%	65.63%	34.38%	61.29%	38.71%	52.78%	47.22%	
PEAK HR :	05:00 PM - 06:00 PM										TOTAL
PEAK HR VOL :	1	8	3	5	3	4	5	4	3	8	44
PEAK HR FACTOR :	0.250	0.500	0.750	0.625	0.375	0.500	0.417	0.333	0.375	0.400	0.647
	0.563		0.667		0.583		0.375		0.550		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd/Vineland Ave & Camarillo St
City: North Hollywood
Control: Signalized

Project ID: 19-05537-033
Date: 9/11/2019

Total

NS / EW Streets:	Vineland Ave						Vineland Ave						Camarillo St						Camarillo St						Lankershim Blvd						Lankershim Blvd						
AM	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND																		
	2	1.5	0.5	0	0	0	1	3	0	0	0	0	1	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
7:00 AM	1	51	0	0	13	0	3	157	19	1	44	0	6	29	8	0	3	5	9	67	5	0	3	4	43	0	11	26	7	0	222	0	4	59	8	0	808
7:15 AM	0	46	1	0	5	0	1	179	25	0	60	1	7	35	15	0	2	9	15	74	1	0	3	7	52	0	6	33	4	0	254	0	10	41	6	0	892
7:30 AM	7	46	0	0	14	0	3	164	13	0	50	0	10	64	21	0	5	6	14	88	2	0	2	6	43	0	0	35	3	0	243	0	9	75	5	0	928
7:45 AM	5	57	4	0	10	0	6	200	37	0	56	0	4	60	19	0	0	7	14	110	0	0	3	8	70	0	9	48	5	0	207	0	5	59	11	0	1014
8:00 AM	6	75	6	1	15	0	6	136	47	0	65	1	8	43	7	0	2	23	5	82	3	0	5	10	80	0	4	35	7	0	203	0	5	30	22	0	932
8:15 AM	13	69	6	2	13	0	13	140	30	0	75	1	12	78	21	0	3	22	13	73	1	0	2	7	67	0	6	35	1	0	193	0	12	25	19	0	952
8:30 AM	6	48	10	2	12	1	21	145	20	0	73	3	9	61	13	0	4	15	7	57	11	0	5	7	49	0	10	21	5	1	193	0	7	33	19	1	869
8:45 AM	11	43	3	7	5	3	4	168	5	0	68	2	9	73	18	0	2	12	12	71	5	0	4	18	79	0	7	38	9	0	201	0	21	102	14	0	1014
9:00 AM	10	59	13	3	15	3	12	174	4	0	60	1	6	90	10	0	5	22	7	73	6	0	6	15	63	0	14	23	1	1	149	0	13	84	13	0	955
9:15 AM	11	43	10	2	24	6	2	92	10	0	49	0	9	82	13	0	2	14	8	63	5	0	3	11	75	0	12	25	3	1	202	0	23	52	25	1	878
9:30 AM	2	77	9	4	14	5	6	121	16	0	9	1	9	57	16	0	2	21	5	48	10	0	11	12	83	0	12	40	7	1	227	0	8	36	20	1	890
9:45 AM	9	71	11	0	19	10	0	167	12	1	3	1	10	53	21	0	3	19	6	49	3	0	14	15	85	0	2	44	8	1	220	0	11	33	15	1	917
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
TOTAL VOLUMES :	81	685	73	21	159	28	77	1843	238	2	612	11	99	725	182	0	33	175	115	855	52	0	61	120	789	0	93	403	60	5	2514	0	128	629	177	4	11049
APPROACH %'s :	7.74%	65.43%	6.97%	2.01%	15.19%	2.67%	2.77%	66.22%	8.55%	0.07%	21.99%	0.40%	8.15%	59.72%	14.99%	0.00%	2.72%	14.42%	9.56%	71.07%	4.32%	0.00%	5.07%	9.98%	58.44%	0.00%	6.89%	29.85%	4.44%	0.37%	72.83%	0.00%	3.71%	18.22%	5.13%	0.12%	
PEAK HR :	07:00 AM - 08:00 AM																																				TOTAL
PEAK HR VOL :	13	200	5	0	42	0	13	700	94	1	210	1	27	188	63	0	10	27	52	339	8	0	11	25	208	0	26	142	19	0	926	0	28	234	30	0	3642
PEAK HR FACTOR :	0.464	0.877	0.313	0.000	0.750	0.000	0.542	0.875	0.635	0.250	0.875	0.250	0.675	0.734	0.750	0.000	0.500	0.750	0.867	0.770	0.400	0.000	0.917	0.781	0.743	0.000	0.591	0.740	0.679	0.000	0.911	0.000	0.700	0.780	0.682	0.000	0.898
			0.855						0.852						0.743						0.806																

PM	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND																		
	2	1.5	0.5	0	0	0	1	3	0	0	0	0	1	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
3:00 PM	15	87	6	3	23	7	10	96	26	1	38	3	15	42	14	0	5	10	12	74	10	0	4	14	114	0	9	53	23	0	82	0	16	42	2	1	857
3:15 PM	13	122	11	1	22	4	3	85	10	0	31	1	12	55	17	0	2	19	11	67	8	0	6	12	137	0	13	52	7	0	111	0	14	39	0	3	888
3:30 PM	6	106	17	5	43	5	6	111	15	0	17	2	16	61	12	0	7	22	9	75	11	0	5	13	136	0	21	59	6	0	69	0	14	41	1	2	913
3:45 PM	22	119	8	0	33	5	6	86	9	0	28	0	10	61	17	0	3	15	12	73	9	0	4	11	121	0	20	77	4	0	82	0	9	34	1	0	879
4:00 PM	10	123	13	2	26	3	8	131	15	0	37	0	14	61	11	0	2	7	9	56	6	0	5	20	149	0	14	70	8	0	111	0	12	36	2	6	967
4:15 PM	13	93	8	0	29	9	8	107	19	1	23	0	14	57	17	0	4	12	11	75	11	0	6	25	123	0	17	64	3	0	90	0	10	53	6	1	909
4:30 PM	14	127	5	0	32	7	12	102	14	0	35	2	11	58	13	0	5	21	16	74	7	0	6	11	138	0	13	54	1	0	68	0	10	35	22	3	916
4:45 PM	20	141	9	3	30	7	7	114	14	0	28	0	10	73	16	0	7	15	13	79	8	0	7	15	138	0	12	76	5	0	76	0	4	40	23	2	992
5:00 PM	12	128	12	0	25	14	5	111	11	2	34	2	9	62	18	0	4	12	9	79	8	0	5	15	142	0	23	66	12	0	79	0	7	29	22	4	961
5:15 PM	16	120	15	0	26	14	8	102	18	0	26	1	8	67	10	0	6	20	7	81	6	0	6	13	169	0	23	95	11	0	97	0	8	30	25	6	1034
5:30 PM	17	119	19	4	22	7	11	107	17	0	34	0	9	95	8	0	1	13	13	97	8	0	3	14	164	0	33	91	8	0	101	0	17	27	19	4	1082
5:45 PM	11	131	12	0	46	7	18	100	15	0	43	1	14	71	11	0	3	10	6	85	5	0	1	9	183	0	28	74	9	0	99	0	8	24	49	4	1077
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
TOTAL VOLUMES :	169	1416	135	18	357	89	102	1252	183	4	374	12	142	763	164	0	49	176	128	915	97	0	58	172	1714	0	226	831	97	0	1065	0	129	430	172	36	11475
APPROACH %'s :	7.74%	64.84%	6.18%	0.82%	16.35%	4.08%	5.29%	64.97%	9.50%	0.21%	19.41%	0.62%	10.97%	58.96%	12.67%	0.00%	3.79%	13.60%	9.34%	66.79%	7.08%	0.00%	4.23%	12.55%	59.76%	0.00%	7.88%	28.97%	3.38%	0.00%	58.13%	0.00%	7.04%	23.47%	9.39%	1.97%	
PEAK HR :	03:00 PM - 04:00 PM																																				TOTAL
PEAK HR VOL :	56	434	42	9	121	21	25	378	60	1	114	6	53	219	60	0	17	66	44	289	38	0	19	50	508	0	63	241	40	0	344	0	53	156	4	6	3537
PEAK HR FACTOR :	0.636	0.889	0.618	0.450	0.703	0.750	0.625	0.851	0.577	0.250	0.750	0.500	0.828	0.898	0.882	0.000	0.607	0.750	0.917	0.963	0.864	0.000	0.792	0.893	0.927	0.000	0.750	0.782	0.435	0.000	0.775	0.000	0.828	0.929	0.500	0.500	0.969
			0.913						0.839						0.879						0.965																

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd/Vineland Ave & Camarillo St
City: North Hollywood
Control: Signalized

Project ID: 19-05537-033
Date: 9/11/2019

Bikes

AM

NS/EW Streets:	Vineland Ave						Vineland Ave						Camarillo St						Camarillo St						Lankershim Blvd						Lankershim Blvd						
	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND																		
	2	1.5	0.5	0	0	0	1	3	0	0	0	0	1	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
9:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	4
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
TOTAL VOLUMES :	0	2	0	0	0	0	0	7	0	0	3	0	0	5	0	0	0	1	0	4	1	0	0	0	0	0	0	2	0	0	5	0	0	0	0	0	30
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	70.00%	0.00%	0.00%	30.00%	0.00%	0.00%	83.33%	0.00%	0.00%	0.00%	16.67%	0.00%	80.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																																				TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	5	0	0	0	0	0	2	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.429
	0.250						0.417						0.500						0.333																		

PM

NS/EW Streets:	Vineland Ave						Vineland Ave						Camarillo St						Camarillo St						Lankershim Blvd						Lankershim Blvd						
	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND																		
	2	1.5	0.5	0	0	0	1	3	0	0	0	0	1	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
5:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	8
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	NT2	NU2	SL	ST	SR	SU	ST2	SU2	EL	ET	ER	EU	EL2	ER2	WL	WT	WR	WU	WL2	WR2	N2T	N2U	N2L2	N2T2	N2R2	N2U2	S2T	S2U	S2L2	S2T2	S2R2	S2U2	TOTAL
TOTAL VOLUMES :	0	6	0	0	0	0	1	8	0	0	3	0	0	2	1	0	0	3	1	7	0	0	0	0	0	0	0	2	0	0	1	0	0	2	0	0	37
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	8.33%	66.67%	0.00%	0.00%	25.00%	0.00%	0.00%	33.33%	16.67%	0.00%	0.00%	50.00%	12.50%	87.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	33.33%	0.00%	0.00%	66.67%	0.00%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																																				TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	3	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400
	0.250						0.417						0.250						0.250																		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd/Vineland Ave & Camarillo St
City: North Hollywood

Project ID: 19-05537-033
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Vineland Ave		Vineland Ave		Camarillo St		Camarillo St		Lankershim Blvd		Lankershim Blvd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NORTH LEG 2		SOUTH LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	TOTAL
7:00 AM	1	1	2	0	1	0	0	0	1	0	0	0	6
7:15 AM	1	5	0	0	2	1	1	0	1	0	0	0	11
7:30 AM	3	2	0	1	2	0	0	1	0	2	0	0	11
7:45 AM	3	1	0	2	0	0	0	1	0	0	0	1	8
8:00 AM	2	4	2	0	0	0	2	1	1	0	0	0	12
8:15 AM	2	3	0	1	2	3	1	1	1	0	0	0	14
8:30 AM	5	3	1	1	0	0	0	0	0	0	1	1	12
8:45 AM	0	0	1	0	0	0	0	0	4	0	0	6	11
9:00 AM	2	0	0	1	0	0	0	0	0	3	2	2	10
9:15 AM	2	3	1	2	0	0	0	0	1	0	2	2	13
9:30 AM	2	0	1	1	0	1	0	0	2	2	2	1	12
9:45 AM	3	2	0	0	0	2	1	0	0	0	0	0	8
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	TOTAL
TOTAL VOLUMES :	26	24	8	9	7	7	5	4	11	7	7	13	128
APPROACH %'s :	52.00%	48.00%	47.06%	52.94%	50.00%	50.00%	55.56%	44.44%	61.11%	38.89%	35.00%	65.00%	
PEAK HR :	07:00 AM - 08:00 AM												TOTAL
PEAK HR VOL :	8	9	2	3	5	1	1	2	2	2	0	1	36
PEAK HR FACTOR :	0.667	0.450	0.250	0.375	0.625	0.250	0.250	0.500	0.500	0.250		0.250	0.818
	0.708		0.625		0.500		0.750		0.500		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		NORTH LEG 2		SOUTH LEG 2		
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	TOTAL
3:00 PM	4	4	1	0	2	4	2	2	3	1	1	0	24
3:15 PM	2	1	1	2	2	3	2	6	0	1	1	2	23
3:30 PM	8	3	1	2	1	7	2	1	4	3	1	2	35
3:45 PM	5	0	5	1	1	4	4	5	0	0	6	4	35
4:00 PM	1	3	3	3	3	2	6	1	0	0	3	1	26
4:15 PM	2	3	3	3	2	2	3	2	0	0	3	3	26
4:30 PM	6	3	1	1	0	1	0	0	0	0	2	1	15
4:45 PM	1	4	4	0	2	0	0	1	0	0	3	0	15
5:00 PM	6	0	1	0	0	1	0	2	0	1	1	0	12
5:15 PM	0	0	2	1	2	3	0	2	0	2	3	1	16
5:30 PM	3	0	6	1	1	0	1	6	0	3	5	1	27
5:45 PM	2	0	2	5	3	1	3	1	0	0	3	3	23
	EB	WB	EB	WB	NB	SB	NB	SB	EB	WB	EB	WB	TOTAL
TOTAL VOLUMES :	40	21	30	19	19	28	23	29	7	11	32	18	277
APPROACH %'s :	65.57%	34.43%	61.22%	38.78%	40.43%	59.57%	44.23%	55.77%	38.89%	61.11%	64.00%	36.00%	
PEAK HR :	03:00 PM - 04:00 PM												TOTAL
PEAK HR VOL :	19	8	8	5	6	18	10	14	7	5	9	8	117
PEAK HR FACTOR :	0.594	0.500	0.400	0.625	0.750	0.643	0.625	0.583	0.438	0.417	0.375	0.500	0.836
	0.614		0.542		0.750		0.667		0.429		0.425		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & US 101 WB On-ramp
City: North Hollywood
Control: No Control

Project ID: 19-05537-034
Date: 9/11/2019

Total

NS/EW Streets:	Tujunga Ave				Tujunga Ave				US 101 WB On-ramp				US 101 WB On-ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	12	81	0	0	0	186	109	0	0	0	0	0	0	0	0	0	388
7:15 AM	25	109	0	0	0	241	85	0	0	0	0	0	0	0	0	0	460
7:30 AM	14	150	0	0	0	315	59	0	0	0	0	0	0	0	0	0	538
7:45 AM	24	161	0	1	0	294	107	0	0	0	0	0	0	0	0	0	587
8:00 AM	15	136	0	1	0	293	95	1	0	0	0	0	0	0	0	0	541
8:15 AM	19	97	0	0	0	256	77	0	0	0	0	0	0	0	0	0	449
8:30 AM	7	99	0	0	0	220	82	0	0	0	0	0	0	0	0	0	408
8:45 AM	21	114	0	0	0	253	70	0	0	0	0	0	0	0	0	0	458
9:00 AM	24	91	0	0	0	204	69	0	0	0	0	0	0	0	0	0	388
9:15 AM	32	108	0	0	0	165	97	0	0	0	0	0	0	0	0	0	402
9:30 AM	23	80	0	0	0	124	103	0	0	0	0	0	0	0	0	0	330
9:45 AM	35	90	0	0	0	131	144	0	0	0	0	0	0	0	0	0	400
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	251	1316	0	2	0	2682	1097	1	0	0	0	0	0	0	0	0	5349
APPROACH %'s :	16.00%	83.88%	0.00%	0.13%	0.00%	70.95%	29.02%	0.03%									
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	78	556	0	2	0	1143	346	1	0	0	0	0	0	0	0	0	2126
PEAK HR FACTOR :	0.780	0.863	0.000	0.500	0.000	0.907	0.808	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.905
	0.855				0.929												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	47	137	0	0	0	127	98	0	0	0	0	0	0	0	0	0	409
3:15 PM	36	133	0	1	0	123	83	0	0	0	0	0	0	0	0	0	376
3:30 PM	31	145	0	1	0	137	59	0	0	0	0	0	0	0	0	0	373
3:45 PM	5	129	0	0	0	185	10	0	0	0	0	0	0	0	0	0	329
4:00 PM	27	130	0	1	0	123	50	0	0	0	0	0	0	0	0	0	331
4:15 PM	25	166	0	0	0	82	79	0	0	0	0	0	0	0	0	0	352
4:30 PM	18	135	0	0	0	78	64	0	0	0	0	0	0	0	0	0	295
4:45 PM	35	136	0	1	0	78	56	0	0	0	0	0	0	0	0	0	306
5:00 PM	24	119	0	1	0	101	46	0	0	0	0	0	0	0	0	0	291
5:15 PM	31	133	0	1	0	95	62	0	0	0	0	0	0	0	0	0	322
5:30 PM	25	144	0	0	0	87	76	0	0	0	0	0	0	0	0	0	332
5:45 PM	27	153	0	2	0	125	51	0	0	0	0	0	0	0	0	0	358
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	331	1660	0	8	0	1341	734	0	0	0	0	0	0	0	0	0	4074
APPROACH %'s :	16.56%	83.04%	0.00%	0.40%	0.00%	64.63%	35.37%	0.00%									
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	119	544	0	2	0	572	250	0	0	0	0	0	0	0	0	0	1487
PEAK HR FACTOR :	0.633	0.938	0.000	0.500	0.000	0.773	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.909
	0.904				0.913												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & US 101 WB On-ramp
City: North Hollywood
Control: No Control

Project ID: 19-05537-034
Date: 9/11/2019

Bikes

NS/EW Streets:	Tujunga Ave				Tujunga Ave				US 101 WB On-ramp				US 101 WB On-ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	7
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
		0.250															

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & US 101 WB On-ramp
City: North Hollywood

Project ID: 19-05537-034
Date: 9/11/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Tujunga Ave		Tujunga Ave		US 101 WB On-ramp		US 101 WB On-ramp		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	2	2
7:15 AM	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	2	2
8:00 AM	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	1	0	1
9:00 AM	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	2	6	8
APPROACH %'s :							25.00%	75.00%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	4	5
PEAK HR FACTOR :							0.250	0.500	0.625
							0.625		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	0	0	0	0	2	0	2
3:15 PM	0	0	0	0	0	0	18	0	18
3:30 PM	0	0	0	0	0	0	2	0	2
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	1	1	2
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	24	1	25
APPROACH %'s :							96.00%	4.00%	
PEAK HR :	03:00 PM - 04:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	22	0	22
PEAK HR FACTOR :							0.306		0.306
							0.306		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & US 101 EB Off-ramp
City: North Hollywood
Control: 1-Way Stop (WB)

Project ID: 19-05537-035
Date: 9/12/2019

Total

NS/EW Streets:	Tujunga Ave				Tujunga Ave				US 101 EB Off-ramp				US 101 EB Off-ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	57	0	0	0	169	0	0	0	0	0	0	12	0	20	0	258
7:15 AM	0	70	0	0	0	180	0	0	0	0	0	0	13	0	13	0	276
7:30 AM	0	83	0	0	0	219	0	0	0	0	0	0	11	0	13	0	326
7:45 AM	0	98	0	0	0	268	0	1	0	0	0	0	0	0	17	0	384
8:00 AM	0	119	0	0	0	278	0	0	0	0	0	0	7	0	15	0	419
8:15 AM	0	79	0	0	0	230	0	0	0	0	0	0	8	0	6	0	323
8:30 AM	0	104	0	0	0	215	0	0	0	0	0	0	5	0	5	0	329
8:45 AM	0	100	0	0	0	235	0	0	0	0	0	0	6	0	4	0	345
9:00 AM	0	101	0	0	0	170	0	0	0	0	0	0	7	0	7	0	285
9:15 AM	0	106	0	0	0	175	0	0	0	0	0	0	14	0	15	0	310
9:30 AM	0	102	0	0	0	121	0	0	0	0	0	0	9	0	14	0	246
9:45 AM	0	99	0	0	0	117	0	0	0	0	0	0	16	0	19	0	251
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1118	0	0	0	2377	0	1	0	0	0	0	108	0	148	0	3752
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	99.96%	0.00%	0.04%					42.19%	0.00%	57.81%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	400	0	0	0	991	0	1	0	0	0	0	20	0	43	0	1455
PEAK HR FACTOR :	0.000	0.840	0.000	0.000	0.000	0.891	0.000	0.250	0.000	0.000	0.000	0.000	0.625	0.000	0.632	0.000	0.868
	0.840				0.892								0.716				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	126	0	0	0	99	0	0	0	0	0	0	9	0	38	0	272
3:15 PM	0	70	0	1	0	120	0	0	0	0	0	0	24	0	49	0	264
3:30 PM	0	120	0	1	0	93	0	0	0	0	0	0	14	0	35	0	263
3:45 PM	0	118	0	0	0	91	0	0	0	0	0	0	19	0	46	0	274
4:00 PM	0	142	0	0	0	79	0	0	0	0	0	0	14	0	42	0	277
4:15 PM	0	125	0	1	0	102	0	0	0	0	0	0	17	0	52	0	297
4:30 PM	0	132	0	0	0	86	0	0	0	0	0	0	15	0	37	0	270
4:45 PM	0	133	0	0	0	77	0	1	0	0	0	0	10	0	43	0	264
5:00 PM	0	128	0	0	0	92	0	0	0	0	0	0	16	0	36	0	272
5:15 PM	0	119	0	0	0	108	0	0	0	0	0	0	17	0	33	0	277
5:30 PM	0	123	0	0	0	101	0	0	0	0	0	0	21	0	35	0	280
5:45 PM	0	140	0	0	0	102	0	0	0	0	0	0	11	0	29	0	282
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1476	0	3	0	1150	0	1	0	0	0	0	187	0	475	0	3292
APPROACH %'s :	0.00%	99.80%	0.00%	0.20%	0.00%	99.91%	0.00%	0.09%					28.25%	0.00%	71.75%	0.00%	
PEAK HR :	03:45 PM - 04:45 PM																TOTAL
PEAK HR VOL :	0	517	0	1	0	358	0	0	0	0	0	0	65	0	177	0	1118
PEAK HR FACTOR :	0.000	0.910	0.000	0.250	0.000	0.877	0.000	0.000	0.000	0.000	0.000	0.000	0.855	0.000	0.851	0.000	0.941
	0.912				0.877								0.877				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & US 101 EB Off-ramp
City: North Hollywood
Control: 1-Way Stop (WB)

Project ID: 19-05537-035
Date: 9/12/2019

Bikes

NS/EW Streets:	Tujunga Ave				Tujunga Ave				US 101 EB Off-ramp				US 101 EB Off-ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%									
PEAK HR :	03:45 PM - 04:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tujunga Ave & US 101 EB Off-ramp
City: North Hollywood

Project ID: 19-05537-035
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Tujunga Ave		Tujunga Ave		US 101 EB Off-ramp		US 101 EB Off-ramp		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	1	0	0	1
9:15 AM	0	0	0	0	0	1	0	0	1
9:30 AM	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	3	0	0	3
APPROACH %'s :					0.00%	100.00%			
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :						0.250			0.250
					0.250				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	0	0	0	2	0	0	2
3:15 PM	0	0	0	0	2	0	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	1	0	0	2
5:00 PM	0	1	0	0	2	0	0	0	3
5:15 PM	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	0	0	5	5	0	0	12
APPROACH %'s :	50.00%	50.00%			50.00%	50.00%			
PEAK HR :	03:45 PM - 04:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Riverside Dr
City: North Hollywood
Control: Signalized

Project ID: 19-05537-036
Date: 9/12/2019

Total

NS/EW Streets:	Vineland Ave				Vineland Ave				Riverside Dr				Riverside Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	3	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	8	73	75	1	23	221	8	0	12	150	80	0	58	35	32	0	776
7:15 AM	7	82	91	0	48	238	7	1	13	122	43	0	51	45	29	0	777
7:30 AM	8	83	107	3	41	162	15	0	13	180	51	0	73	54	58	0	848
7:45 AM	22	140	122	1	33	129	14	0	16	178	39	0	50	64	31	0	839
8:00 AM	21	113	119	0	30	120	21	0	13	186	44	0	54	59	36	0	816
8:15 AM	10	144	126	0	43	190	13	0	9	170	52	0	39	34	41	0	871
8:30 AM	6	86	123	2	64	179	4	1	12	212	56	0	44	46	31	0	866
8:45 AM	13	141	162	2	55	148	10	1	7	194	61	0	55	43	31	0	923
9:00 AM	9	85	166	0	55	184	14	0	7	186	40	0	57	41	35	0	879
9:15 AM	10	123	160	2	43	179	6	0	13	193	29	0	58	46	28	0	890
9:30 AM	7	102	104	1	57	151	2	0	21	166	55	0	59	58	51	0	834
9:45 AM	12	132	141	3	33	175	16	0	11	146	49	0	64	43	38	0	863
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	133	1304	1496	15	525	2076	130	3	147	2083	599	0	662	568	441	0	10182
APPROACH %'s :	4.51%	44.23%	50.75%	0.51%	19.20%	75.93%	4.75%	0.11%	5.20%	73.63%	21.17%	0.00%	39.62%	33.99%	26.39%	0.00%	
PEAK HR :	08:30 AM - 09:30 AM																TOTAL
PEAK HR VOL :	38	435	611	6	217	690	34	2	39	785	186	0	214	176	125	0	3558
PEAK HR FACTOR :	0.731	0.771	0.920	0.750	0.848	0.938	0.607	0.500	0.750	0.926	0.762	0.000	0.922	0.957	0.893	0.000	0.964
	0.857				0.932				0.902				0.968				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	3	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	19	179	99	4	23	150	9	0	24	89	20	0	88	89	76	0	869
3:15 PM	23	210	109	1	30	144	3	2	38	94	23	0	71	78	71	0	897
3:30 PM	15	171	109	2	30	144	6	2	41	97	21	0	99	86	82	0	905
3:45 PM	17	206	104	3	27	179	2	2	31	91	21	0	85	89	78	0	935
4:00 PM	20	164	89	3	29	142	8	0	22	85	21	0	94	101	94	0	872
4:15 PM	26	200	96	3	23	142	9	0	30	67	20	0	91	99	78	0	884
4:30 PM	21	184	98	1	22	140	8	0	36	105	27	0	90	114	81	0	927
4:45 PM	25	202	95	1	31	175	3	1	28	75	12	0	96	100	76	0	920
5:00 PM	16	188	70	3	34	137	6	1	43	82	15	0	102	139	121	0	957
5:15 PM	14	189	61	4	15	177	8	0	35	76	23	0	108	111	84	0	905
5:30 PM	18	199	76	3	17	164	9	1	32	91	26	0	119	133	102	0	990
5:45 PM	15	178	77	4	17	175	6	1	32	74	33	0	123	145	92	0	972
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	229	2270	1083	32	298	1869	77	10	392	1026	262	0	1166	1284	1035	0	11033
APPROACH %'s :	6.34%	62.81%	29.97%	0.89%	13.22%	82.92%	3.42%	0.44%	23.33%	61.07%	15.60%	0.00%	33.46%	36.84%	29.70%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	63	754	284	14	83	653	29	3	142	323	97	0	452	528	399	0	3824
PEAK HR FACTOR :	0.875	0.947	0.922	0.875	0.610	0.922	0.806	0.750	0.826	0.887	0.735	0.000	0.919	0.910	0.824	0.000	0.966
	0.942				0.960				0.943				0.952				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Riverside Dr
City: North Hollywood
Control: Signalized

Project ID: 19-05537-036
Date: 9/12/2019

Bikes

NS/EW Streets:	Vineland Ave				Vineland Ave				Riverside Dr				Riverside Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	3	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
7:45 AM	0	1	0	0	1	4	0	0	0	0	0	0	0	0	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	7	0	0	1	0	0	0	8
8:30 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
8:45 AM	0	1	0	0	0	3	0	0	0	2	2	0	0	0	0	0	8
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
9:30 AM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
9:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	6	0	0	2	15	0	0	0	14	2	0	1	1	0	0	41
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	11.76%	88.24%	0.00%	0.00%	0.00%	87.50%	12.50%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	08:30 AM - 09:30 AM																TOTAL
PEAK HR VOL :	0	2	0	0	1	4	0	0	0	4	2	0	0	0	0	0	13
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.250	0.333	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.000	0.000	0.406
	0.500				0.417				0.375								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	3	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
3:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	3
4:30 PM	0	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0	4
4:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	1	0	0	1	1	0	0	0	2	0	0	0	1	0	0	6
5:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	4
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	4	1	0	1	11	1	0	0	5	0	0	1	4	2	0	30
APPROACH %'s :	0.00%	80.00%	20.00%	0.00%	7.69%	84.62%	7.69%	0.00%	0.00%	100.00%	0.00%	0.00%	14.29%	57.14%	28.57%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	2	0	0	1	3	1	0	0	4	0	0	0	3	1	0	15
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.250	0.375	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.750	0.250	0.000	0.625
	0.500				0.625				0.500				1.000				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Vineland Ave & Riverside Dr
City: North Hollywood

Project ID: 19-05537-036
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Vineland Ave		Vineland Ave		Riverside Dr		Riverside Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	0	0	0	0	1	1	1	5
7:15 AM	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	1	1	0	0	1	1	4
7:45 AM	1	1	0	0	1	2	0	4	9
8:00 AM	0	1	0	0	1	0	0	0	2
8:15 AM	0	0	1	0	0	2	0	1	4
8:30 AM	2	0	2	0	1	0	2	1	8
8:45 AM	0	1	2	0	1	0	0	2	6
9:00 AM	1	0	1	0	0	1	1	0	4
9:15 AM	0	0	0	1	0	0	2	0	3
9:30 AM	1	0	0	1	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	7	3	8	3	4	6	7	10	48
APPROACH %'s :	70.00%	30.00%	72.73%	27.27%	40.00%	60.00%	41.18%	58.82%	
PEAK HR :	**08:30 AM - 09:30 AM**								TOTAL
PEAK HR VOL :	3	1	5	1	2	1	5	3	21
PEAK HR FACTOR :	0.375	0.250	0.625	0.250	0.500	0.250	0.625	0.375	0.656
	0.500		0.750		0.750		0.667		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	0	0	1	0	2	0	0	1	4
3:15 PM	0	0	0	0	2	2	0	0	4
3:30 PM	2	1	0	0	2	5	1	0	11
3:45 PM	0	1	0	0	2	1	0	2	6
4:00 PM	1	2	1	0	1	1	0	2	8
4:15 PM	0	0	0	1	2	1	0	1	5
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	2	0	0	0	2
5:00 PM	0	0	0	1	1	0	1	0	3
5:15 PM	0	0	3	0	0	0	0	4	7
5:30 PM	0	0	1	0	3	0	0	1	5
5:45 PM	0	1	0	0	0	1	1	1	4
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	5	6	2	17	11	3	12	59
APPROACH %'s :	37.50%	62.50%	75.00%	25.00%	60.71%	39.29%	20.00%	80.00%	
PEAK HR :	**05:00 PM - 06:00 PM**								TOTAL
PEAK HR VOL :	0	1	4	1	4	1	2	6	19
PEAK HR FACTOR :		0.250	0.333	0.250	0.333	0.250	0.500	0.375	0.679
	0.250		0.417		0.417		0.500		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & SR-134 WB Off-ramp
City: North Hollywood
Control: Signalized

Project ID: 19-05537-037
Date: 9/12/2019

Total

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				SR-134 WB Off-ramp				SR-134 WB Off-ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	1	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	43	0	0	0	278	0	0	0	0	0	0	75	0	41	0	437
7:15 AM	0	35	0	0	0	299	0	0	0	0	0	0	112	0	44	0	490
7:30 AM	0	43	0	0	0	280	0	0	0	0	0	0	141	0	61	0	525
7:45 AM	0	48	0	0	0	298	0	0	0	0	0	0	112	0	53	0	511
8:00 AM	0	75	0	0	0	280	0	0	0	0	0	0	120	0	58	0	533
8:15 AM	0	58	0	0	0	276	0	0	0	0	0	0	139	0	45	0	518
8:30 AM	0	61	0	0	0	209	0	0	0	0	0	0	131	0	55	0	456
8:45 AM	0	68	0	0	0	212	0	0	0	0	0	0	114	0	94	0	488
9:00 AM	0	76	0	0	0	343	0	0	0	0	0	0	77	0	75	0	571
9:15 AM	0	92	0	0	0	275	0	0	0	0	0	0	137	0	60	0	564
9:30 AM	0	92	0	0	0	269	0	0	0	0	0	0	137	0	64	0	562
9:45 AM	0	89	0	0	0	329	0	0	0	0	0	0	96	0	67	0	581
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	780	0	0	0	3348	0	0	0	0	0	0	1391	0	717	0	6236
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					65.99%	0.00%	34.01%	0.00%	
PEAK HR :	09:00 AM - 10:00 AM																TOTAL
PEAK HR VOL :	0	349	0	0	0	1216	0	0	0	0	0	0	447	0	266	0	2278
PEAK HR FACTOR :	0.000	0.948	0.000	0.000	0.000	0.886	0.000	0.000	0.000	0.000	0.000	0.000	0.816	0.000	0.887	0.000	0.980
	0.948				0.886								0.887				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	1	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	172	0	0	0	161	0	0	0	0	0	0	92	0	71	0	496
3:15 PM	0	147	0	1	0	179	0	0	0	0	0	0	76	0	63	0	466
3:30 PM	0	172	0	0	0	176	0	0	0	0	0	0	78	0	79	0	505
3:45 PM	0	169	0	0	0	163	0	0	0	0	0	0	92	0	88	0	512
4:00 PM	0	186	0	0	0	155	0	0	0	0	0	0	75	0	72	0	488
4:15 PM	0	206	0	0	0	198	0	0	0	0	0	0	96	0	71	0	571
4:30 PM	0	183	0	0	0	163	0	0	0	0	0	0	78	0	63	0	487
4:45 PM	0	180	0	0	0	156	0	0	0	0	0	0	90	0	78	0	504
5:00 PM	0	219	0	1	0	179	0	0	0	0	0	0	103	0	78	0	580
5:15 PM	0	200	0	0	0	183	0	0	0	0	0	0	107	0	101	0	591
5:30 PM	0	180	0	0	0	155	0	0	0	0	0	0	94	0	71	0	500
5:45 PM	0	151	0	0	0	132	0	0	0	0	0	0	78	0	71	0	432
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2165	0	2	0	2000	0	0	0	0	0	0	1059	0	906	0	6132
APPROACH %'s :	0.00%	99.91%	0.00%	0.09%	0.00%	100.00%	0.00%	0.00%					53.89%	0.00%	46.11%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	779	0	1	0	673	0	0	0	0	0	0	394	0	328	0	2175
PEAK HR FACTOR :	0.000	0.889	0.000	0.250	0.000	0.919	0.000	0.000	0.000	0.000	0.000	0.000	0.921	0.000	0.812	0.000	0.920
	0.886				0.919								0.868				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & SR-134 WB Off-ramp
City: North Hollywood
Control: Signalized

Project ID: 19-05537-037
Date: 9/12/2019

Bikes

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				SR-134 WB Off-ramp				SR-134 WB Off-ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	1	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	0	0	0	9	0	0	0	0	0	0	0	0	0	0	14
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	**09:00 AM - 10:00 AM**																TOTAL
PEAK HR VOL :	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6
PEAK HR FACTOR :	0.000	0.375	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.375				0.750												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	1	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	4
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	0	0	0	10	0	0	0	0	0	0	0	0	1	2	18
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					0.00%	0.00%	33.33%	66.67%	
PEAK HR :	**04:45 PM - 05:45 PM**																TOTAL
PEAK HR VOL :	0	3	0	0	0	4	0	0	0	0	0	0	0	0	1	0	8
PEAK HR FACTOR :	0.00	0.750	0.000	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500
	0.750				0.333								0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & SR-134 WB Off-ramp
City: North Hollywood

Project ID: 19-05537-037
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Lankershim Blvd		Lankershim Blvd		SR-134 WB Off-ramp		SR-134 WB Off-ramp		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	0	0	0	1	1	0	0	4
7:15 AM	1	0	0	0	0	2	0	0	3
7:30 AM	0	0	0	0	3	0	0	0	3
7:45 AM	3	1	0	0	0	1	0	0	5
8:00 AM	0	1	0	0	4	1	0	0	6
8:15 AM	3	1	0	0	1	0	0	0	5
8:30 AM	0	1	0	0	2	0	0	0	3
8:45 AM	2	1	0	0	3	3	0	0	9
9:00 AM	2	2	0	0	0	1	0	0	5
9:15 AM	7	3	0	0	0	3	0	0	13
9:30 AM	5	2	0	0	3	7	0	0	17
9:45 AM	2	0	0	0	0	5	0	0	7
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	27	12	0	0	17	24	0	0	80
APPROACH %'s :	69.23%	30.77%			41.46%	58.54%			
PEAK HR :	**09:00 AM - 10:00 AM**								TOTAL
PEAK HR VOL :	16	7	0	0	3	16	0	0	42
PEAK HR FACTOR :	0.571	0.583			0.250	0.571			0.618
	0.575				0.475				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	3	0	0	0	1	1	0	0	5
3:15 PM	0	1	0	0	0	4	0	0	5
3:30 PM	0	1	0	0	4	2	0	0	7
3:45 PM	1	1	0	0	3	5	0	0	10
4:00 PM	0	0	0	0	3	6	0	0	9
4:15 PM	0	0	0	0	2	5	0	0	7
4:30 PM	0	1	0	0	5	3	0	0	9
4:45 PM	0	0	0	0	2	2	0	0	4
5:00 PM	0	2	0	0	0	2	0	0	4
5:15 PM	0	1	0	0	3	2	0	0	6
5:30 PM	1	1	0	0	1	1	0	0	4
5:45 PM	1	0	0	0	1	2	0	0	4
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	8	0	0	25	35	0	0	74
APPROACH %'s :	42.86%	57.14%			41.67%	58.33%			
PEAK HR :	**04:45 PM - 05:45 PM**								TOTAL
PEAK HR VOL :	1	4	0	0	6	7	0	0	18
PEAK HR FACTOR :	0.250	0.500			0.500	0.875			0.750
	0.625				0.650				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Riverside Dr
City: North Hollywood
Control: Signalized

Project ID: 19-05537-038
Date: 9/12/2019

Total

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Riverside Dr				Riverside Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	10	37	6	0	14	284	52	0	3	55	23	0	15	63	9	0	571
7:15 AM	19	22	7	0	19	313	71	0	2	48	36	0	13	81	8	0	639
7:30 AM	31	34	24	0	25	276	103	0	4	75	52	0	16	98	5	0	743
7:45 AM	31	49	23	0	32	289	84	0	5	78	54	0	29	91	6	0	771
8:00 AM	29	47	21	0	34	288	65	0	11	84	49	0	16	78	10	0	732
8:15 AM	16	45	18	0	32	317	60	0	6	94	57	0	20	71	17	0	753
8:30 AM	29	45	24	0	26	244	43	0	8	94	62	0	21	73	17	0	686
8:45 AM	20	40	21	1	38	254	58	0	7	122	53	0	14	77	12	0	717
9:00 AM	20	50	14	0	61	282	80	0	9	93	41	0	13	69	7	0	739
9:15 AM	29	71	15	0	41	285	66	1	11	109	42	0	15	65	11	1	762
9:30 AM	24	64	13	0	39	261	113	0	10	106	55	0	23	94	14	0	816
9:45 AM	17	60	15	0	61	247	98	0	10	85	65	0	17	83	17	0	775
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	275	564	201	1	422	3340	893	1	86	1043	589	0	212	943	133	1	8704
APPROACH %'s :	26.42%	54.18%	19.31%	0.10%	9.06%	71.74%	19.18%	0.02%	5.01%	60.71%	34.28%	0.00%	16.45%	73.16%	10.32%	0.08%	
PEAK HR :	09:00 AM - 10:00 AM																TOTAL
PEAK HR VOL :	90	245	57	0	202	1075	357	1	40	393	203	0	68	311	49	1	3092
PEAK HR FACTOR :	0.776	0.863	0.950	0.000	0.828	0.943	0.790	0.250	0.909	0.901	0.781	0.000	0.739	0.827	0.721	0.250	0.947
	0.852				0.966				0.930				0.819				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	54	105	22	0	40	127	72	0	11	81	20	0	19	134	35	1	721
3:15 PM	36	114	18	0	54	113	74	0	11	84	17	0	13	137	32	0	703
3:30 PM	44	119	20	0	41	147	85	0	17	87	19	2	15	155	33	0	784
3:45 PM	53	141	21	0	40	120	97	0	9	88	17	0	16	165	30	0	797
4:00 PM	54	146	26	1	39	126	81	0	12	69	14	0	19	175	30	0	792
4:15 PM	37	138	23	0	42	129	86	0	15	78	15	0	26	169	41	0	799
4:30 PM	33	137	16	0	27	116	95	0	14	78	12	0	21	166	34	0	749
4:45 PM	52	145	14	0	34	135	80	0	14	69	31	0	25	173	31	0	803
5:00 PM	46	163	16	0	41	124	117	0	10	79	19	0	21	223	37	0	896
5:15 PM	65	156	35	0	35	158	92	0	7	78	17	0	25	208	40	0	916
5:30 PM	65	152	20	0	26	132	99	0	12	88	21	0	17	222	28	0	882
5:45 PM	55	151	24	0	35	120	92	0	12	70	21	0	21	220	26	0	847
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	594	1667	255	1	454	1547	1070	0	144	949	223	2	238	2147	397	1	9689
APPROACH %'s :	23.60%	66.23%	10.13%	0.04%	14.78%	50.37%	34.84%	0.00%	10.93%	72.00%	16.92%	0.15%	8.55%	77.15%	14.27%	0.04%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	231	622	95	0	137	534	400	0	41	315	78	0	84	873	131	0	3541
PEAK HR FACTOR :	0.888	0.954	0.679	0.000	0.835	0.845	0.855	0.000	0.854	0.895	0.929	0.000	0.840	0.979	0.819	0.000	0.966
	0.926				0.939				0.897				0.968				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Riverside Dr
City: North Hollywood
Control: Signalized

Project ID: 19-05537-038
Date: 9/12/2019

Bikes

NS/EW Streets:	Lankershim Blvd				Lankershim Blvd				Riverside Dr				Riverside Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	4
8:15 AM	0	0	0	0	0	1	0	0	0	7	0	0	0	0	0	0	8
8:30 AM	0	0	0	0	0	1	0	0	0	0	2	0	1	0	0	0	4
8:45 AM	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	4
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
9:15 AM	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
9:30 AM	0	1	1	0	0	2	0	0	0	1	0	0	0	0	0	0	5
9:45 AM	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	5	2	0	1	7	0	0	1	15	2	0	1	2	0	0	38
APPROACH %'s :	22.22%	55.56%	22.22%	0.00%	12.50%	87.50%	0.00%	0.00%	5.56%	83.33%	11.11%	0.00%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	09:00 AM - 10:00 AM																TOTAL
PEAK HR VOL :	2	3	1	0	0	3	0	0	1	3	0	0	0	1	0	0	14
PEAK HR FACTOR :	0.250	0.750	0.250	0.000	0.000	0.375	0.000	0.000	0.250	0.750	0.000	0.000	0.000	0.250	0.000	0.000	0.700
	0.500				0.375				0.500				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:00 PM	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	3
4:15 PM	0	3	0	0	0	0	0	0	2	0	0	0	0	2	0	0	7
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
4:45 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	1	0	0	0	1	0	0	0	2	1	0	0	0	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	9	0	0	0	5	0	0	2	5	2	0	0	7	1	0	31
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	22.22%	55.56%	22.22%	0.00%	0.00%	87.50%	12.50%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	4	1	0	0	3	1	0	11
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.375	0.250	0.000	0.550
	0.250				0.250				0.417				0.333				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lankershim Blvd & Riverside Dr
City: North Hollywood

Project ID: 19-05537-038
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Lankershim Blvd		Lankershim Blvd		Riverside Dr		Riverside Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	2	3	1	1	2	4	2	15
7:15 AM	3	0	7	1	2	4	0	1	18
7:30 AM	1	3	0	0	0	1	0	2	7
7:45 AM	0	2	1	0	0	0	3	3	9
8:00 AM	4	0	3	1	3	2	5	3	21
8:15 AM	0	1	2	0	2	0	5	4	14
8:30 AM	0	0	1	0	2	2	1	1	7
8:45 AM	0	1	4	1	2	4	2	1	15
9:00 AM	1	0	1	1	0	3	0	0	6
9:15 AM	2	0	2	0	1	0	3	0	8
9:30 AM	3	4	2	3	2	4	2	6	26
9:45 AM	0	0	4	1	2	5	2	0	14
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	14	13	30	9	17	27	27	23	160
APPROACH %'s :	51.85%	48.15%	76.92%	23.08%	38.64%	61.36%	54.00%	46.00%	
PEAK HR :	09:00 AM - 10:00 AM								TOTAL
PEAK HR VOL :	6	4	9	5	5	12	7	6	54
PEAK HR FACTOR :	0.500	0.250	0.563	0.417	0.625	0.600	0.583	0.250	0.519
	0.357		0.700		0.607		0.406		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
3:00 PM	1	0	2	2	0	0	3	2	10
3:15 PM	1	1	1	1	4	3	6	2	19
3:30 PM	0	3	3	1	4	1	1	3	16
3:45 PM	2	0	0	1	4	4	3	4	18
4:00 PM	1	4	0	1	3	1	1	4	15
4:15 PM	2	1	3	3	4	5	1	1	20
4:30 PM	0	1	2	1	1	5	1	0	11
4:45 PM	0	1	2	2	1	3	6	1	16
5:00 PM	1	0	4	5	2	1	2	1	16
5:15 PM	3	1	3	2	1	2	2	4	18
5:30 PM	0	2	7	1	1	2	3	2	18
5:45 PM	3	1	2	0	6	2	2	1	17
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	14	15	29	20	31	29	31	25	194
APPROACH %'s :	48.28%	51.72%	59.18%	40.82%	51.67%	48.33%	55.36%	44.64%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	7	4	16	8	10	7	9	8	69
PEAK HR FACTOR :	0.583	0.500	0.571	0.400	0.417	0.875	0.750	0.500	0.958
	0.688		0.667		0.531		0.708		

Turning Movement Count Report AM

Location ID: 39
North/South: Lankershim Avenue
East/West: Moorpark Avenue

Date: 10/22/19
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	27	290	1	1	76	7	4	53	11	30	25	5	530
7:15	44	334	2	3	66	13	4	44	15	39	36	12	612
7:30	40	285	3	7	87	12	5	69	23	33	43	9	616
7:45	46	291	5	7	112	20	18	75	19	50	39	13	695
8:00	24	320	6	10	76	10	12	96	16	50	66	15	701
8:15	44	321	5	7	78	23	5	70	11	29	70	11	674
8:30	18	336	4	7	74	10	11	73	10	35	71	14	663
8:45	30	278	3	5	100	10	7	86	10	41	119	16	705
9:00	28	297	6	4	72	11	6	75	13	40	115	13	680
9:15	21	319	2	5	71	19	7	64	12	40	88	12	660
9:30	33	308	9	7	71	16	11	69	9	51	78	8	670
9:45	30	271	7	14	62	10	10	73	17	50	80	18	642

Total Volume:	385	3650	53	77	945	161	100	847	166	488	830	146	7848
Approach %	9%	89%	1%	7%	80%	14%	9%	76%	15%	33%	57%	10%	

Peak Hr Begin:	8:00												
PHV	116	1255	18	29	328	53	35	325	47	155	326	56	2743
PHF	0.939			0.891			0.821			0.763			0.973

Prepared by City Count, LLC. (www.citycount.com)

Turning Movement Count Report PM

Location ID: 39
North/South: Lankershim Avenue
East/West: Moorpark Avenue

Date: 10/22/19
City: Los Angeles, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	Totals:
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
15:00	33	98	6	8	69	5	18	149	33	21	61	16	517
15:15	17	111	7	10	74	9	11	143	26	19	79	14	520
15:30	23	117	4	8	68	8	9	156	28	14	69	14	518
15:45	23	106	5	7	94	6	8	171	21	21	55	18	535
16:00	25	104	6	8	80	12	5	173	29	22	69	19	552
16:15	26	113	10	11	98	3	3	170	26	24	51	14	549
16:30	31	114	11	15	78	14	5	190	32	17	65	14	586
16:45	28	96	4	14	86	18	9	191	42	24	73	16	601
17:00	32	132	6	18	103	10	7	204	40	20	102	18	692
17:15	25	123	2	13	102	11	7	211	50	18	74	16	652
17:30	32	128	7	10	121	19	15	205	47	28	60	18	690
17:45	43	169	6	18	119	15	8	199	29	21	81	17	725
Total Volume:	338	1411	74	140	1092	130	105	2162	403	249	839	194	7137
Approach %	19%	77%	4%	10%	80%	10%	4%	81%	15%	19%	65%	15%	

Peak Hr Begin:	17:00												
PHV	132	552	21	59	445	55	37	819	166	87	317	69	2759
PHF	0.808			0.919			0.953			0.845			0.951

Prepared by City Count, LLC. (www.citycount.com)

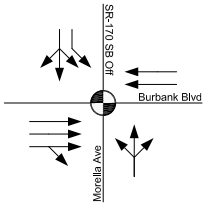
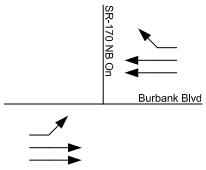
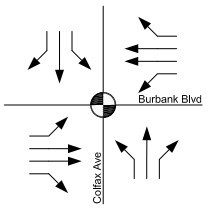
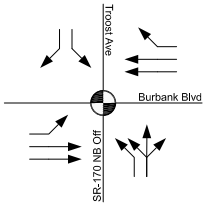
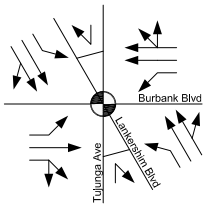
Pedestrian/Bicycle Count Report

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
7:00	4	0	3	0	1	0	5	1
7:15	0	0	1	0	4	0	9	0
7:30	5	1	0	0	1	0	6	0
7:45	0	0	1	2	2	0	12	2
8:00	2	0	1	0	1	0	5	0
8:15	3	0	3	0	1	1	3	0
8:30	3	0	8	0	2	0	3	3
8:45	1	0	3	0	1	0	7	1
9:00	2	1	9	0	2	0	7	0
9:15	3	0	2	0	2	1	3	0
9:30	5	0	3	0	2	0	8	0
9:45	3	0	4	0	2	1	7	0

Leg:	*North*		*East*		*South*		*West*	
Class:	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*	*Peds*	*Bicycle*
15:00	0	0	6	0	3	0	0	0
15:15	0	0	0	0	1	0	2	0
15:30	4	0	3	0	2	1	4	0
15:45	2	1	4	0	1	0	3	1
16:00	0	0	3	1	0	0	1	0
16:15	0	0	3	1	2	0	6	1
16:30	0	0	3	0	2	0	2	0
16:45	2	0	4	0	4	0	1	1
17:00	0	0	5	0	0	0	7	2
17:15	0	0	3	0	4	0	4	0
17:30	0	0	6	0	8	0	5	0
17:45	3	0	9	0	3	1	5	0

Appendix I

Intersection Lane Configurations

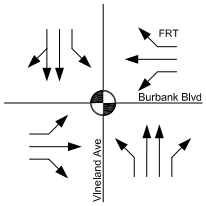
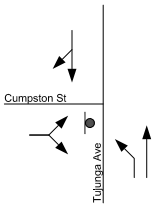
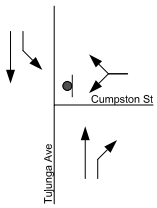
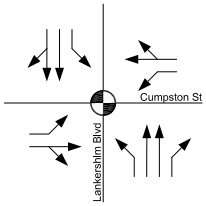
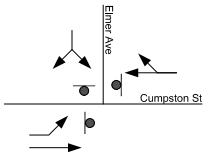
Intersection	Existing Conditions	Future without Project Conditions	Future with Project Conditions
1. SR-170 Southbound Off-Ramp Burbank Boulevard		Unchanged	Unchanged
2. SR-170 Northbound Off-Ramp Burbank Boulevard		Unchanged	Unchanged
3. Colfax Avenue & Burbank Boulevard		Unchanged	Unchanged
4. Troost Avenue / SR-170 Northbound Off-Ramp & Burbank Boulevard		Unchanged	Unchanged
5. Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard		Unchanged	Unchanged

LEGEND

- Traffic Signal
- Stop Sign
- FRT Functional Right-Turn
- ◊ Bus Only Lane
- -- Project Roadway (Private)

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS

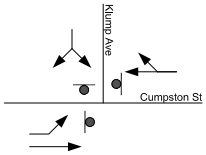
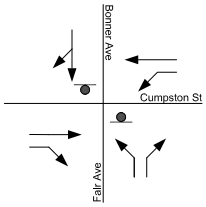
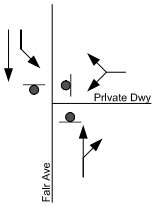
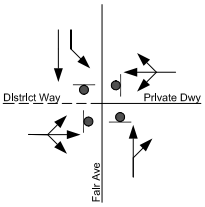
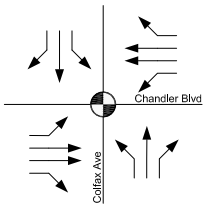
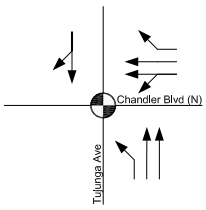
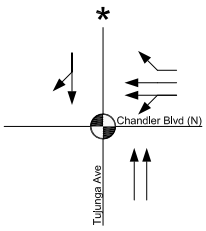
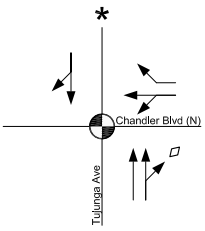
Intersection	Existing Conditions	Future without Project Conditions	Future with Project Conditions
6. Vineland Avenue & Burbank Boulevard		Unchanged	Unchanged
7. Tujunga Avenue & Cumpston Street (West)		Unchanged	Unchanged
8. Tujunga Avenue & Cumpston Street (East)		Unchanged	Unchanged
9. Lankershim Boulevard & Cumpston Street		Unchanged	Unchanged
10. Elmer Avenue & Cumpston Street		Unchanged	Unchanged

LEGEND

Traffic Signal	FRT	Functional Right-Turn	--	Project Roadway (Private)	
Stop Sign	◊	Bus Only Lane			

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS

Intersection	Existing Conditions	Future without Project Conditions	Future with Project Conditions
11. Klump Avenue & Cumpston Street		Unchanged	Unchanged
12. Bonner Avenue / Fair Avenue & Cumpston Street		Unchanged	Unchanged
13. Fair Avenue & District Way		Unchanged	
14. Colfax Avenue & Chandler Boulevard		Unchanged	Unchanged
15. Tujunga Avenue & Chandler Boulevard (North)			

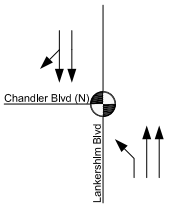
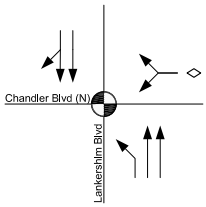
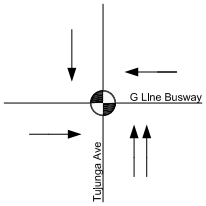
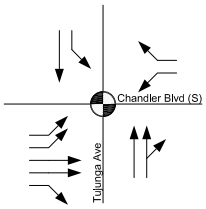
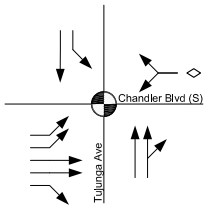
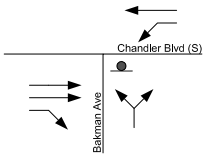
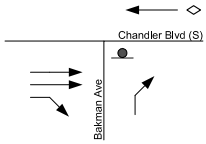
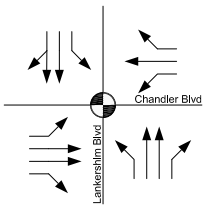
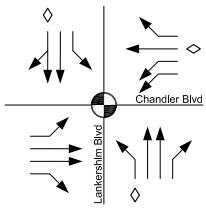
**NOTE: For the purposes of this analysis, it was assumed that the Metro Orange Line Improvements Project would cause the elimination of the northbound left-turn from Tujunga Avenue to Chandler Boulevard (North)*

LEGEND

- Traffic Signal
- Stop Sign
- FRT Functional Right-Turn
- ◊ Bus Only Lane
- -- Project Roadway (Private)

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS

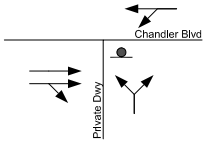
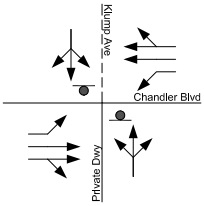
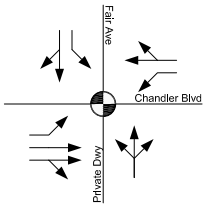
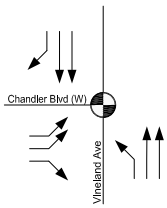
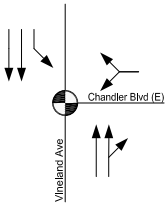
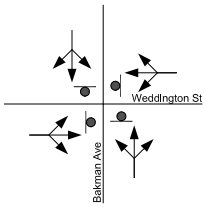
Intersection	Existing Conditions	Future without Project Conditions	Future with Project Conditions
16. Lankershim Boulevard & Chandler Boulevard (North)		Unchanged	
17. Tujunga Avenue & Metro G Line Busway		Unchanged	Unchanged
18. Tujunga Avenue & Chandler Boulevard (South)		Unchanged	
19. Bakman Avenue & Chandler Boulevard (South)		Unchanged	
20. Lankershim Boulevard & Chandler Boulevard		Unchanged	

LEGEND

- Traffic Signal
- Stop Sign
- FRT Functional Right-Turn
- ◊ Bus Only Lane
- -- Project Roadway (Private)

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS

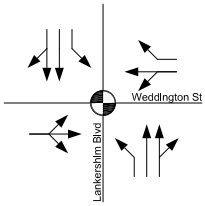
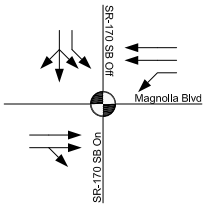
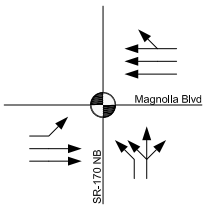
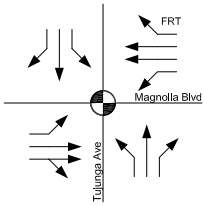
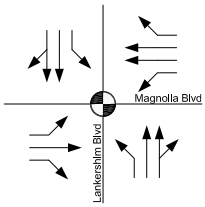
Intersection	Existing Conditions	Future without Project Conditions	Future with Project Conditions
21. Klump Avenue & Chandler Boulevard		Unchanged	
22. Fair Avenue & Chandler Boulevard		Unchanged	Unchanged
23. Vineland Avenue & Chandler Boulevard (West Leg)		Unchanged	Unchanged
24. Vineland Avenue & Chandler Boulevard (East Leg)		Unchanged	Unchanged
25. Bakman Avenue & Weddington Street		Unchanged	Unchanged

LEGEND

- Traffic Signal
- Stop Sign
- FRT Functional Right-Turn
- ◊ Bus Only Lane
- -- Project Roadway (Private)

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS

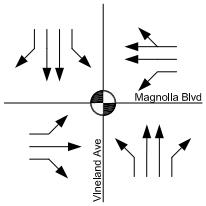
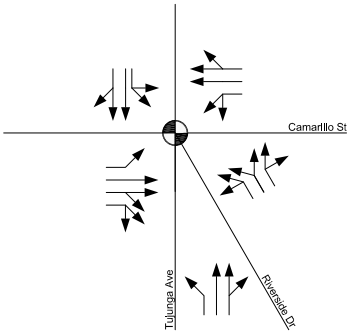
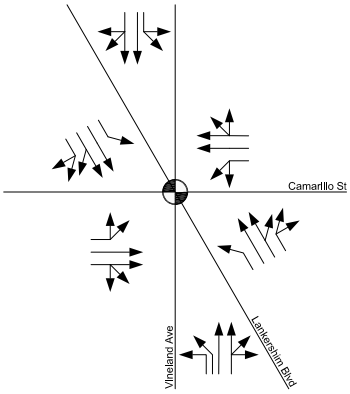
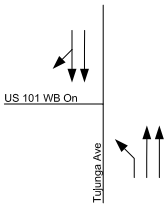
Intersection	Existing Conditions	Future without Project Conditions	Future with Project Conditions
26. Lankershim Boulevard & Weddington Street		Unchanged	Unchanged
27. SR-170 Southbound Ramps & Magnolia Boulevard		Unchanged	Unchanged
28. SR-170 Northbound Ramps & Magnolia Boulevard		Unchanged	Unchanged
29. Tujunga Avenue & Magnolia Boulevard		Unchanged	Unchanged
30. Lankershim Boulevard & Magnolia Boulevard		Unchanged	Unchanged

LEGEND

- Traffic Signal
- Stop Sign
- FRT Functional Right-Turn
- ◊ Bus Only Lane
- -- Project Roadway (Private)

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS

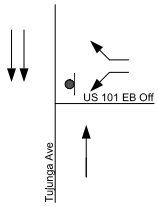
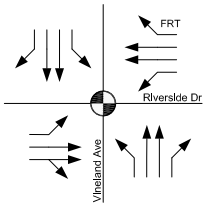
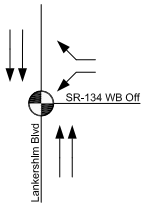
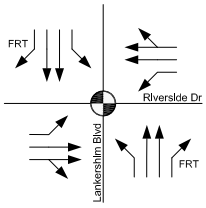
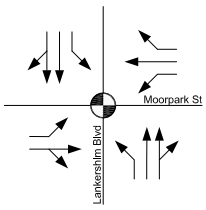
Intersection	Existing Conditions	Future without Project Conditions	Future with Project Conditions
31. Vineland Avenue & Magnolia Boulevard		Unchanged	Unchanged
32. Tujunga Avenue / Riverside Drive & Camarilla Street		Unchanged	Unchanged
33. Lankershim Boulevard / Vineland Avenue & Camarillo Street		Unchanged	Unchanged
34. Tujunga Avenue & US 101 Westbound On-Ramp		Unchanged	Unchanged

LEGEND

Traffic Signal	FRT	Functional Right-Turn	--	Project Roadway (Private)	
Stop Sign	◊	Bus Only Lane			

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS

Intersection	Existing Conditions	Future without Project Conditions	Future with Project Conditions
35. Tujunga Avenue & US 101 Eastbound Off-Ramp		Unchanged	Unchanged
36. Vineland Avenue & Riverside Drive		Unchanged	Unchanged
37. Lankershim Boulevard & SR-134 Westbound Off-Ramp		Unchanged	Unchanged
38. Lankershim Boulevard & Riverside Drive		Unchanged	Unchanged
39. Lankershim Boulevard & Moorpark Street		Unchanged	Unchanged

LEGEND

⊕	Traffic Signal	FRT	Functional Right-Turn	--	Project Roadway (Private)
●	Stop Sign	◊	Bus Only Lane		

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS

Appendix J

Transportation Improvements Memorandum

MEMORANDUM

TO: Shirley Zamora, LADOT Valley Planning & Development Review

FROM: Jonathan Chambers, P.E.

DATE: June 17, 2021

RE: Additional Transportation Improvements
for the District NoHo Mixed-Use Project
North Hollywood, California **Ref:** J1752

This memorandum summarizes our understanding of the agreed upon off-site transportation improvements to be implemented or funded by the District NoHo mixed-use development project (Project) based on the analysis contained in the Project's transportation assessment (TA)

At our virtual meeting on May 6, 2021, LADOT emphasized that, while it acknowledges and appreciates the many millions of dollars the Project will spend on transportation improvements, it is also important that it address, in a non-CEQA context, certain effects of the Project's vehicular traffic at locations where a suitable improvement can be identified. To this end, three departments of the Los Angeles Department of Transportation (LADOT) compiled a comprehensive list of available transportation infrastructure improvements at the TA study intersections to serve as a menu of options for the Project to consider (LADOT List).

As discussed on May 6, the Project will implement the identified pedestrian improvements at three locations adjacent to the Project Site during construction. Those include the installation of GridSmart pedestrian safety crossing controls at two intersections on Lankershim Boulevard (at Chandler Boulevard (North) and Chandler Boulevard) and upgraded Americans with Disabilities Act (ADA) pedestrian ramps at the intersection of Bakman Avenue & Weddington Street.

At your request, GTC reviewed the LADOT List to identify potential additional improvements that (a) are intended to improve traffic congestion[1], and (b) are located where the Project contributes to an increase in operational delay or an increase in key vehicle queue lengths. We then tested the improvements involving changes to traffic signal phasing or timing, because, while well-intentioned, they have the potential to further increase average delay or turn-pocket queue lengths, which would be counter-productive to the stated purpose of alleviating the effects of Project traffic.

---

[1] GTC excluded pedestrian-focused improvements because the Project would not directly affect pedestrian activity farther from the Project Site. However, as discussed above, the Project would implement several pedestrian-focused improvements identified on the LADOT List at locations adjacent to the Project Site during Project construction.

REVIEW OF IMPROVEMENTS

The LADOT List identified measures designed to improve traffic flow at 16 intersections. These measures included installing left-turn phasing in one or more directions, installing closed-circuit television (CCTV) monitoring cameras and associated infrastructure, or installing traffic signals at unsignalized locations.

GTC cross-checked those 16 locations with the level of service (LOS) and queuing analyses results from the TA and identified locations where the Project would add at least 10 seconds of delay for an intersection operating at LOS E or F and/or would result in a queue increase of at least 150 feet, exceeding a turn pocket[2]. A total of seven intersections met these criteria based on Future with Full Buildout (Year 2037) traffic conditions, as shown in Table 1.

ANALYSIS OF EFFECTIVENESS

The seven intersections identified in Table 1, and the improvements identified by LADOT at each location, are summarized in Table 2. Active improvements, which add new signal phases, were tested to ensure that they have a positive effect on congestion. Passive improvements, which include the installation of traffic monitoring equipment and the extension of turn pockets through striping, have no direct effect on congestion and, therefore, could not have a counter-productive effect on traffic conditions. As shown, active improvements were identified at five locations and passive improvements were also identified at five locations (including three locations where both active and passive improvements were identified).

The active improvements were tested in Synchro using the Future with Full Buildout (Year 2037) traffic conditions from the TA. Where applicable, “left-turn phasing” was tested as both a protected signal phase and a protected-permissive signal phase. Also, where multiple left-turn phases were proposed, tests were conducted analyzing the effects of all suggested phases, as well as isolating the one left-turn phase where the Project traffic specifically results in increased queue lengths. Table 3 summarizes the effects of these improvements on average vehicular delay and Table 4 summarizes their effects on queue lengths. Highway Capacity Manual worksheets are provided in the Attachment.

As shown in Tables 3 and 4, many of the potential improvements actually result in higher average delay and/or longer queue lengths. Table 5 summarizes the delay and queuing results for each location as favorable or unfavorable, or in some cases as “mixed” when there was a balanced mix of favorable and unfavorable results by peak hour or by turning movement. Overall, of the five locations with active improvements, only two improvements would result in consistent reductions in both delay and queuing.

[2] These criteria were developed to include locations where the Project’s contribution to traffic congestion warranted direct improvement despite the Project’s major investment in transportation infrastructure while excluding locations where the Project has a lesser impact.

PROPOSED IMPROVEMENTS

Based on this analysis, and per our discussions, the Project will install the passive improvements at five intersections and the identified effective active improvements at two intersections, up to a maximum cost as described below. In total, six intersections were identified for improvements, including one with both an active and a passive improvement, as shown in Table 6.

GTC assumes that the passive improvements would require an average of $50,000 per location, including $25,000 for the installation of a CCTV camera (based on LADOT's estimate provided with the LADOT List) and $25,000 for fiber connections (an assumed average per location). These improvements total $250,000 for five locations. LADOT estimates that the active improvements would cost approximately $175,000 per location, or $350,000 for two locations. In total, these improvements are estimated to cost $600,000. The Applicant would implement each of these improvements subject to the limits of a $600,000 overall budget. If insufficient funds remain to conduct any of the improvements from Table 6, the Applicant would contribute the remaining funds up to $600,000 to LADOT.

As previously noted, the Project would also directly implement pedestrian improvements at three locations as part of Project construction. The two locations with GridSmart crosswalk upgrades would be implemented upon completion of Block 0 (the Consolidated Transit Center) and the ADA ramp upgrades at Bakman Avenue & Weddington Street would be implemented upon completion of Block 8 adjacent to that location. The cost of these improvements would not count toward the $600,000 budget for the measures identified in Table 6.

TIMING OF IMPROVEMENTS

The analysis above was conducted based on the Future with Full Buildout (Year 2037) traffic conditions. The TA also analyzes Future with Phase 1 (Year 2026) conditions, which includes buildout of Block 0 (the Consolidated Transit Center) and Blocks 5 through 8 and would generate roughly two-thirds of the Project's total peak hour trips based on Table 22 of the TA. Applying the same delay and queuing criteria to that analysis, two of the six intersections proposed for improvements would not be substantially affected by Phase 1 Project traffic.

Therefore, the improvements for four intersections affected by Phase 1 traffic would be implemented prior to the Final Certificate of Occupancy for any Project development other than the Consolidated Transit Center or any Los Angeles County Metropolitan Authority (Metro) parking structures. The remaining improvements would be implemented prior to the Final Certificate of Occupancy for any Phase 2 development (i.e., Blocks 1 through 4 or equivalent[3]). As summarized in Table 6, the budget for Phase 1 improvements would total $325,000 and the budget for Phase 2 improvements would total $275,000. Any unused Phase 1 budget would be applicable to Phase 2 improvements.

[3] The Project may develop the Blocks in a different order than assumed in the TA. In this case, the Phase 2 improvements would be required to be implemented prior to Final Certificate of Occupancy for whichever Block would cause total Project trip generation to exceed two-thirds of total estimated trip generation, based on the rates and estimates from Tables 20 through 22 of the TA.

CONCLUSION

The Project is directly spending tens of millions of dollars on transportation improvements, including constructing a new consolidated public transit center, widening sidewalks, reconstructing roadways, upgrading traffic signals, installing and upgrading crosswalks, incorporating bicycle infrastructure, and installing landscaping throughout the Project Site. These improvements to be implemented by the Project prioritize public transit, pedestrian, and bicycle safety and accessibility, all of which are directly in line with top City and Metro priorities promoting multi-modal transportation and safety for vulnerable roadway users.

During construction, the Project would implement three pedestrian-focused improvements identified in the LADOT List adjacent to the Project Site. In addition, per the analysis above, the Project would implement the additional improvements described in Table 6, up to $600,000, each of which are either passive in nature or, if active, have been demonstrated to reduce the effects of Project traffic.

TABLE 1
POTENTIAL LOCATIONS TO FUND IMPROVEMENTS

No.	Intersection with Identified Improvement [a]	Project Effect on Congestion		
		Delay [b]	Queuing [c]	Either [d]
3.	Colfax Avenue & Burbank Boulevard	No	Yes	Yes
5.	Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard	Yes	Yes	Yes
6.	Vineland Avenue & Burbank Boulevard	No	No	No
9.	Lankershim Boulevard & Cumpston Street	No	Yes	Yes
14.	Colfax Avenue & Chandler Boulevard	No	Yes	Yes
23.	Vineland Avenue & Chandler Boulevard (West Leg)	No	No	No
24.	Vineland Avenue & Chandler Boulevard (East Leg)	No	No	No
27.	SR 170 Southbound Ramps & Magnolia Boulevard	Yes	Yes	Yes
28.	SR 170 Northbound Ramps & Magnolia Boulevard	Yes	Yes	Yes
30.	Lankershim Boulevard & Magnolia Boulevard	Yes	Yes	Yes
31.	Vineland Avenue & Magnolia Boulevard	No	No	No
34.	Tujunga Avenue & US 101 Westbound On-ramp	No	No	No
35.	Tujunga Avenue & US 101 Eastbound Off-ramp	No	No	No
36.	Vineland Avenue & Riverside Drive	No	No	No
38.	Lankershim Boulevard & Riverside Drive	No	No	No
39.	Lankershim Boulevard & Moorpark Street	No	No	No

Notes:

[a] Includes all locations from the LADOT List with a non-pedestrian transportation improvement.

[b] Locations where Future with Full Buildout (Year 2037) conditions shows a Project increase of 10 or more seconds at LOS E or F during either peak hour.

[c] Locations where Future with Full Buildout (Year 2037) conditions show the Project adding 150 or more feet to a queue exceeding a turn pocket.

[d] Intersections where the Project affects delay or queuing would qualify for potential improvement by the Project.

TABLE 2
SUMMARY OF QUALIFYING INTERSECTION IMPROVEMENTS

No.	Intersection	Active Improvement [a]	Passive Improvement [b]
3.	Colfax Avenue & Burbank Boulevard	Left-turn phasing for all directions	Install new digital cameras and hub communications equipment and fiber
5.	Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard		Extend NB left-turn pocket Install CCTV and fiber connection to nearest communications hub
9.	Lankershim Boulevard & Cumpston Street	SB left-turn phase (if warranted)	Install Pedestrian Safety Crossing Control (GridSmart ped crossing extension and timing)
14.	Colfax Avenue & Chandler Boulevard		Install CCTV and fiber connection to nearest communications hub
27.	SR 170 Southbound Ramps & Magnolia Boulevard	WB and SB left-turn phase upgrades, signal timing adjustments (TCR approved for WB Prot-Perm installation)	
28.	SR 170 Northbound Ramps & Magnolia Boulevard	NB right-turn phase upgrade (TCR approved for EB Prot-Perm installation)	
30.	Lankershim Boulevard & Magnolia Boulevard	NB and SB left-turn phasing	Install CCTV and fiber connection to nearest communications hub

Notes:
[a] Active improvements add new traffic signal phases.
[b] Passive improvements have no direct effect on traffic conditions.

TABLE 3
ACTIVE IMPROVEMENT EFFECTIVENESS TESTING
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Improvement	Peak Hour	Future without Project Conditions		Future with Full Buildout Conditions [a]			Future with Full Buildout With Improvement Conditions [b]		
				Delay	LOS	Delay	LOS	Δ Delay	Delay	LOS	Δ Delay
3.	Colfax Avenue & Burbank Boulevard	NB Protected	A.M.	17.5	B	18.3	B	0.8	45.0	D	27.5
			P.M.	22.0	C	49.8	D	27.8	80.1	F	58.1
		NB Prot-Perm	A.M.						31.3	C	13.8
			P.M.						55.5	E	33.5
		All Movements Protected	A.M.						74.3	E	56.8
			P.M.						121.2	F	99.2
9.	Lankershim Boulevard & Cumpston Street	SB Protected	A.M.	9.6	A	22.4	C	12.8	44.6	D	35.0
			P.M.	31.8	C	32.6	C	0.8	118.5	F	86.7
		SB Prot-Perm	A.M.						21.8	C	12.2
			P.M.						29.2	C	-2.6
27.	SR 170 Southbound Ramps & Magnolia Boulevard	WB Protected	A.M.	127.4	F	195.6	F	68.2	265.2	F	137.8
			P.M.	54.0	D	112.0	F	58.0	269.1	F	215.1
		WB Prot-Perm	A.M.						180.4	F	53.0
			P.M.						94.5	F	40.5
		WB and SB Prot-Perm	A.M.						1485.0	F	1357.6
			P.M.						281.8	F	227.8
28.	SR 170 Northbound Ramps & Magnolia Boulevard	EB Protected	A.M.	19.2	B	24.2	C	5.0	45.2	D	26.0
			P.M.	42.6	D	57.4	E	14.8	72.6	E	30.0
		EB Prot-Perm	A.M.						24.8	C	5.6
			P.M.						56.4	E	13.8
30.	Lankershim Boulevard & Magnolia Boulevard	NB & WB Protected	A.M.	53.5	D	74.0	E	20.5	115.5	F	62.0
			P.M.	48.7	D	66.8	E	18.1	80.0	E	31.3
		NB & WB Prot-Perm	A.M.						99.9	F	46.4
			P.M.						68.9	E	20.2

Notes:
[a] From Table 28 of the Transportation Assessment.
[b] Red indicates a worse delay than the Project analysis; green indicates an improvement in delay.

TABLE 4
ACTIVE IMPROVEMENT EFFECTIVENESS TESTING
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length [a]			Improvement 1 [c]		Improvement 2 [c]		Improvement 3 [c]	
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length	Future with Full Buildout Conditions	Project Contribution to Queue Length	Future with Full Buildout Conditions	Project Contribution to Queue Length	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #3, Colfax Avenue & Burbank Boulevard						NB Protected		NB Protected-Permissive		All Directions Protected	
Eastbound Left-Turn *from Burbank Boulevard to Colfax Avenue*	125	A.M.	53	55	2	190	137	165	112	170	117
		P.M.	123	323	200	360	237	360	237	298	175
Westbound Left-Turn *from Burbank Boulevard to Colfax Avenue*	140	A.M.	68	78	10	118	50	110	42	133	65
		P.M.	58	75	17	103	45	93	35	155	97
Northbound Left-Turn *from Colfax Avenue to Burbank Boulevard*	65	A.M.	215	233	18	320	105	165	-50	375	160
		P.M.	330	730	400	903	573	785	455	930	600
Southbound Left-Turn *from Colfax Avenue to Burbank Boulevard*	190	A.M.	68	83	15	83	15	90	22	153	85
		P.M.	35	43	8	48	13	53	18	80	45
Intersection #9, Lankershim Boulevard & Cumpston Street						SB Protected		SB Protected-Permissive		n/a	
Southbound Left-Turn *from Lankershim Boulevard to Cumpston Street*	150	A.M.	223	118	-105	513	290	75	-148		
		P.M.	313	568	255	1,048	735	353	40		
Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard						WB Protected		WB Protected-Permissive		WB and SB Protected-Permissive	
Westbound Left-Turn *from Magnolia Boulevard to SR 170 Southbound*	430	A.M.	1,125	1,818	693	1,580	455	1,263	138	550	-575
		P.M.	1,085	1,883	798	1,810	725	1,308	223	813	-272
Southbound Left-Turn *from SR 170 Southbound to Magnolia Boulevard*	675 [b]	A.M.	1,395	1,480	85	1,825	430	1,825	430	3,483	2,088
		P.M.	255	260	5	293	38	293	38	1,258	1,003
Intersection #28, SR 170 Northbound Ramps & Magnolia Boulevard						EB Protected		EB Protected-Permissive		n/a	
Eastbound Left-Turn *from Magnolia Boulevard to SR 170 Northbound*	170	A.M.	120	170	50	448	328	55	-65		
		P.M.	403	473	70	443	40	90	-313		
Northbound Left-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	308	375	67	475	167	475	167		
		P.M.	523	670	147	880	357	880	357		
Northbound Right-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	408	493	85	648	240	648	240		
		P.M.	708	1,025	317	1,260	552	1,260	552		
Intersection #30, Lankershim Boulevard & Magnolia Boulevard						NB and WB Protected		NB and WB Protected-Permissive		n/a	
Eastbound Left-Turn *from Magnoila Boulevard to Lankershim Boulevard*	140	A.M.	518	618	100	518	0	590	72		
		P.M.	473	625	152	583	110	553	80		
Westbound Left-Turn *from Magnoila Boulevard to Lankershim Boulevard*	200	A.M.	145	150	5	128	-17	75	-70		
		P.M.	100	110	10	145	45	75	-25		
Northbound Left-Turn *from Lankershim Boulevard to Magnoila Boulevard*	205	A.M.	195	408	213	260	65	170	-25		
		P.M.	250	315	65	360	110	263	13		
Southbound Left-Turn *from Lankershim Boulevard to Magnoila Boulevard*	75	A.M.	78	80	2	95	17	93	15		
		P.M.	100	115	15	158	58	168	68		

Notes:
All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.
[a] From Table 28 of the Transportation Assessment.
[b] The off-ramp extends an additional 500 feet beyond the point where the left-turn and right-turn lanes diverge.
[c] Red indicates a longer queue than the Project analysis; green indicates a reduction in queue.

TABLE 5
ACTIVE IMPROVEMENT EFFECTIVENESS SUMMARY

No.	Intersection	Identified Improvement	Identified Improvement Results in Favorable Effect		
			Delay [a]	**Queue** [b]	**Overall** [c]
3.	Colfax Avenue & Burbank Boulevard	NB Protected	No	No	No
		NB Prot-Perm	No	No	No
		All Movements Protected	No	No	No
9.	Lankershim Boulevard & Cumpston Street	SB Protected	No	No	No
		SB Prot-Perm	Mixed	Yes	Yes
27.	SR 170 Southbound Ramps & Magnolia Boulevard	WB Protected	No	Mixed	No
		WB Prot-Perm	Yes	Mixed	Yes
		WB and SB Prot-Perm	No	Mixed	No
28.	SR 170 Northbound Ramps & Magnolia Boulevard	EB Protected	No	No	No
		EB Prot-Perm	Mixed	Mixed	No
30.	Lankershim Boulevard & Magnolia Boulevard	NB & WB Protected	No	Yes	No
		NB & WB Prot-Perm	No	Yes	No

Notes:

[a] Delay is considered favorable if AM and PM peak hour delay with the improvement is lower than without it.

[b] Queue is considered favorable if queue lengths are generally shorter with the improvement than without it.

[c] Overall improvement is considered favorable if, at a minimum, one factor is improved and one shows mixed results. The Project proposes to implement the active improvements at the two locations where a favorable improvement was identified (#9 and #27).

TABLE 6
PROPOSED IMPROVEMENTS AND BUDGET

No.	Intersection	Proposed Improvement		Budget
		Active Improvement	Passive Improvement	
Phase 1 Improvements				
3.	Colfax Avenue & Burbank Boulevard		CCTV camera and fiber	$50,000
5.	Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard		CCTV camera and fiber, Extend NB left-turn pocket	$50,000
27.	SR 170 Southbound Ramps & Magnolia Boulevard	Westbound protected-permissive signal phase		$175,000
30.	Lankershim Boulevard & Magnolia Boulevard		CCTV camera and fiber	$50,000
			[a] ***Phase 1 Total***	**$325,000**
Phase 2 Improvements				
9.	Lankershim Boulevard & Cumpston Street	Southbound protected-permissive signal phase	Pedestrian Safety Crossing Control	$225,000
14.	Colfax Avenue & Chandler Boulevard		CCTV camera and fiber	$50,000
			[b] ***Phase 2 Total***	**$275,000**
			Project Total	**$600,000**

Notes:
[a] To be impldmented by Project Applicant prior to receipt of Final Certificate of Occupancy for any Project development other than the Consolidated Transit Center or associated Metro parking structure.
[b] To be implemented by Project Applicant prior to receipt of Final Certificate of Occupancy for any Phase 2 development (Blocks 1 through 4) or equivalent based on order of construction.

Attachment

Highway Capacity Manual Worksheets

Intersection #3

Colfax Avenue & Burbank Boulevard

Northbound Protected Left-Turn Phase

HCM 6th Signalized Intersection Summary
3: Colfax Ave & Burbank Blvd

05/06/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Future Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	1714	750	128	1714	750	169	757	614	283	495	392
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.09	0.40	0.40	0.26	0.26	0.26
Sat Flow, veh/h	250	3554	1555	333	3554	1555	1781	1870	1516	853	1870	1479
Grp Volume(v), veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Grp Sat Flow(s),veh/h/ln	250	1777	1555	333	1777	1555	1781	1870	1516	853	1870	1479
Q Serve(g_s), s	0.0	31.4	8.1	16.8	48.2	1.7	9.5	15.8	5.6	9.0	20.5	18.1
Cycle Q Clear(g_c), s	48.2	31.4	8.1	48.2	48.2	1.7	9.5	15.8	5.6	10.8	20.5	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	72	1714	750	128	1714	750	169	757	614	283	495	392
V/C Ratio(X)	1.06	0.78	0.28	0.73	1.05	0.07	1.13	0.52	0.21	0.32	0.82	0.75
Avail Cap(c_a), veh/h	72	1714	750	128	1714	750	169	786	637	296	524	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.46	0.46	0.46	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	21.5	15.5	44.9	25.9	13.8	45.3	22.4	19.4	31.7	34.6	33.7
Incr Delay (d2), s/veh	122.2	3.6	0.9	15.3	30.0	0.1	93.3	0.3	0.1	0.7	9.9	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.6	18.6	5.2	4.7	32.3	1.0	12.8	9.9	3.4	3.3	15.5	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	172.2	25.2	16.4	60.2	55.9	13.9	138.5	22.7	19.5	32.4	44.4	40.5
LnGrp LOS	F	C	B	E	F	B	F	C	B	C	D	D
Approach Vol, veh/h		1628			1941			713			791	
Approach Delay, s/veh		30.9			55.1			53.2			41.6	
Approach LOS		C			E			D			D	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		53.7		46.3		53.7	14.0	32.3				
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5	4.5	5.8				
Max Green Setting (Gmax), s		* 46		42.0		* 46	9.5	28.0				
Max Q Clear Time (g_c+I1), s		50.2		17.8		50.2	11.5	22.5				
Green Ext Time (p_c), s		0.0		2.7		0.0	0.0	2.0				

Intersection Summary	
HCM 6th Ctrl Delay	45.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
3: Colfax Ave & Burbank Blvd

05/06/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Future Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	1698	745	116	1698	745	223	765	643	257	447	374
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.13	0.41	0.41	0.24	0.24	0.24
Sat Flow, veh/h	208	3554	1559	345	3554	1559	1781	1870	1572	774	1870	1563
Grp Volume(v), veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Grp Sat Flow(s),veh/h/ln	208	1777	1559	345	1777	1559	1781	1870	1572	774	1870	1563
Q Serve(g_s), s	0.0	34.9	3.3	12.9	47.8	3.3	12.5	15.9	11.5	5.6	16.7	19.3
Cycle Q Clear(g_c), s	47.8	34.9	3.3	47.8	47.8	3.3	12.5	15.9	11.5	5.6	16.7	19.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	72	1698	745	116	1698	745	223	765	643	257	447	374
V/C Ratio(X)	1.57	0.84	0.12	0.89	1.14	0.12	1.65	0.52	0.40	0.21	0.75	0.85
Avail Cap(c_a), veh/h	72	1698	745	116	1698	745	223	842	708	289	524	438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.14	0.14	0.14	0.57	0.57	0.57	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	22.8	14.5	47.3	26.1	14.5	43.8	22.2	20.9	31.1	35.3	36.3
Incr Delay (d2), s/veh	312.7	5.1	0.3	14.1	65.6	0.0	303.0	0.3	0.2	0.4	5.2	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.4	20.8	2.1	4.1	41.6	1.8	36.1	9.8	6.5	1.9	12.6	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	362.7	27.9	14.8	61.4	91.7	14.5	346.7	22.5	21.1	31.5	40.5	48.8
LnGrp LOS	F	C	B	E	F	B	F	C	C	C	D	D
Approach Vol, veh/h		1629			2138			1021			706	
Approach Delay, s/veh		50.4			86.9			138.7			43.5	
Approach LOS		D			F			F			D	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		53.3		46.7		53.3	17.0	29.7				
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5	4.5	5.8				
Max Green Setting (Gmax), s		* 43		45.0		* 43	12.5	28.0				
Max Q Clear Time (g_c+I1), s		49.8		17.9		49.8	14.5	21.3				
Green Ext Time (p_c), s		0.0		3.3		0.0	0.0	2.0				

Intersection Summary	
HCM 6th Ctrl Delay	80.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Northbound Protected-Permissive Left-Turn Phase

HCM 6th Signalized Intersection Summary
3: Colfax Ave & Burbank Blvd

05/06/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Future Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.95	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	1873	821	152	1873	821	205	673	542	235	495	392
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.05	0.36	0.36	0.26	0.26	0.26
Sat Flow, veh/h	250	3554	1558	333	3554	1558	1781	1870	1507	856	1870	1479
Grp Volume(v), veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Grp Sat Flow(s),veh/h/ln	250	1777	1558	333	1777	1558	1781	1870	1507	856	1870	1479
Q Serve(g_s), s	4.2	28.7	7.4	24.1	48.5	1.5	5.0	17.0	6.0	9.6	20.5	18.1
Cycle Q Clear(g_c), s	52.7	28.7	7.4	52.7	48.5	1.5	5.0	17.0	6.0	17.1	20.5	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	83	1873	821	152	1873	821	205	673	542	235	495	392
V/C Ratio(X)	0.92	0.72	0.26	0.61	0.96	0.06	0.93	0.58	0.24	0.39	0.82	0.75
Avail Cap(c_a), veh/h	83	1873	821	152	1873	821	205	701	565	248	524	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.46	0.46	0.46	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	18.0	12.9	39.6	22.6	11.5	34.9	25.9	22.4	36.7	34.6	33.7
Incr Delay (d2), s/veh	78.7	2.4	0.8	8.2	7.5	0.1	32.0	0.7	0.1	1.0	9.9	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.6	16.6	4.6	4.4	24.7	0.9	6.6	10.8	3.7	3.6	15.5	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	128.4	20.3	13.7	47.8	30.2	11.6	66.8	26.6	22.6	37.8	44.4	40.5
LnGrp LOS	F	C	B	D	C	B	E	C	C	D	D	D
Approach Vol, veh/h		1628			1941			713			791	
Approach Delay, s/veh		24.5			30.5			36.7			42.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		58.2		41.8		58.2	9.5	32.3				
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5	4.5	5.8				
Max Green Setting (Gmax), s		* 51		37.5		* 51	5.0	28.0				
Max Q Clear Time (g_c+I1), s		54.7		19.0		54.7	7.0	22.5				
Green Ext Time (p_c), s		0.0		2.5		0.0	0.0	2.0				

Intersection Summary	
HCM 6th Ctrl Delay	31.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
3: Colfax Ave & Burbank Blvd

05/06/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Future Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	1943	854	156	1943	854	223	637	534	198	459	384
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.05	0.34	0.34	0.25	0.25	0.25
Sat Flow, veh/h	208	3554	1562	345	3554	1562	1781	1870	1570	775	1870	1564
Grp Volume(v), veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Grp Sat Flow(s),veh/h/ln	208	1777	1562	345	1777	1562	1781	1870	1570	775	1870	1564
Q Serve(g_s), s	0.1	30.3	2.8	24.4	54.6	2.9	5.0	17.8	12.9	6.1	16.6	19.1
Cycle Q Clear(g_c), s	54.7	30.3	2.8	54.7	54.6	2.9	5.0	17.8	12.9	14.4	16.6	19.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	72	1943	854	156	1943	854	223	637	534	198	459	384
V/C Ratio(X)	1.56	0.73	0.11	0.67	1.00	0.11	1.65	0.62	0.48	0.27	0.73	0.82
Avail Cap(c_a), veh/h	72	1943	854	156	1943	854	223	640	537	273	640	535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.14	0.14	0.14	0.57	0.57	0.57	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	17.1	10.9	40.2	22.6	10.9	37.3	27.6	26.0	37.6	34.7	35.7
Incr Delay (d2), s/veh	310.7	2.5	0.3	3.2	7.4	0.0	302.5	1.1	0.4	0.7	2.7	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.4	17.3	1.7	3.7	24.7	1.5	31.4	11.2	7.3	2.1	12.1	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	360.7	19.6	11.2	43.3	30.1	11.0	339.8	28.7	26.4	38.4	37.5	42.9
LnGrp LOS	F	B	B	D	C	B	F	C	C	D	D	D
Approach Vol, veh/h		1629			2138			1021			706	
Approach Delay, s/veh		42.8			29.9			139.9			40.0	
Approach LOS		D			C			F			D	

Timer - Assigned Phs		2		4		6	7	8				
Phs Duration (G+Y+Rc), s		60.2		39.8		60.2	9.5	30.3				
Change Period (Y+Rc), s		* 5.5		5.8		* 5.5	4.5	5.8				
Max Green Setting (Gmax), s		* 45		34.2		* 45	5.0	34.2				
Max Q Clear Time (g_c+I1), s		56.7		19.8		56.7	7.0	21.1				
Green Ext Time (p_c), s		0.0		2.8		0.0	0.0	2.8				

Intersection Summary	
HCM 6th Ctrl Delay	55.5
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

All-Way Protected Left-Turn Phases

HCM 6th Signalized Intersection Summary
3: Colfax Ave & Burbank Blvd

05/06/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Future Volume (veh/h)	70	1234	194	86	1655	45	176	361	120	84	375	269
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1484	648	106	1533	670	155	509	403	114	466	367
Arrive On Green	0.05	0.42	0.42	0.06	0.43	0.43	0.09	0.27	0.27	0.06	0.25	0.25
Sat Flow, veh/h	1781	3554	1551	1781	3554	1552	1781	1870	1482	1781	1870	1473
Grp Volume(v), veh/h	76	1341	211	93	1799	49	191	392	130	91	408	292
Grp Sat Flow(s),veh/h/ln	1781	1777	1551	1781	1777	1552	1781	1870	1482	1781	1870	1473
Q Serve(g_s), s	4.6	38.5	10.0	5.6	47.0	2.0	9.5	21.0	7.6	5.5	22.8	20.2
Cycle Q Clear(g_c), s	4.6	38.5	10.0	5.6	47.0	2.0	9.5	21.0	7.6	5.5	22.8	20.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	1484	648	106	1533	670	155	509	403	114	466	367
V/C Ratio(X)	0.93	0.90	0.33	0.88	1.17	0.07	1.23	0.77	0.32	0.80	0.87	0.80
Avail Cap(c_a), veh/h	82	1484	648	106	1533	670	155	523	415	114	480	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.46	0.46	0.46	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	29.7	21.4	50.8	31.0	18.2	49.8	36.5	31.6	50.3	39.3	38.3
Incr Delay (d2), s/veh	76.2	9.3	1.3	29.1	81.5	0.1	133.0	4.2	0.3	31.1	16.0	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.8	24.2	6.7	5.3	48.2	1.3	15.0	13.9	4.8	6.1	17.9	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	128.1	39.0	22.7	79.9	112.5	18.3	182.8	40.7	31.9	81.4	55.3	49.2
LnGrp LOS	F	D	C	E	F	B	F	D	C	F	E	D
Approach Vol, veh/h		1628			1941			713			791	
Approach Delay, s/veh		41.1			108.6			77.2			56.1	
Approach LOS		D			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	51.0	11.5	35.5	9.5	52.5	14.0	33.0
Change Period (Y+Rc), s	4.5	* 5.5	4.5	5.8	4.5	* 5.5	4.5	5.8
Max Green Setting (Gmax), s	6.5	* 45	7.0	30.5	5.0	* 46	9.5	28.0
Max Q Clear Time (g_c+I1), s	7.6	40.5	7.5	23.0	6.6	49.0	11.5	24.8
Green Ext Time (p_c), s	0.0	3.2	0.0	1.6	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	74.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
3: Colfax Ave & Burbank Blvd

05/06/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Future Volume (veh/h)	104	1310	85	96	1786	86	338	365	236	49	310	291
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	1452	635	90	1452	635	221	592	496	68	432	361
Arrive On Green	0.05	0.41	0.41	0.05	0.41	0.41	0.12	0.32	0.32	0.04	0.23	0.23
Sat Flow, veh/h	1781	3554	1554	1781	3554	1554	1781	1870	1569	1781	1870	1562
Grp Volume(v), veh/h	113	1424	92	104	1941	93	367	397	257	53	337	316
Grp Sat Flow(s),veh/h/ln	1781	1777	1554	1781	1777	1554	1781	1870	1569	1781	1870	1562
Q Serve(g_s), s	5.5	43.1	4.1	5.5	44.5	4.1	13.5	20.1	14.6	3.2	18.4	21.3
Cycle Q Clear(g_c), s	5.5	43.1	4.1	5.5	44.5	4.1	13.5	20.1	14.6	3.2	18.4	21.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	90	1452	635	90	1452	635	221	592	496	68	432	361
V/C Ratio(X)	1.26	0.98	0.14	1.16	1.34	0.15	1.66	0.67	0.52	0.78	0.78	0.88
Avail Cap(c_a), veh/h	90	1452	635	90	1452	635	221	604	507	103	480	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.14	0.14	0.14	0.57	0.57	0.57	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	31.8	20.3	51.8	32.2	20.3	47.7	32.3	30.5	52.0	39.3	40.4
Incr Delay (d2), s/veh	179.0	19.4	0.5	87.4	152.1	0.1	309.8	1.6	0.5	18.6	7.3	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.9	28.8	2.7	6.2	64.8	2.2	37.2	12.7	8.3	3.2	14.0	14.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	230.8	51.2	20.7	139.1	184.3	20.3	357.6	34.0	31.0	70.5	46.7	58.3
LnGrp LOS	F	D	C	F	F	C	F	C	C	E	D	E
Approach Vol, veh/h		1629			2138			1021			706	
Approach Delay, s/veh		61.9			175.0			149.5			53.7	
Approach LOS		E			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	50.0	8.7	40.3	10.0	50.0	18.0	31.0
Change Period (Y+Rc), s	4.5	* 5.5	4.5	5.8	4.5	* 5.5	4.5	5.8
Max Green Setting (Gmax), s	5.5	* 42	6.3	35.2	5.5	* 42	13.5	28.0
Max Q Clear Time (g_c+I1), s	7.5	45.1	5.2	22.1	7.5	46.5	15.5	23.3
Green Ext Time (p_c), s	0.0	0.0	0.0	2.7	0.0	0.0	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	121.2
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection #9

Lankershim Boulevard & Cumpston Street

Southbound Protected Left-Turn Phase

HCM 6th Signalized Intersection Summary
9: Lankershim Blvd & Cumpston St (E)/Cumpston St

05/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	89	102	188	58	211	21	507	95	149	1323	47
Future Volume (veh/h)	126	89	102	188	58	211	21	507	95	149	1323	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	97	111	204	63	229	23	551	103	162	1438	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	242	277	316	107	390	176	1741	735	89	2044	72
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.49	0.49	0.49	0.05	0.58	0.58
Sat Flow, veh/h	1083	790	903	1164	350	1271	354	3554	1501	1781	3494	124
Grp Volume(v), veh/h	137	0	208	204	0	292	23	551	103	162	730	759
Grp Sat Flow(s),veh/h/ln	1083	0	1693	1164	0	1621	354	1777	1501	1781	1777	1841
Q Serve(g_s), s	12.2	0.0	9.7	16.8	0.0	15.2	4.9	9.4	3.8	5.0	28.9	29.1
Cycle Q Clear(g_c), s	27.5	0.0	9.7	26.5	0.0	15.2	24.5	9.4	3.8	5.0	28.9	29.1
Prop In Lane	1.00		0.53	1.00		0.78	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	240	0	520	316	0	498	176	1741	735	89	1039	1077
V/C Ratio(X)	0.57	0.00	0.40	0.64	0.00	0.59	0.13	0.32	0.14	1.82	0.70	0.71
Avail Cap(c_a), veh/h	321	0	647	404	0	619	176	1741	735	89	1039	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	27.4	37.8	0.0	29.3	26.7	15.4	14.0	47.5	14.6	14.7
Incr Delay (d2), s/veh	2.1	0.0	0.5	2.3	0.0	1.1	1.5	0.5	0.4	409.0	4.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	0.0	7.2	8.6	0.0	10.1	0.9	6.7	2.3	20.5	17.2	17.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	0.0	27.9	40.1	0.0	30.4	28.2	15.9	14.4	456.5	18.6	18.5
LnGrp LOS	D	A	C	D	A	C	C	B	B	F	B	B
Approach Vol, veh/h		345			496			677			1651	
Approach Delay, s/veh		33.9			34.4			16.1			61.5	
Approach LOS		C			C			B			E	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		63.5		36.5	9.5	54.0		36.5				
Change Period (Y+Rc), s		* 5		* 5.8	4.5	* 5		* 5.8				
Max Green Setting (Gmax), s		* 41		* 38	5.0	* 41		* 38				
Max Q Clear Time (g_c+I1), s		31.1		29.5	7.0	26.5		28.5				
Green Ext Time (p_c), s		6.5		1.2	0.0	3.8		2.0				

Intersection Summary	
HCM 6th Ctrl Delay	44.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
9: Lankershim Blvd & Cumpston St (E)/Cumpston St

05/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	62	46	126	126	196	30	940	103	258	671	30
Future Volume (veh/h)	147	62	46	126	126	196	30	940	103	258	671	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.97		0.97	0.97		0.89	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	67	50	137	137	213	33	1022	112	280	729	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	344	257	450	227	353	357	1583	631	89	1862	84
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.45	0.45	0.45	0.05	0.54	0.54
Sat Flow, veh/h	1026	978	730	1242	645	1003	684	3554	1416	1781	3446	156
Grp Volume(v), veh/h	160	0	117	137	0	350	33	1022	112	280	376	386
Grp Sat Flow(s),veh/h/ln	1026	0	1708	1242	0	1648	684	1777	1416	1781	1777	1825
Q Serve(g_s), s	15.2	0.0	4.8	8.6	0.0	17.5	3.0	22.4	4.8	5.0	12.3	12.3
Cycle Q Clear(g_c), s	32.7	0.0	4.8	13.4	0.0	17.5	5.8	22.4	4.8	5.0	12.3	12.3
Prop In Lane	1.00		0.43	1.00		0.61	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	253	0	601	450	0	579	357	1583	631	89	960	986
V/C Ratio(X)	0.63	0.00	0.19	0.30	0.00	0.60	0.09	0.65	0.18	3.14	0.39	0.39
Avail Cap(c_a), veh/h	284	0	653	487	0	630	357	1583	631	89	960	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	22.6	27.2	0.0	26.7	17.9	21.6	16.7	47.5	13.4	13.4
Incr Delay (d2), s/veh	3.7	0.0	0.2	0.4	0.0	1.4	0.5	1.8	0.5	993.5	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.4	0.0	3.5	4.7	0.0	11.4	0.9	13.9	2.9	41.9	8.6	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.9	0.0	22.7	27.6	0.0	28.1	18.3	23.4	17.2	1041.0	14.6	14.6
LnGrp LOS	D	A	C	C	A	C	B	C	B	F	B	B
Approach Vol, veh/h		277			487			1167			1042	
Approach Delay, s/veh		35.0			28.0			22.7			290.4	
Approach LOS		C			C			C			F	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		59.0		41.0	9.5	49.5		41.0				
Change Period (Y+Rc), s		* 5		* 5.8	4.5	* 5		* 5.8				
Max Green Setting (Gmax), s		* 41		* 38	5.0	* 41		* 38				
Max Q Clear Time (g_c+I1), s		14.3		34.7	7.0	24.4		19.5				
Green Ext Time (p_c), s		5.0		0.5	0.0	7.2		2.8				

Intersection Summary	
HCM 6th Ctrl Delay	118.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Southbound Protected-Permissive Left-Turn Phase

HCM 6th Signalized Intersection Summary
9: Lankershim Blvd & Cumpston St (E)/Cumpston St

05/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	89	102	188	58	211	21	507	95	149	1323	47
Future Volume (veh/h)	126	89	102	188	58	211	21	507	95	149	1323	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		0.95	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	137	97	111	204	63	229	23	551	103	162	1438	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	242	277	316	107	390	176	1741	735	467	2044	72
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.49	0.49	0.49	0.05	0.58	0.58
Sat Flow, veh/h	1083	790	903	1164	350	1271	354	3554	1501	1781	3494	124
Grp Volume(v), veh/h	137	0	208	204	0	292	23	551	103	162	730	759
Grp Sat Flow(s),veh/h/ln	1083	0	1693	1164	0	1621	354	1777	1501	1781	1777	1841
Q Serve(g_s), s	12.2	0.0	9.7	16.8	0.0	15.2	4.9	9.4	3.8	4.4	28.9	29.1
Cycle Q Clear(g_c), s	27.5	0.0	9.7	26.5	0.0	15.2	24.5	9.4	3.8	4.4	28.9	29.1
Prop In Lane	1.00		0.53	1.00		0.78	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	240	0	520	316	0	498	176	1741	735	467	1039	1077
V/C Ratio(X)	0.57	0.00	0.40	0.64	0.00	0.59	0.13	0.32	0.14	0.35	0.70	0.71
Avail Cap(c_a), veh/h	321	0	647	404	0	619	176	1741	735	467	1039	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	27.4	37.8	0.0	29.3	26.7	15.4	14.0	11.5	14.6	14.7
Incr Delay (d2), s/veh	2.1	0.0	0.5	2.3	0.0	1.1	1.5	0.5	0.4	0.4	4.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	0.0	7.2	8.6	0.0	10.1	0.9	6.7	2.3	3.0	17.2	17.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	0.0	27.9	40.1	0.0	30.4	28.2	15.9	14.4	11.9	18.6	18.5
LnGrp LOS	D	A	C	D	A	C	C	B	B	B	B	B
Approach Vol, veh/h		345			496			677			1651	
Approach Delay, s/veh		33.9			34.4			16.1			17.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		63.5		36.5	9.5	54.0		36.5				
Change Period (Y+Rc), s		* 5		* 5.8	4.5	* 5		* 5.8				
Max Green Setting (Gmax), s		* 41		* 38	5.0	* 41		* 38				
Max Q Clear Time (g_c+I1), s		31.1		29.5	6.4	26.5		28.5				
Green Ext Time (p_c), s		6.5		1.2	0.0	3.8		2.0				

Intersection Summary	
HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
9: Lankershim Blvd & Cumpston St (E)/Cumpston St

05/11/2021

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	62	46	126	126	196	30	940	103	258	671	30
Future Volume (veh/h)	147	62	46	126	126	196	30	940	103	258	671	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.97		0.97	0.97		0.89	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	160	67	50	137	137	213	33	1022	112	280	729	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	344	257	450	227	353	357	1583	631	271	1862	84
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.45	0.45	0.45	0.05	0.54	0.54
Sat Flow, veh/h	1026	978	730	1242	645	1003	684	3554	1416	1781	3446	156
Grp Volume(v), veh/h	160	0	117	137	0	350	33	1022	112	280	376	386
Grp Sat Flow(s),veh/h/ln	1026	0	1708	1242	0	1648	684	1777	1416	1781	1777	1825
Q Serve(g_s), s	15.2	0.0	4.8	8.6	0.0	17.5	3.0	22.4	4.8	5.0	12.3	12.3
Cycle Q Clear(g_c), s	32.7	0.0	4.8	13.4	0.0	17.5	5.8	22.4	4.8	5.0	12.3	12.3
Prop In Lane	1.00		0.43	1.00		0.61	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	253	0	601	450	0	579	357	1583	631	271	960	986
V/C Ratio(X)	0.63	0.00	0.19	0.30	0.00	0.60	0.09	0.65	0.18	1.03	0.39	0.39
Avail Cap(c_a), veh/h	284	0	653	487	0	630	357	1583	631	271	960	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	22.6	27.2	0.0	26.7	17.9	21.6	16.7	29.4	13.4	13.4
Incr Delay (d2), s/veh	3.7	0.0	0.2	0.4	0.0	1.4	0.5	1.8	0.5	63.5	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.4	0.0	3.5	4.7	0.0	11.4	0.9	13.9	2.9	14.1	8.6	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.9	0.0	22.7	27.6	0.0	28.1	18.3	23.4	17.2	92.9	14.6	14.6
LnGrp LOS	D	A	C	C	A	C	B	C	B	F	B	B
Approach Vol, veh/h		277			487			1167			1042	
Approach Delay, s/veh		35.0			28.0			22.7			35.6	
Approach LOS		C			C			C			D	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		59.0		41.0	9.5	49.5		41.0				
Change Period (Y+Rc), s		* 5		* 5.8	4.5	* 5		* 5.8				
Max Green Setting (Gmax), s		* 41		* 38	5.0	* 41		* 38				
Max Q Clear Time (g_c+I1), s		14.3		34.7	7.0	24.4		19.5				
Green Ext Time (p_c), s		5.0		0.5	0.0	7.2		2.8				

Intersection Summary	
HCM 6th Ctrl Delay	29.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection #27

SR 170 Southbound Ramps & Magnolia Boulevard

Westbound Protected Left-Turn Phase

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Future Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	729	735	422	1235	0				854	558	335
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	849	732	89	2036	0				588	361	216
Arrive On Green	0.00	0.48	0.48	0.05	0.57	0.00				0.33	0.33	0.33
Sat Flow, veh/h	0	1870	1532	1781	3647	0				1781	1093	656
Grp Volume(v), veh/h	0	729	735	422	1235	0				854	0	893
Grp Sat Flow(s),veh/h/ln	0	1777	1532	1781	1777	0				1781	0	1749
Q Serve(g_s), s	0.0	36.3	47.8	5.0	22.7	0.0				33.0	0.0	33.0
Cycle Q Clear(g_c), s	0.0	36.3	47.8	5.0	22.7	0.0				33.0	0.0	33.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	849	732	89	2036	0				588	0	577
V/C Ratio(X)	0.00	0.86	1.00	4.74	0.61	0.00				1.45	0.00	1.55
Avail Cap(c_a), veh/h	0	849	732	89	2036	0				588	0	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.54	0.54	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.1	26.1	47.5	14.0	0.0				33.5	0.0	33.5
Incr Delay (d2), s/veh	0.0	11.0	34.2	1695.9	0.7	0.0				213.2	0.0	254.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	23.4	30.9	63.2	12.0	0.0				73.0	0.0	82.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.1	60.3	1743.4	14.7	0.0				246.7	0.0	288.4
LnGrp LOS	A	C	F	F	B	A				F	A	F
Approach Vol, veh/h		1464			1657						1747	
Approach Delay, s/veh		47.2			455.0						268.0	
Approach LOS		D			F						F	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		62.0		38.0	9.5	52.5						
Change Period (Y+Rc), s		* 4.7		5.0	4.5	* 4.7						
Max Green Setting (Gmax), s		* 47		33.0	5.0	* 47						
Max Q Clear Time (g_c+I1), s		24.7		35.0	7.0	49.8						
Green Ext Time (p_c), s		9.6		0.0	0.0	0.0						

Intersection Summary												
HCM 6th Ctrl Delay			265.2									
HCM 6th LOS			F									

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Future Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	916	605	500	1546	0				328	235	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1125	711	89	2281	0				465	270	184
Arrive On Green	0.00	0.55	0.55	0.05	0.64	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	2150	1301	1781	3647	0				1781	1034	704
Grp Volume(v), veh/h	0	786	735	500	1546	0				328	0	395
Grp Sat Flow(s),veh/h/ln	0	1777	1581	1781	1777	0				1781	0	1738
Q Serve(g_s), s	0.0	35.9	39.4	5.0	27.6	0.0				16.7	0.0	21.7
Cycle Q Clear(g_c), s	0.0	35.9	39.4	5.0	27.6	0.0				16.7	0.0	21.7
Prop In Lane	0.00		0.82	1.00		0.00				1.00		0.41
Lane Grp Cap(c), veh/h	0	972	864	89	2281	0				465	0	454
V/C Ratio(X)	0.00	0.81	0.85	5.61	0.68	0.00				0.70	0.00	0.87
Avail Cap(c_a), veh/h	0	972	864	89	2281	0				588	0	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.19	0.19	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.4	19.2	47.5	11.4	0.0				33.5	0.0	35.3
Incr Delay (d2), s/veh	0.0	7.2	10.3	2080.9	0.3	0.0				2.8	0.0	11.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	21.8	22.0	72.4	11.7	0.0				11.7	0.0	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.6	29.5	2128.4	11.7	0.0				36.2	0.0	46.7
LnGrp LOS	A	C	C	F	B	A				D	A	D
Approach Vol, veh/h		1521			2046						723	
Approach Delay, s/veh		27.5			529.0						42.0	
Approach LOS		C			F						D	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		68.9		31.1	9.5	59.4						
Change Period (Y+Rc), s		* 4.7		5.0	4.5	* 4.7						
Max Green Setting (Gmax), s		* 47		33.0	5.0	* 47						
Max Q Clear Time (g_c+I1), s		29.6		23.7	7.0	41.4						
Green Ext Time (p_c), s		10.8		2.4	0.0	4.4						

Intersection Summary	
HCM 6th Ctrl Delay	269.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Westbound Protected-Permissive Left-Turn Phase

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Future Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	729	735	422	1235	0				854	558	335
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	849	732	161	2036	0				588	361	216
Arrive On Green	0.00	0.48	0.48	0.05	0.57	0.00				0.33	0.33	0.33
Sat Flow, veh/h	0	1870	1532	1781	3647	0				1781	1093	656
Grp Volume(v), veh/h	0	729	735	422	1235	0				854	0	893
Grp Sat Flow(s),veh/h/ln	0	1777	1532	1781	1777	0				1781	0	1749
Q Serve(g_s), s	0.0	36.3	47.8	5.0	22.7	0.0				33.0	0.0	33.0
Cycle Q Clear(g_c), s	0.0	36.3	47.8	5.0	22.7	0.0				33.0	0.0	33.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	849	732	161	2036	0				588	0	577
V/C Ratio(X)	0.00	0.86	1.00	2.62	0.61	0.00				1.45	0.00	1.55
Avail Cap(c_a), veh/h	0	849	732	161	2036	0				588	0	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.54	0.54	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.1	26.1	26.2	14.0	0.0				33.5	0.0	33.5
Incr Delay (d2), s/veh	0.0	11.0	34.2	738.7	0.7	0.0				213.2	0.0	254.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	23.4	30.9	50.5	12.0	0.0				73.0	0.0	82.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	34.1	60.3	764.8	14.7	0.0				246.7	0.0	288.4
LnGrp LOS	A	C	F	F	B	A				F	A	F
Approach Vol, veh/h		1464			1657						1747	
Approach Delay, s/veh		47.2			205.7						268.0	
Approach LOS		D			F						F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		62.0		38.0	9.5	52.5
Change Period (Y+Rc), s		* 4.7		5.0	4.5	* 4.7
Max Green Setting (Gmax), s		* 47		33.0	5.0	* 47
Max Q Clear Time (g_c+I1), s		24.7		35.0	7.0	49.8
Green Ext Time (p_c), s		9.6		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	180.4
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Future Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	916	605	500	1546	0				328	235	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1125	711	213	2281	0				465	270	184
Arrive On Green	0.00	0.55	0.55	0.05	0.64	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	2150	1301	1781	3647	0				1781	1034	704
Grp Volume(v), veh/h	0	786	735	500	1546	0				328	0	395
Grp Sat Flow(s),veh/h/ln	0	1777	1581	1781	1777	0				1781	0	1738
Q Serve(g_s), s	0.0	35.9	39.4	5.0	27.6	0.0				16.7	0.0	21.7
Cycle Q Clear(g_c), s	0.0	35.9	39.4	5.0	27.6	0.0				16.7	0.0	21.7
Prop In Lane	0.00		0.82	1.00		0.00				1.00		0.41
Lane Grp Cap(c), veh/h	0	972	864	213	2281	0				465	0	454
V/C Ratio(X)	0.00	0.81	0.85	2.34	0.68	0.00				0.70	0.00	0.87
Avail Cap(c_a), veh/h	0	972	864	213	2281	0				588	0	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.19	0.19	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.4	19.2	23.4	11.4	0.0				33.5	0.0	35.3
Incr Delay (d2), s/veh	0.0	7.2	10.3	606.8	0.3	0.0				2.8	0.0	11.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	21.8	22.0	52.3	11.7	0.0				11.7	0.0	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.6	29.5	630.3	11.7	0.0				36.2	0.0	46.7
LnGrp LOS	A	C	C	F	B	A				D	A	D
Approach Vol, veh/h		1521			2046						723	
Approach Delay, s/veh		27.5			162.8						42.0	
Approach LOS		C			F						D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		68.9		31.1	9.5	59.4
Change Period (Y+Rc), s		* 4.7		5.0	4.5	* 4.7
Max Green Setting (Gmax), s		* 47		33.0	5.0	* 47
Max Q Clear Time (g_c+I1), s		29.6		23.7	7.0	41.4
Green Ext Time (p_c), s		10.8		2.4	0.0	4.4

Intersection Summary	
HCM 6th Ctrl Delay	94.5
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Westbound and Southbound Protected-Permissive Left-Turn Phases

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Future Volume (veh/h)	0	671	676	388	1136	0	0	0	0	876	388	308
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	729	735	422	1235	0				854	558	335
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1356	1184	360	3049	0				89	54	32
Arrive On Green	0.00	0.76	0.76	0.05	0.86	0.00				0.05	0.05	0.05
Sat Flow, veh/h	0	1870	1552	1781	3647	0				1781	1081	649
Grp Volume(v), veh/h	0	729	735	422	1235	0				854	0	893
Grp Sat Flow(s),veh/h/ln	0	1777	1552	1781	1777	0				1781	0	1730
Q Serve(g_s), s	0.0	16.5	21.3	5.0	7.6	0.0				5.0	0.0	5.0
Cycle Q Clear(g_c), s	0.0	16.5	21.3	5.0	7.6	0.0				5.0	0.0	5.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.38
Lane Grp Cap(c), veh/h	0	1356	1184	360	3049	0				89	0	86
V/C Ratio(X)	0.00	0.54	0.62	1.17	0.41	0.00				9.59	0.00	10.32
Avail Cap(c_a), veh/h	0	1356	1184	360	3049	0				89	0	86
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.54	0.54	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	4.8	5.3	17.9	1.5	0.0				47.5	0.0	47.5
Incr Delay (d2), s/veh	0.0	1.5	2.5	92.6	0.2	0.0				3887.3	0.0	4218.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	8.5	9.5	22.0	1.6	0.0				139.3	0.0	146.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.3	7.8	110.4	1.8	0.0				3934.8	0.0	4266.4
LnGrp LOS	A	A	A	F	A	A				F	A	F
Approach Vol, veh/h		1464			1657						1747	
Approach Delay, s/veh		7.0			29.4						4104.3	
Approach LOS		A			C						F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		90.5		9.5	9.5	81.0
Change Period (Y+Rc), s		* 4.7		4.5	4.5	* 4.7
Max Green Setting (Gmax), s		* 47		5.0	5.0	* 47
Max Q Clear Time (g_c+I1), s		9.6		7.0	7.0	23.3
Green Ext Time (p_c), s		11.6		0.0	0.0	12.1

Intersection Summary	
HCM 6th Ctrl Delay	1485.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Future Volume (veh/h)	0	843	557	460	1422	0	0	0	0	455	2	147
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	916	605	500	1546	0				328	235	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1575	998	353	3049	0				89	51	35
Arrive On Green	0.00	0.76	0.76	0.05	0.86	0.00				0.05	0.05	0.05
Sat Flow, veh/h	0	2157	1308	1781	3647	0				1781	1020	695
Grp Volume(v), veh/h	0	783	738	500	1546	0				328	0	395
Grp Sat Flow(s),veh/h/ln	0	1777	1595	1781	1777	0				1781	0	1715
Q Serve(g_s), s	0.0	18.7	20.4	5.0	10.9	0.0				5.0	0.0	5.0
Cycle Q Clear(g_c), s	0.0	18.7	20.4	5.0	10.9	0.0				5.0	0.0	5.0
Prop In Lane	0.00		0.82	1.00		0.00				1.00		0.41
Lane Grp Cap(c), veh/h	0	1356	1217	353	3049	0				89	0	86
V/C Ratio(X)	0.00	0.58	0.61	1.42	0.51	0.00				3.68	0.00	4.61
Avail Cap(c_a), veh/h	0	1356	1217	353	3049	0				89	0	86
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.19	0.19	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.0	5.2	18.0	1.8	0.0				47.5	0.0	47.5
Incr Delay (d2), s/veh	0.0	1.8	2.2	191.0	0.1	0.0				1234.4	0.0	1649.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	9.4	9.4	32.5	2.0	0.0				50.3	0.0	62.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.8	7.5	208.9	1.9	0.0				1281.9	0.0	1697.1
LnGrp LOS	A	A	A	F	A	A				F	A	F
Approach Vol, veh/h		1521			2046						723	
Approach Delay, s/veh		7.1			52.5						1508.7	
Approach LOS		A			D						F	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		90.5		9.5	9.5	81.0						
Change Period (Y+Rc), s		* 4.7		4.5	4.5	* 4.7						
Max Green Setting (Gmax), s		* 47		5.0	5.0	* 47						
Max Q Clear Time (g_c+I1), s		12.9		7.0	7.0	22.4						
Green Ext Time (p_c), s		15.7		0.0	0.0	12.9						

Intersection Summary	
HCM 6th Ctrl Delay	281.8
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection #28

SR 170 Northbound Ramps & Magnolia Boulevard

Eastbound Protected Left-Turn Phase

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1384	0	0	1073	433	462	3	337	0	0	0
Future Volume (veh/h)	164	1384	0	0	1073	433	462	3	337	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	178	1504	0	0	1166	471	436	96	366			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	89	2214	0	0	1863	751	470	89	339			
Arrive On Green	0.10	1.00	0.00	0.00	0.53	0.53	0.26	0.26	0.26			
Sat Flow, veh/h	1781	3647	0	0	3696	1421	1781	337	1286			
Grp Volume(v), veh/h	178	1504	0	0	1125	512	436	0	462			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1545	1781	0	1623			
Q Serve(g_s), s	5.0	0.0	0.0	0.0	23.3	23.4	23.9	0.0	26.4			
Cycle Q Clear(g_c), s	5.0	0.0	0.0	0.0	23.3	23.4	23.9	0.0	26.4			
Prop In Lane	1.00		0.00	0.00		0.92	1.00		0.79			
Lane Grp Cap(c), veh/h	89	2214	0	0	1797	816	470	0	429			
V/C Ratio(X)	2.00	0.68	0.00	0.00	0.63	0.63	0.93	0.00	1.08			
Avail Cap(c_a), veh/h	89	2214	0	0	1797	816	470	0	429			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.27	0.27	1.00	0.00	1.00			
Uniform Delay (d), s/veh	45.0	0.0	0.0	0.0	16.6	16.7	35.9	0.0	36.8			
Incr Delay (d2), s/veh	453.0	0.2	0.0	0.0	0.2	0.4	24.6	0.0	66.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	17.9	0.1	0.0	0.0	10.9	10.1	19.0	0.0	25.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	498.0	0.2	0.0	0.0	16.8	17.1	60.5	0.0	102.8			
LnGrp LOS	F	A	A	A	B	B	E	A	F			
Approach Vol, veh/h		1682			1637			898				
Approach Delay, s/veh		52.8			16.9			82.3				
Approach LOS		D			B			F				

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		68.0		32.0	9.5	58.5
Change Period (Y+Rc), s		* 5.7		* 5.6	4.5	* 5.7
Max Green Setting (Gmax), s		* 52		* 26	5.0	* 52
Max Q Clear Time (g_c+I1), s		2.0		28.4	7.0	25.4
Green Ext Time (p_c), s		17.2		0.0	0.0	14.0

Intersection Summary	
HCM 6th Ctrl Delay	45.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	1128	0	0	1372	626	510	4	539	0	0	0
Future Volume (veh/h)	159	1128	0	0	1372	626	510	4	539	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	173	1226	0	0	1491	680	554	4	586			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	89	2214	0	0	1825	801	470	3	414			
Arrive On Green	0.10	1.00	0.00	0.00	0.53	0.53	0.26	0.26	0.26			
Sat Flow, veh/h	1781	3647	0	0	3625	1517	1781	11	1569			
Grp Volume(v), veh/h	173	1226	0	0	1467	704	554	0	590			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1570	1781	0	1580			
Q Serve(g_s), s	5.0	0.0	0.0	0.0	35.8	38.3	26.4	0.0	26.4			
Cycle Q Clear(g_c), s	5.0	0.0	0.0	0.0	35.8	38.3	26.4	0.0	26.4			
Prop In Lane	1.00		0.00	0.00		0.97	1.00		0.99			
Lane Grp Cap(c), veh/h	89	2214	0	0	1797	829	470	0	417			
V/C Ratio(X)	1.94	0.55	0.00	0.00	0.82	0.85	1.18	0.00	1.41			
Avail Cap(c_a), veh/h	89	2214	0	0	1797	829	470	0	417			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.15	0.15	0.00	0.00	0.09	0.09	1.00	0.00	1.00			
Uniform Delay (d), s/veh	45.0	0.0	0.0	0.0	19.6	20.2	36.8	0.0	36.8			
Incr Delay (d2), s/veh	430.2	0.2	0.0	0.0	0.3	0.8	100.4	0.0	200.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	17.7	0.1	0.0	0.0	14.7	14.7	35.2	0.0	50.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	475.2	0.2	0.0	0.0	19.9	21.0	137.2	0.0	237.2			
LnGrp LOS	F	A	A	A	B	C	F	A	F			
Approach Vol, veh/h		1399			2171			1144				
Approach Delay, s/veh		58.9			20.2			188.8				
Approach LOS		E			C			F				

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		68.0		32.0	9.5	58.5
Change Period (Y+Rc), s		* 5.7		* 5.6	4.5	* 5.7
Max Green Setting (Gmax), s		* 52		* 26	5.0	* 52
Max Q Clear Time (g_c+I1), s		2.0		28.4	7.0	40.3
Green Ext Time (p_c), s		12.2		0.0	0.0	10.0

Intersection Summary	
HCM 6th Ctrl Delay	72.6
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Eastbound Protected-Permissive Left-Turn Phase

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1384	0	0	1073	433	462	3	337	0	0	0
Future Volume (veh/h)	164	1384	0	0	1073	433	462	3	337	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	178	1504	0	0	1166	471	436	96	366			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	251	2214	0	0	1863	751	470	89	339			
Arrive On Green	0.10	1.00	0.00	0.00	0.53	0.53	0.26	0.26	0.26			
Sat Flow, veh/h	1781	3647	0	0	3696	1421	1781	337	1286			
Grp Volume(v), veh/h	178	1504	0	0	1125	512	436	0	462			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1545	1781	0	1623			
Q Serve(g_s), s	4.8	0.0	0.0	0.0	23.3	23.4	23.9	0.0	26.4			
Cycle Q Clear(g_c), s	4.8	0.0	0.0	0.0	23.3	23.4	23.9	0.0	26.4			
Prop In Lane	1.00		0.00	0.00		0.92	1.00		0.79			
Lane Grp Cap(c), veh/h	251	2214	0	0	1797	816	470	0	429			
V/C Ratio(X)	0.71	0.68	0.00	0.00	0.63	0.63	0.93	0.00	1.08			
Avail Cap(c_a), veh/h	251	2214	0	0	1797	816	470	0	429			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.27	0.27	1.00	0.00	1.00			
Uniform Delay (d), s/veh	15.3	0.0	0.0	0.0	16.6	16.7	35.9	0.0	36.8			
Incr Delay (d2), s/veh	0.8	0.2	0.0	0.0	0.2	0.4	24.6	0.0	66.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	2.2	0.1	0.0	0.0	10.9	10.1	19.0	0.0	25.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	0.2	0.0	0.0	16.8	17.1	60.5	0.0	102.8			
LnGrp LOS	B	A	A	A	B	B	E	A	F			
Approach Vol, veh/h		1682			1637			898				
Approach Delay, s/veh		1.9			16.9			82.3				
Approach LOS		A			B			F				

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		68.0		32.0	9.5	58.5
Change Period (Y+Rc), s		* 5.7		* 5.6	4.5	* 5.7
Max Green Setting (Gmax), s		* 52		* 26	5.0	* 52
Max Q Clear Time (g_c+I1), s		2.0		28.4	6.8	25.4
Green Ext Time (p_c), s		17.2		0.0	0.0	14.0

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	1128	0	0	1372	626	510	4	539	0	0	0
Future Volume (veh/h)	159	1128	0	0	1372	626	510	4	539	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	173	1226	0	0	1491	680	554	4	586			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	187	2214	0	0	1825	801	470	3	414			
Arrive On Green	0.10	1.00	0.00	0.00	0.53	0.53	0.26	0.26	0.26			
Sat Flow, veh/h	1781	3647	0	0	3625	1517	1781	11	1569			
Grp Volume(v), veh/h	173	1226	0	0	1467	704	554	0	590			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1702	1570	1781	0	1580			
Q Serve(g_s), s	4.6	0.0	0.0	0.0	35.8	38.3	26.4	0.0	26.4			
Cycle Q Clear(g_c), s	4.6	0.0	0.0	0.0	35.8	38.3	26.4	0.0	26.4			
Prop In Lane	1.00		0.00	0.00		0.97	1.00		0.99			
Lane Grp Cap(c), veh/h	187	2214	0	0	1797	829	470	0	417			
V/C Ratio(X)	0.92	0.55	0.00	0.00	0.82	0.85	1.18	0.00	1.41			
Avail Cap(c_a), veh/h	187	2214	0	0	1797	829	470	0	417			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.15	0.15	0.00	0.00	0.09	0.09	1.00	0.00	1.00			
Uniform Delay (d), s/veh	21.7	0.0	0.0	0.0	19.6	20.2	36.8	0.0	36.8			
Incr Delay (d2), s/veh	11.5	0.2	0.0	0.0	0.3	0.8	100.4	0.0	200.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.6	0.1	0.0	0.0	14.7	14.7	35.2	0.0	50.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	0.2	0.0	0.0	19.9	21.0	137.2	0.0	237.2			
LnGrp LOS	C	A	A	A	B	C	F	A	F			
Approach Vol, veh/h		1399			2171			1144				
Approach Delay, s/veh		4.2			20.2			188.8				
Approach LOS		A			C			F				

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		68.0		32.0	9.5	58.5
Change Period (Y+Rc), s		* 5.7		* 5.6	4.5	* 5.7
Max Green Setting (Gmax), s		* 52		* 26	5.0	* 52
Max Q Clear Time (g_c+I1), s		2.0		28.4	6.6	40.3
Green Ext Time (p_c), s		12.2		0.0	0.0	10.0

Intersection Summary	
HCM 6th Ctrl Delay	56.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection #30

Lankershim Boulevard & Magnolia Boulevard

Northbound & Westbound
Protected Left-Turn Phase

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	671	239	58	866	111	102	426	51	116	1155	472
Future Volume (veh/h)	262	671	239	58	866	111	102	426	51	116	1155	472
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.89	1.00		0.83	0.97		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	729	260	63	941	121	111	463	55	126	1255	513
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	626	484	80	928	367	109	1280	151	415	1008	381
Arrive On Green	0.11	0.33	0.33	0.05	0.26	0.26	0.06	0.41	0.41	0.06	0.41	0.41
Sat Flow, veh/h	1781	1870	1446	1781	3554	1407	1781	3124	367	1781	2437	921
Grp Volume(v), veh/h	285	729	260	63	941	121	111	261	257	126	887	881
Grp Sat Flow(s),veh/h/ln	1781	1870	1446	1781	1777	1407	1781	1777	1715	1781	1777	1582
Q Serve(g_s), s	15.6	46.5	20.3	4.9	36.3	9.7	8.5	14.1	14.4	5.6	57.5	57.5
Cycle Q Clear(g_c), s	15.6	46.5	20.3	4.9	36.3	9.7	8.5	14.1	14.4	5.6	57.5	57.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.58
Lane Grp Cap(c), veh/h	252	626	484	80	928	367	109	728	703	415	735	654
V/C Ratio(X)	1.13	1.16	0.54	0.78	1.01	0.33	1.02	0.36	0.37	0.30	1.21	1.35
Avail Cap(c_a), veh/h	252	626	484	83	928	367	109	728	703	463	735	654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.68	0.68	0.68	0.88	0.88	0.88	0.32	0.32	0.32
Uniform Delay (d), s/veh	42.6	46.2	37.5	65.7	51.3	41.5	65.3	28.4	28.5	22.1	40.8	40.8
Incr Delay (d2), s/veh	97.0	90.5	1.2	26.9	27.9	0.4	86.1	1.2	1.3	0.1	97.6	159.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.7	52.1	11.8	5.1	25.9	5.9	10.4	10.1	10.0	3.8	58.2	70.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	139.6	136.8	38.7	92.6	79.2	41.9	151.3	29.6	29.8	22.3	138.4	199.8
LnGrp LOS	F	F	D	F	F	D	F	C	C	C	F	F
Approach Vol, veh/h		1274			1125			629			1894	
Approach Delay, s/veh		117.4			76.0			51.1			159.2	
Approach LOS		F			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	63.0	21.0	42.0	13.5	62.5	10.8	52.2
Change Period (Y+Rc), s	4.5	* 5.5	* 5.4	* 5.7	5.6	* 5.5	4.5	* 5.7
Max Green Setting (Gmax), s	8.5	* 58	* 16	* 36	11.7	* 53	6.5	* 46
Max Q Clear Time (g_c+I1), s	10.5	59.5	17.6	38.3	7.6	16.4	6.9	48.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	3.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	115.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	718	241	75	1228	162	181	741	85	125	582	306
Future Volume (veh/h)	262	718	241	75	1228	162	181	741	85	125	582	306
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.91	1.00		0.74	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	780	262	82	1335	176	197	805	92	136	633	333
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	784	613	83	1235	499	173	979	112	212	609	320
Arrive On Green	0.11	0.42	0.42	0.05	0.35	0.35	0.10	0.32	0.32	0.06	0.29	0.29
Sat Flow, veh/h	1781	1870	1463	1781	3554	1437	1781	3087	353	1781	2089	1099
Grp Volume(v), veh/h	285	780	262	82	1335	176	197	463	434	136	538	428
Grp Sat Flow(s),veh/h/ln	1781	1870	1463	1781	1777	1437	1781	1777	1663	1781	1777	1411
Q Serve(g_s), s	15.6	57.7	17.6	6.4	48.3	12.7	13.5	33.5	33.5	7.4	40.5	40.5
Cycle Q Clear(g_c), s	15.6	57.7	17.6	6.4	48.3	12.7	13.5	33.5	33.5	7.4	40.5	40.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.78
Lane Grp Cap(c), veh/h	252	784	613	83	1235	499	173	564	528	212	518	411
V/C Ratio(X)	1.13	0.99	0.43	0.98	1.08	0.35	1.14	0.82	0.82	0.64	1.04	1.04
Avail Cap(c_a), veh/h	252	784	613	83	1235	499	173	564	528	212	518	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.29	0.29	0.29	0.40	0.40	0.40	0.85	0.85	0.85
Uniform Delay (d), s/veh	45.1	40.2	28.5	66.2	45.3	33.7	62.8	43.8	43.8	35.5	49.3	49.3
Incr Delay (d2), s/veh	97.0	30.6	0.5	48.7	41.5	0.1	86.9	5.5	5.9	5.5	47.3	51.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	23.3	42.2	10.4	5.8	34.9	6.4	14.4	19.5	18.5	6.3	32.8	27.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	142.1	70.8	29.0	114.9	86.8	33.8	149.7	49.3	49.7	40.9	96.5	100.9
LnGrp LOS	F	E	C	F	F	C	F	D	D	D	F	F
Approach Vol, veh/h		1327			1593			1094			1102	
Approach Delay, s/veh		77.9			82.4			67.6			91.4	
Approach LOS		E			F			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	46.0	21.0	54.0	14.4	49.6	11.0	64.0
Change Period (Y+Rc), s	4.5	* 5.5	* 5.4	* 5.7	5.6	* 5.5	4.5	* 5.7
Max Green Setting (Gmax), s	13.5	* 41	* 16	* 48	8.8	* 44	6.5	* 58
Max Q Clear Time (g_c+I1), s	15.5	42.5	17.6	50.3	9.4	35.5	8.4	59.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	80.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Northbound & Westbound
Protected-Permissive Left-Turn Phase

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	671	239	58	866	111	102	426	51	116	1155	472
Future Volume (veh/h)	262	671	239	58	866	111	102	426	51	116	1155	472
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.89	1.00		0.83	0.97		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	729	260	63	941	121	111	463	55	126	1255	513
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	623	481	116	941	373	122	1315	155	426	1089	413
Arrive On Green	0.10	0.33	0.33	0.04	0.26	0.26	0.04	0.42	0.42	0.06	0.45	0.45
Sat Flow, veh/h	1781	1870	1445	1781	3554	1409	1781	3127	368	1781	2442	925
Grp Volume(v), veh/h	285	729	260	63	941	121	111	261	257	126	886	882
Grp Sat Flow(s),veh/h/ln	1781	1870	1445	1781	1777	1409	1781	1777	1718	1781	1777	1590
Q Serve(g_s), s	13.6	46.3	20.3	3.6	36.8	9.6	5.0	13.9	14.2	5.5	62.0	62.0
Cycle Q Clear(g_c), s	13.6	46.3	20.3	3.6	36.8	9.6	5.0	13.9	14.2	5.5	62.0	62.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.58
Lane Grp Cap(c), veh/h	226	623	481	116	941	373	122	747	722	426	793	709
V/C Ratio(X)	1.26	1.17	0.54	0.54	1.00	0.32	0.91	0.35	0.36	0.30	1.12	1.24
Avail Cap(c_a), veh/h	226	623	481	116	941	373	122	747	722	452	793	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.68	0.68	0.68	0.88	0.88	0.88	0.32	0.32	0.32
Uniform Delay (d), s/veh	41.3	46.3	37.7	40.1	51.1	41.1	33.9	27.4	27.4	21.2	38.5	38.5
Incr Delay (d2), s/veh	147.8	92.9	1.2	3.5	24.2	0.3	49.6	1.1	1.2	0.1	59.5	113.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	23.6	52.5	11.9	3.0	25.4	5.9	6.8	9.9	9.9	3.7	49.3	61.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	189.1	139.3	38.9	43.6	75.3	41.4	83.5	28.5	28.6	21.4	98.0	151.8
LnGrp LOS	F	F	D	D	F	D	F	C	C	C	F	F
Approach Vol, veh/h		1274			1125			629			1894	
Approach Delay, s/veh		129.9			69.9			38.3			117.9	
Approach LOS		F			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	67.5	19.0	42.5	13.5	64.0	9.5	52.0
Change Period (Y+Rc), s	4.5	* 5.5	* 5.4	* 5.7	5.6	* 5.5	4.5	* 5.7
Max Green Setting (Gmax), s	5.5	* 62	* 14	* 37	10.0	* 56	5.0	* 46
Max Q Clear Time (g_c+I1), s	7.0	64.0	15.6	38.8	7.5	16.2	5.6	48.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	3.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	99.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	718	241	75	1228	162	181	741	85	125	582	306
Future Volume (veh/h)	262	718	241	75	1228	162	181	741	85	125	582	306
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.91	1.00		0.73	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	780	262	82	1335	176	197	805	92	136	633	333
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	844	664	149	1286	522	186	926	106	188	609	320
Arrive On Green	0.12	0.45	0.45	0.04	0.36	0.36	0.08	0.30	0.30	0.06	0.29	0.29
Sat Flow, veh/h	1781	1870	1471	1781	3554	1443	1781	3078	352	1781	2089	1099
Grp Volume(v), veh/h	285	780	262	82	1335	176	197	465	432	136	538	428
Grp Sat Flow(s),veh/h/ln	1781	1870	1471	1781	1777	1443	1781	1777	1653	1781	1777	1411
Q Serve(g_s), s	16.6	54.6	16.5	4.0	50.3	12.3	10.5	34.4	34.4	7.5	40.5	40.5
Cycle Q Clear(g_c), s	16.6	54.6	16.5	4.0	50.3	12.3	10.5	34.4	34.4	7.5	40.5	40.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.78
Lane Grp Cap(c), veh/h	265	844	664	149	1286	522	186	534	497	188	518	411
V/C Ratio(X)	1.08	0.92	0.39	0.55	1.04	0.34	1.06	0.87	0.87	0.72	1.04	1.04
Avail Cap(c_a), veh/h	265	844	664	149	1286	522	186	534	497	188	518	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.29	0.29	0.29	0.40	0.40	0.40	0.85	0.85	0.85
Uniform Delay (d), s/veh	45.8	35.9	25.5	33.9	44.3	32.2	38.3	46.0	46.0	36.8	49.3	49.3
Incr Delay (d2), s/veh	77.4	15.7	0.4	1.3	24.8	0.1	57.6	7.9	8.5	10.9	47.3	51.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	22.1	36.9	9.9	3.0	31.8	6.2	10.5	20.4	19.2	6.7	32.8	27.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.3	51.7	25.9	35.2	69.2	32.3	95.9	53.9	54.5	47.8	96.5	100.9
LnGrp LOS	F	D	C	D	F	C	F	D	D	D	F	F
Approach Vol, veh/h		1327			1593			1094			1102	
Approach Delay, s/veh		62.0			63.3			61.7			92.2	
Approach LOS		E			E			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	46.0	22.0	56.0	13.7	47.3	9.6	68.4
Change Period (Y+Rc), s	4.5	* 5.5	* 5.4	* 5.7	5.6	* 5.5	4.5	* 5.7
Max Green Setting (Gmax), s	10.5	* 41	* 17	* 50	8.1	* 42	5.1	* 63
Max Q Clear Time (g_c+I1), s	12.5	42.5	18.6	52.3	9.5	36.4	6.0	56.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.6	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	68.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix K

Construction Forecasts

BLOCK 0 (Duration - 18 months)					
		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		2	5	8	3
Manpower per Day (# of Workers) [EA]		25	35	50	40
Stalls per Day [EA]		20	28	40	32
Equipment	**Hours/Day**				
Air Compressor	8	1	1	1	0
Aerial Lift	8	0	0	1	2
Bore/Drill Rig	8	0	2	1	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	1	2	1	2
Cranes (Tower)	0	0	0	0	0
Cranes (Mobile)	10	0	0	2	2
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	2	0	0
Forklifts	8	1	1	1	1
Generator Sets	8	1	1	0	0
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	4	1	1	1	1
Pavers	8	0	1	0	0
Paving Equipment	8	0	1	0	0
Pumps	8	0	1	1	0
Plate Compactors	8	0	1	1	0
Rollers	8	0	1	0	0
Rough Terrain Forklifts	0	0	0	0	0
Rubber Tired Dozers	8	1	0	0	0
Rubber Tired Loaders	8	0	0	0	0
Scrapers	8	0	1	0	0
Signal Boards	8	0	2	1	1
Skid Steer Loaders	8	0	0	0	0
Surfacing Equipment	8	0	1	0	0
Tractors/Loaders/Backhoes	8	1	0	1	0
Trenchers	8	1	1	0	1
Welders	8	0	1	1	2
Other ( )	0	0	0	0	0
TOTAL		**9**	**22**	**14**	**12**
Grading & Excavation					
Total Amount of Grading [SF]		0	200,000	0	0
Acreage to be Graded [ACRES]		0	5	0	0
Depth of Grading [FT]		0	(5)	0	0
Export of Fill [CY]		2,000	9,000	0	0
Import of Fill [CY] *will use 3000 CY of export to backfill*		0	0	0	0
Estimated Truck Trips (Daily Average) [EA]		8	12	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		8	12	0	0
Delivery Trucks (Daily Average) [EA]		0	0.25	1	1
Concrete Pour Trucks (Daily Average) [EA]		0	8	3	0.5

BLOCK 1 (Duration - 30 months)					
		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		2	6	12	10
Manpower per Day (# of Workers) [EA]		20	40	300	230
Stalls per Day [EA]		16	32	240	184
Equipment	**Hours/Day**				
Air Compressor	8	1	1	2	0
Aerial Lift	8	0	0	4	4
Bore/Drill Rig	8	0	3	0	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	1	2	2	1
Cranes (Tower)	10	0	0	1	1
Cranes (Mobile)	10	0	0	4	3
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	2	0	0
Forklifts	8	1	1	4	2
Generator Sets	8	1	1	1	1
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	8	1	1	0	1
Pavers	8	0	0	0	1
Paving Equipment	8	0	0	0	1
Pumps	8	0	1	1	1
Plate Compactors	8	0	0	0	1
Rollers	8	0	0	0	1
Rough Terrain Forklifts	8	1	1	0	0
Rubber Tired Dozers	0	0	0	0	0
Rubber Tired Loaders	8	0	1	0	0
Scrapers	8	1	0	0	0
Signal Boards	8	0	2	1	1
Skid Steer Loaders	8	0	1	1	0
Surfacing Equipment	8	0	1	0	1
Tractors/Loaders/Backhoes	8	0	1	0	0
Trenchers	8	1	1	0	1
Welders	8	0	2	4	2
Other ( )	0	0	0	0	0
TOTAL		**9**	**23**	**26**	**23**
Grading & Excavation					
Total Amount of Grading [SF]		0	80,000	0	0
Acreage to be Graded [ACRES]		0	2	0	0
Depth of Grading [FT]		0	(50)	0	0
Export of Fill [CY]		5,000	110,000	0	0
Import of Fill [CY]		0	500	0	0
Estimated Truck Trips (Daily Average) [EA]		19	100	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		19	100	0	0
Delivery Trucks (Daily Average) [EA]		0	0.5	7	16
Concrete Pour Trucks (Daily Average) [EA]		0	1	9	0.10

BLOCK 2 (Duration - 30 Months)					
		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		2	6	12	10
Manpower per Day (# of Workers) [EA]		15	35	275	210
Stalls per Day [EA]		12	28	220	168
Equipment	**Hours/Day**				
Air Compressor	8	1	1	2	0
Aerial Lift	8	0	0	3	3
Bore/Drill Rig	8	0	2	0	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	1	2	2	1
Cranes (Tower)	10	0	0	1	1
Cranes (Mobile)	10	0	0	3	2
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	2	0	0
Forklifts	8	1	1	3	2
Generator Sets	8	1	1	1	1
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	8	1	1	0	1
Pavers	8	0	0	0	1
Paving Equipment	8	0	0	0	1
Pumps	8	0	1	1	1
Plate Compactors	8	0	0	0	1
Rollers	8	0	0	0	1
Rough Terrain Forklifts	8	1	1	0	0
Rubber Tired Dozers	0	0	0	0	0
Rubber Tired Loaders	8	0	1	0	0
Scrapers	8	1	0	0	0
Signal Boards	8	0	2	1	1
Skid Steer Loaders	8	0	1	1	0
Surfacing Equipment	8	0	1	0	1
Tractors/Loaders/Backhoes	8	0	1	0	0
Trenchers	8	1	1	0	1
Welders	8	0	2	3	2
Other ( )	0	0	0	0	0
TOTAL		**9**	**22**	**22**	**21**
Grading & Excavation					
Total Amount of Grading [SF]		0	76,000	0	0
Acreage to be Graded [ACRES]		0	2	0	0
Depth of Grading [FT]		0	(30)	0	0
Export of Fill [CY]		4,200	100,000	0	0
Import of Fill [CY]		0	500	0	0
Estimated Truck Trips (Daily Average) [EA]		16	90	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		16	90	0	0
Delivery Trucks (Daily Average) [EA]		0	0.5	5	14
Concrete Pour Trucks (Daily Average) [EA]		0	1	8	0.10

BLOCK 3 (Duration 24 Months)					
		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		2	4	9	9
Manpower per Day (# of Workers) [EA]		25	35	50	40
Stalls per Day [EA]		20	28	40	32
Equipment	Hours/Day				
Air Compressor	8	1	1	1	0
Aerial Lift	8	0	0	1	2
Bore/Drill Rig	8	0	2	1	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	1	2	1	2
Cranes (Tower)	10	0	0	1	0
Cranes (Mobile)	10	0	0	2	2
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	2	0	0
Forklifts	8	1	1	1	1
Generator Sets	8	1	1	0	0
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	4	1	1	1	1
Pavers	8	0	1	0	0
Paving Equipment	8	0	1	0	0
Pumps	8	0	1	1	0
Plate Compactors	8	0	1	1	0
Rollers	8	0	1	0	0
Rough Terrain Forklifts	0	0	0	0	0
Rubber Tired Dozers	8	1	0	0	0
Rubber Tired Loaders	8	0	0	0	0
Scrapers	8	0	1	0	0
Signal Boards	8	0	2	1	1
Skid Steer Loaders	8	0	0	0	0
Surfacing Equipment	8	0	1	0	0
Tractors/Loaders/Backhoes	8	1	0	1	0
Trenchers	8	1	1	0	1
Welders	8	0	1	1	2
Other ( )	0	0	0	0	0
TOTAL		9	22	15	12
Grading & Excavation					
Total Amount of Grading [SF]		0	47,545	0	0
Acreage to be Graded [ACRES]		0	1	0	0
Depth of Grading [FT]		0	12	0	0
Export of Fill [CY]		2,000	27,300	0	0
Import of Fill [CY] *will use 3000 CY of export to backfill*		0	0	0	0
Estimated Truck Trips (Daily Average) [EA]		8	90	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		8	12	0	0
Delivery Trucks (Daily Average) [EA]		0	0.25	1	1
Concrete Pour Trucks (Daily Average) [EA]		0	9	3	0.5

BLOCK 4 (Duration 24 Months)					
		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		1	5	9	9
Manpower per Day (# of Workers) [EA]		20	40	300	230
Stalls per Day [EA]		16	32	240	184
Equipment	Hours/Day				
Air Compressor	8	1	1	2	0
Aerial Lift	8	0	0	4	4
Bore/Drill Rig	8	0	3	0	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	1	2	2	1
Cranes (Tower)	10	0	0	1	1
Cranes (Mobile)	10	0	0	4	3
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	2	0	0
Forklifts	8	1	1	4	2
Generator Sets	8	1	1	1	1
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	8	1	1	0	1
Pavers	8	0	0	0	1
Paving Equipment	8	0	0	0	1
Pumps	8	0	1	1	1
Plate Compactors	8	0	0	0	1
Rollers	8	0	0	0	1
Rough Terrain Forklifts	8	1	1	0	0
Rubber Tired Dozers	0	0	0	0	0
Rubber Tired Loaders	8	0	1	0	0
Scrapers	8	1	0	0	0
Signal Boards	8	0	2	1	1
Skid Steer Loaders	8	0	1	1	0
Surfacing Equipment	8	0	1	0	1
Tractors/Loaders/Backhoes	8	0	1	0	0
Trenchers	8	1	1	0	1
Welders	8	0	2	4	2
Other ( )	0	0	0	0	0
TOTAL		9	23	26	23
Grading & Excavation					
Total Amount of Grading [SF]		0	53,400	0	0
Acreage to be Graded [ACRES]		0	1	0	0
Depth of Grading [FT]		0	20	0	0
Export of Fill [CY]		2,500	60,000	0	0
Import of Fill [CY]		0	500	0	0
Estimated Truck Trips (Daily Average) [EA]		19	90	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		19	100	0	0
Delivery Trucks (Daily Average) [EA]		0	0.5	8	16
Concrete Pour Trucks (Daily Average) [EA]		0	1	11	0.10

BLOCK 5/6 (Duration - 32 months)					
		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		1	6	13	12
Manpower per Day (# of Workers) [EA]		20	50	355	260
Stalls per Day [EA]		16	40	284	208
Equipment	**Hours/Day**				
Air Compressor	8	1	1	3	1
Aerial Lift	8	0	0	8	6
Bore/Drill Rig	8	0	4	0	0
Cement and Mortar Mixers	8	0	1	2	1
Concrete/Industrial Saws	4	1	3	3	2
Cranes (Tower)	10	0	0	1	1
Cranes (Mobile)	10	0	0	5	4
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	3	0	0
Forklifts	8	1	1	5	4
Generator Sets	8	1	1	2	2
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	8	1	1	0	1
Pavers	8	0	0	0	1
Paving Equipment	8	0	0	0	1
Pumps	8	0	1	1	1
Plate Compactors	8	0	0	0	1
Rollers	8	0	0	0	1
Rough Terrain Forklifts	8	1	1	0	0
Rubber Tired Dozers	0	0	0	0	0
Rubber Tired Loaders	8	0	1	0	0
Scrapers	8	1	0	0	0
Signal Boards	8	0	2	1	1
Skid Steer Loaders	8	0	1	1	0
Surfacing Equipment	8	0	1	0	1
Tractors/Loaders/Backhoes	8	0	1	0	0
Trenchers	8	1	1	0	1
Welders	8	0	3	6	5
Other ( )	0	0	0	0	0
TOTAL		**9**	**27**	**38**	**35**
Grading & Excavation					
Total Amount of Grading [SF]		1	91,000	0	0
Acreage to be Graded [ACRES]		0	2.25	0	0
Depth of Grading [FT]		0	(60)	0	0
Export of Fill [CY]		6,500	275,000	0	0
Import of Fill [CY]		0	500	0	0
Estimated Truck Trips (Daily Average) [EA]		23	165	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		23	165	0	0
Delivery Trucks (Daily Average) [EA]		0	1	10	20
Concrete Pour Trucks (Daily Average) [EA]		0	1.5	16	0.1

T.B. PENICK & SONS, INC.

BLOCK 7 (Duration 24 Months)

		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		1	5	9	9
Manpower per Day (# of Workers) [EA]		15	35	275	210
Stalls per Day [EA]		12	28	220	168
Equipment	Hours/Day				
Air Compressor	8	1	1	2	0
Aerial Lift	8	0	0	3	3
Bore/Drill Rig	8	0	2	0	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	1	2	2	1
Cranes (Tower)	10	0	0	1	1
Cranes (Mobile)	10	0	0	1	2
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	2	0	0
Forklifts	8	1	1	3	2
Generator Sets	8	1	1	1	1
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	8	1	1	0	1
Pavers	8	0	0	0	1
Paving Equipment	8	0	0	0	1
Pumps	8	0	1	1	1
Plate Compactors	8	0	0	0	1
Rollers	8	0	0	0	1
Rough Terrain Forklifts	8	1	1	0	0
Rubber Tired Dozers	0	0	0	0	0
Rubber Tired Loaders	8	0	1	0	0
Scrapers	8	1	0	0	0
Signal Boards	8	0	2	1	1
Skid Steer Loaders	8	0	1	1	0
Surfacing Equipment	8	0	1	0	1
Tractors/Loaders/Backhoes	8	0	1	0	0
Trenchers	8	1	1	0	1
Welders	8	0	2	3	2
Other ( )	0	0	0	0	0
TOTAL		9	22	20	21
Grading & Excavation					
Total Amount of Grading [SF]		0	28,669	0	0
Acreage to be Graded [ACRES]		0	0.50	0	0
Depth of Grading [FT]		0	12	0	0
Export of Fill [CY]		2,000	18,000	0	0
Import of Fill [CY]		0	500	0	0
Estimated Truck Trips (Daily Average) [EA]		16	90	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		16	90	0	0
Delivery Trucks (Daily Average) [EA]		0	0.5	6	14
Concrete Pour Trucks (Daily Average) [EA]		0	1	9	0.10

CLARIFICATIONS:

1. We have assumed that haul off will be conducted by bottom dump 18 wheelers with an average capacity of 14 cubic yards each.
2. We have assumed that concrete mixing trucks will have an average capacity of 10 CY each.
3. We have that assumed 20% of trips made by workers and other staff will utilize public transportation (due to adjacency of Metro station) or ride sharing.
4. In many instances, the line between structure and finishes is not clearly defined. Therefore, the cumulative duration of structure and finishes is representative of the true duration, but individual durations may vary slightly.

BLOCK 8 (Duration - 30 months)					
		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		2	6	12	10
Manpower per Day (# of Workers) [EA]		20	40	150	200
Stalls per Day [EA]		16	32	120	160
Equipment	**Hours/Day**				
Air Compressor	8	1	1	2	0
Aerial Lift	8	0	0	8	5
Bore/Drill Rig	8	0	3	0	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	1	3	5	1
Cranes (Tower)	10	0	0	1	1
Cranes (Mobile)	10	0	0	4	3
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	3	0	0
Forklifts	8	1	1	3	2
Generator Sets	8	1	1	1	1
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	8	1	1	0	1
Pavers	8	0	0	0	1
Paving Equipment	8	0	0	0	1
Pumps	8	0	1	1	1
Plate Compactors	8	0	0	0	1
Rollers	8	0	0	0	1
Rough Terrain Forklifts	8	1	0	0	0
Rubber Tired Dozers	0	0	0	0	0
Rubber Tired Loaders	8	0	1	0	0
Scrapers	8	1	0	0	0
Signal Boards	8	1	2	1	1
Skid Steer Loaders	8	0	1	1	0
Surfacing Equipment	8	0	1	0	1
Tractors/Loaders/Backhoes	8	0	1	0	0
Trenchers	8	1	1	0	1
Welders	8	0	4	10	3
Other ( )	0	0	0	0	0
TOTAL		**10**	**26**	**38**	**25**
Grading & Excavation					
Total Amount of Grading [SF]		0	55,000	0	0
Acreage to be Graded [ACRES]		0	1.25	0	0
Depth of Grading [FT]		0	(50)	0	0
Export of Fill [CY]		2,500	150,000	0	0
Import of Fill [CY]		0	500	0	0
Estimated Truck Trips (Daily Average) [EA]		5	90	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		5	90	0	0
Delivery Trucks (Daily Average) [EA]		0	1	10	16
Concrete Pour Trucks (Daily Average) [EA]		0	2	6	0

West Lot (Duration - 12 months)					
		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		2	2	6	2
Manpower per Day (# of Workers) [EA]		20	30	85	55
Stalls per Day [EA]		16	24	68	44
Equipment	**Hours/Day**				
Air Compressor	8	1	1	2	0
Aerial Lift	8	0	0	4	4
Bore/Drill Rig	8	0	2	0	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	2	1	1	1
Cranes (Tower)	10	0	0	0	0
Cranes (Mobile)	10	1	0	2	0
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	8	1	2	0	0
Forklifts	8	1	1	2	2
Generator Sets	8	1	1	1	0
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	8	1	1	0	0
Pavers	8	0	0	0	1
Paving Equipment	8	0	0	0	1
Pumps	8	0	1	1	1
Plate Compactors	8	0	0	0	1
Rollers	8	0	0	0	1
Rough Terrain Forklifts	8	1	1	0	0
Rubber Tired Dozers	0	0	0	0	0
Rubber Tired Loaders	8	0	1	0	0
Scrapers	8	1	0	0	0
Signal Boards	8	1	2	2	1
Skid Steer Loaders	8	1	1	1	0
Surfacing Equipment	8	0	1	0	1
Tractors/Loaders/Backhoes	8	0	1	0	0
Trenchers	8	1	1	0	1
Welders	8	0	1	1	0
Other ( )	0	0	0	0	0
TOTAL		**13**	**20**	**18**	**15**
Grading & Excavation					
Total Amount of Grading [SF]		0	65,000	0	0
Acreage to be Graded [ACRES]		0	1.50	0	0
Depth of Grading [FT]		0	(5)	0	0
Export of Fill [CY]		1,500	3,500	0	0
Import of Fill [CY]		0	2,500	0	0
Estimated Truck Trips (Daily Average) [EA]		6	6.5	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		6	7	0	0
Delivery Trucks (Daily Average) [EA]		0	1	7	4
Concrete Pour Trucks (Daily Average) [EA]		0	2	7	1

East Lot (Duration - 4 months)

		Demo	Grading & Exc.	Structure	Finishes
Construction Schedule					
Construction Duration [MONTHS]		0	1	3	0
Manpower per Day (# of Workers) [EA]		0	15	25	0
Stalls per Day [EA]		0	12	20	0
Equipment	**Hours/Day**				
Air Compressor	8	0	1	1	0
Aerial Lift	8	0	0	4	0
Bore/Drill Rig	0	0	0	0	0
Cement and Mortar Mixers	8	0	1	1	0
Concrete/Industrial Saws	4	0	1	1	0
Cranes (Tower)	0	0	0	0	0
Cranes (Mobile)	0	0	0	0	0
Crawler Tractors	0	0	0	0	0
Crushing/Proc. Equipment	0	0	0	0	0
Excavators	0	0	0	0	0
Forklifts	8	0	1	4	0
Generator Sets	8	0	1	1	0
Graders	0	0	0	0	0
Off-Highway Tractors	0	0	0	0	0
Water Truck	0	0	1	0	0
Pavers	0	0	0	0	0
Paving Equipment	0	0	1	0	0
Pumps	0	0	0	0	0
Plate Compactors	0	0	1	0	0
Rollers	0	0	1	0	0
Rough Terrain Forklifts	0	0	1	0	0
Rubber Tired Dozers	0	0	0	0	0
Rubber Tired Loaders	0	0	1	0	0
Scrapers	0	0	0	0	0
Signal Boards	0	0	1	0	0
Skid Steer Loaders	0	0	0	0	0
Surfacing Equipment	8	0	1	0	0
Tractors/Loaders/Backhoes	0	0	0	0	0
Trenchers	0	0	0	0	0
Welders	8	0	1	1	0
Other ( )	0	0	0	0	0
TOTAL		**0**	**14**	**13**	**0**
Grading & Excavation					
Total Amount of Grading [SF]		0	87,500	0	0
Acreage to be Graded [ACRES]		0	2	0	0
Depth of Grading [FT]		0	(2)	0	0
Export of Fill [CY]		0	500	0	0
Import of Fill [CY]		0	250	0	0
Estimated Truck Trips (Daily Average) [EA]		0	3	0	0
Hauling					
Haul Truck Volumes (Daily Average) [EA]		0	3	0	0
Delivery Trucks (Daily Average) [EA]		0	1	8	0
Concrete Pour Trucks (Daily Average) [EA]		0	1	1	0

Assumptions and Qualifications
1. We have assumed that haul off will be conducted by bottom dump 18 wheelers with an average capacity of 14 cubic yards each.
2. We have assumed that concrete mixing trucks will have an average capacity of 10 CY each.
3. We have included all Block 6 associated flatwork with Block 5. This is to stay consistent with our previous budgeting and scheduling.
4. We have that assumed 20% of trips made by workers and other staff will utilize public transportation (due to adjacency of Metro station) or ride sharing.
5. In many instances, the line between structure and finishes is not clearly defined. Therefore, the cumulative duration of structure and finishes is representative of the true duration, but individual durations may vary slightly.
6. The total amount of grading for the east lot is equal to the footprint. The morepark system does not require grading if the existing conditions allow for installation (soil bearing capacity). In this case, the SF would be 0 and depth would be 0.

Appendix R.2

LADOT Approval Letter

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

5430 Lankershim Blvd.
LADOT Case No. SFV19-109033
LADOT Project ID. No. 49220

Date: February 1, 2022

To: Susan Jimenez, Administrative Clerk
Department of City Planning

From: Vicente Cordero, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION IMPACT ASSESSMENT FOR THE DISTRICT NOHO MIXED-USE PROJECT AT 5430 NORTH LANKERSHIM BOULEVARD (CPC-2019-7239-GPAJ-VZCJ-HD-SP-SN-BL/ENV-2019-7241-EIR)**

The Department of Transportation (LADOT) has reviewed the transportation assessment prepared by Gibson Transportation Consulting Inc., dated October 2021 for the proposed transit-oriented mixed-use project located at 5430 Lankershim Boulevard, in the North Hollywood-Valley Village Community Plan Area of the City of Los Angeles. On July 30, 2019, pursuant to Senate Bill (SB) 743 and the recent changes to Section 15064.3 of the State's California Environmental Quality Act (CEQA) Guidelines, the City of Los Angeles adopted vehicle miles traveled (VMT) as the criteria by which to determine transportation impacts under CEQA. Pursuant to the VMT thresholds and study methodology established in LADOT's Transportation Assessment Guidelines (TAG), the proposed project submitted a transportation impact assessment and VMT analysis, which is summarized below.

DISCUSSION AND FINDINGS

A. <u>Project Description</u>

The proposed project consists of a transit-oriented mixed-use development located at and around the Metro North Hollywood Station in North Hollywood. The Project proposes to construct 1,216 market-rate multi-family housing units, 311 affordable housing units, 580,374 square-feet of office space, 30,125 square-feet of retail space, and 75,000 square-feet of high-turnover (sit-down) restaurant space. For a conservative analysis and future flexibility, 10,734 square-feet of retail space was analyzed as restaurant space, which is a higher trip generator. Additionally, the Project may exchange up to 75,000 square-feet of retail and restaurant space for 75,000 square-feet of office space. The Project would also construct a Consolidated Transit Center serving both the Metro G (Orange) Line Busway and the other local and regional bus routes that stop at the North Hollywood Metro Station.

The Project site is comprised of four distinct Parcels as shown in **Attachment A.** Parcel 1 is approximately 10.7 acres and currently provides a surface parking lot for Metro users, a Metro B (Red) Line subway portal, and a local bus plaza and layover area with 14 bus stalls. Parcel 2 is approximately

1.8 acres and currently provides a surface parking lot for the existing adjacent commercial building which is not part of the Project and would remain on the southeast corner of the parcel. Parcel 3 is approximately 2.7 acres and is comprised of the Metro G (Orange) Line busway station, a Metro B (Red) Line subway portal, the historic Lankershim Depot Building, and industrial/warehouse buildings on the northwest corner. Parcel 4 is comprised of 0.7 acres and is currently occupied by several small industrial/warehouse buildings. All of the existing uses would be replaced with the exception of the historic Lankershim Depot Building.

The Parcels are characterized as a series of Blocks, along with several private streets, as shown in **Attachment B.**

- Parcel 1 consists of Blocks 1 through 6 and Block 0 East, which would include primarily residential buildings, several with ground-floor retail and restaurant uses, and some office space. It would be divided by private roadway extensions of Klump Avenue and Elmer Avenue and a new private east-west street known as District Way.

- Parcel 2 consists of Block 8, and would include an office building with ground-floor retail and restaurant uses.

- Parcel 3 consists of Block 0 West, which would construct a new Consolidated Transit Center serving the Metro G (Orange) Line busway and local and regional bus routes, and provide portals to the Metro B (Red) Line subway.

    - The Applicant has partnered with Metro, and will be responsible for the construction of the new Consolidated Transit Center as shown in **Attachment C**, and all lane configurations necessary**.** The Consolidated Transit Center will continue to serve the Metro G (Orange) Line busway and will provide 16 dedicated bus loading spaces to serve LADOT Commuter Express and other local and regional bus lines. It will also provide six off-street bus layover spaces to allow drivers to take breaks.

- Parcel 4 consists of Block 7, which would construct affordable housing.

The Project proposes to provide 3,313 Project parking spaces on-site and accommodate an additional 274 parking spaces for Metro users on-site. The Project may also be supported by two off-site parcels that may be developed by Metro with dedicated Metro Parking areas:

- West Lot is approximately one acre and is bounded by Chandler Boulevard (North) to the north, Tujunga Avenue to the east, the Metro G (Orange) Line busway to the south, and a private property to the west. This lot is proposed to accommodate 520 parking spaces for Metro users.

- East Lot is approximately 1.80 acres and is bounded by a private property to the north, Vineland Avenue to the east, Chandler Boulevard to the south, and Fair Avenue to the west. This lot is proposed to accommodate 395 parking spaces for Metro users.

For analysis purposes, the Project was divided into two Phases. Phase 1 includes the construction of the Consolidated Transit Center (Block 0 East and West) and Blocks 5 through 8 and was assumed to be

completed in Year 2026. Phase 2 includes the construction of Blocks 1 through 4 and was assumed to be completed in Year 2037. The actual timing and sequencing of Project development may differ from that assumed in the analysis.

B. <u>CEQA Screening Threshold</u>

A trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips (DVT) screening threshold set forward by the TAG. The City of Los Angeles VMT Calculator Tool Version 1.3, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the Project's surroundings, determined that the Project exceeds the net 250 DVT s threshold. Therefore, a transportation assessment was required. The assessment concluded that implementation of the project would not result in a significant transportation impact. A copy of the VMT calculator pages with information of the Project's DVT at completion of Phase 1 and at Full Buildout (Phase 2) is provided as **Attachment D**. The traffic analysis included further discussion on the screening of the following CEQA transportation thresholds:

1. **Threshold T-1: Conflicting with Plans, Programs, Ordinances, or Policies**
   The traffic analysis evaluated the proposed Project for conformance with the City's adopted development plans and policies for all travel modes. According to the analysis, the Project does not obstruct or conflict with the City's development policies and standards for the transportation system. Therefore, no Project or cumulative significant transportation impact was identified for this threshold.

2. **Threshold T-2.1: Causing Substantial Vehicle Miles Traveled**
   Using the VMT Calculator Tool, the assessment determined that the Project would generate a 8,988 net increase in DVT and a 79,534 net increase in VMT, prior to any TDM mitigation strategies at completion of Phase 1, and would generate a 14,823 net increase in DVT and a 123,802 net increase in VMT, prior to any TDM mitigation strategies at Full Buildout (Phase 2). As a result, since the Project exceeded this threshold, the applicant was required to prepare the appropriate evaluation to address any potential impacts (see Section D below).

3. **Threshold T-3: Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use**
   The Project proposes to make modifications to the public right-of-way through new driveway installations, sidewalk modifications, and curb work. However, these changes do not involve any design features that introduce access points that would result in unsafe conflicts for other users of the public right-of-way or would result in any incompatible use. Therefore, no Project or cumulative significant transportation impact was identified for this threshold.

C. CEQA Freeway Safety Analysis

The traffic study included a freeway ramp impact analysis that was prepared using LADOT Interim Guidance for Freeway Safety Analysis. Based on the Project's trip generation estimates and traffic distribution patterns presented, the Project would add 25 or more peak hour trips to the following ramps:

- SR 170 Southbound Off-ramp to Burbank Boulevard
- SR 170 Southbound Off-ramp to Magnolia Boulevard
- SR 170 Northbound Off-ramp to Magnolia Boulevard
- US 101 Eastbound Off-ramp to Tujunga Avenue
- SR 134 Westbound Off-ramp to Lankershim Boulevard

Based on LADOT's freeway ramp thresholds, a freeway analysis was required for each ramp. The study applied the Highway Capacity Manual (HCM) methodology to calculate the 95th percentile ramp queue provided by Synchro to determine the resulting queue extending onto the freeway mainline. As shown in **Attachment E,** the difference in queues between Future without Project and Future with Project, both at Phase 1 and at Full Buildout (Phase 2), do not exceed ramp storage lengths during either peak hour. Therefore, the Project would result in less-than-significant impact to the ramps.

D. CEQA Transportation Analysis

Pursuant to Senate Bill (SB) 743 and the recent changes to Section 15064.3 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as a criterion in determining transportation impacts under CEQA. The new LADOT TAG provides instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

Additionally, the TAG requires mixed-use developments to analyze the Project's residential and office land uses individually using the VMT Calculator. In order to assess the VMT per capita associated with individual land uses while still accounting for the reduction in trips associated with interactions between the Project's mix of land uses, the VMT Calculator was run with the full mix of Project land uses, with and without each individual land use in succession. In this manner, the specific VMT and population effects of each individual land use could be measured within the context of a mixed-use project. Separately, because the VMT Calculator is not designed to analyze net change in VMT resulting from retail and restaurant uses, the retail and restaurant land uses were reviewed qualitatively for potential VMT impacts according to the criteria for a regional-serving retail project, as discussed below.

The LADOT VMT Calculator Tool measures Project impact in terms of Daily Household VMT per Capita, and Daily Work VMT per Employee. Using the VMT Calculator Tool, the assessment determined that the Project would not result in a significant impact for Daily Household VMT per Capita or Daily Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven Area Planning Commission (APC) areas in the City. For the South Valley APC area, in which the Project is located, the City established the following thresholds:

- Daily Household VMT per Capita: 9.4
- Daily Work VMT per Employee: 11.6

Since the Project is proposing more than 50,000 square-feet of commercial retail/restaurant space, the commercial component of the Project was evaluated to determine if the space is considered a regional-serving retail project. Due to the space being split amongst the various Blocks, and most with their own parking structures and being separated by streets, the characteristics for a regional-serving retail does not correspond in this case. Nonetheless, a qualitative review provided in the transportation assessment of the limited quantity of other retail/restaurant development in the Project vicinity supports a conclusion that the Project's retail/restaurant space would result in a net

reduction in VMT and thus would not result in a significant impact.

Additionally, the Project will implement the following TDM measures:

- Reduced parking supply
- Promotions and marketing
- Pedestrian network improvements
- Traffic calming improvements
- Implement on-street bicycle facilities
- Bicycle parking per LAMC

As shown on **Attachment F**, the LADOT VMT Calculator Tool determined the Daily Work VMT per Employee and the Daily Household VMT per Capita results in **no significant impact** and that the TDM measures implemented would further reduce the Project VMT per capita and VMT per employee.

E. Pedestrian, Bicycle, and Transit Access Assessment

Section 3.2.2 of the TAG requires an assessment of pedestrian, bicycle, and transit access where a project exceeds the screening criteria. The project would result in a 12,425 net increase in DVT at full-build out after adjusting for all proposed TDM strategies, and so exceeds the net 1,000 DVT screening threshold that requires further assessment of pedestrian, bicycle, and transit access. The Project would result in additional pedestrian, bicycle, and transit activity.

The estimated project-related pedestrian activity is show on **Attachment G**. These values were derived from a combination of vehicular trip generation estimates and a study of existing transit boardings and transfers at the Project site. Pedestrian access points and paths of travel were reviewed to identity missing pedestrian infrastructure.

The Project's design also minimizes potential hazards to bicyclists by providing facilities for bicyclists that avoid arterial streets. In addition, the Project will continue to work with LADOT's Chandler Cycletrack Project team to ensure the Project's proposed bicycle facilities and the City's ongoing bicycle project in the area complement one another.

Lastly, in relation to the construction of the Consolidated Transit Center, the transit infrastructure that is removed from the existing bus plaza in Parcel 1 will be replaced with new and enhanced infrastructure at the Consolidated Transit Center. Access to the Consolidated Transit Center will continue to be provided through existing and new surface street crossings, and the two existing and one new portal connecting the Consolidated Transit Center to the Metro B (Red) Line underground.

The Project would provide corrective measures to address the high amount of pedestrian demand and directly benefit pedestrian, bicycle, or transit access at and around the Project Site. The corrective measures are further described below under Project Requirements.

F. Access and Circulation

The access and circulation analysis included a delay study of selected intersections using the Highway Capacity Manual (HCM) methodology which calculates the amount of delay per vehicle based upon the intersection traffic volumes, lane configurations, and signal timing.

Traffic Conditions

Intersection turning movement counts were collected during the weekday morning and afternoon peak periods in September, October, and November 2019, except at the intersection of Tujunga Avenue and Cumpston Street which was not counted in 2019, and thus the traffic volume was estimated based on nearby traffic counts because the COVID-19 pandemic in 2020 disrupted traffic patterns. When the traffic counts were collected in 2019, the Metro G (Orange) Line was temporarily detoured away from Block 0 via Tujunga Avenue, Cumpston Street, Fair Avenue and Chandler Boulevard. This resulted in additional traffic on those streets, as well as irregular turning movements. In order to mimic standard operating conditions for the Existing Conditions analysis, the Metro G (Orange) Line traffic was manually reassigned away from those streets and back to the existing transit station at Block 0. Finally, the traffic counts were increased by 1% to account for general growth in regional traffic between Year 2019 and 2020. The Existing Conditions (Year 2020) peak hour traffic volumes were developed in this manner.

The Project traffic was determined using the Institute of Transportation Engineers Trip Generation Manual (10th Edition, 2017), and in the case of affordable housing units, the TAG. The trip generation summary is shown on **Attachment H**. The Existing Conditions (Year 2020) plus project conditions were determined by superimposing the net Project traffic volumes onto the Existing Conditions (Year 2020) traffic volumes.

Estimates for future traffic conditions were developed for Phase 1 completion (Year 2026) and for Full Buildout (Year 2037). The traffic conditions without the project and traffic generated by other projects identified within a quarter mile from all intersections included in the operational analysis of the project were added to the base counts to reflect potential growth in the area. In addition, a 1% annual growth rate were included from the Existing (Year 2020) to Future Phase 1 (Year 2026) and a 0.5% growth per year was applied between Phase 1 (Year 2026) to Full Buildout (Year 2037). Finally, the traffic expected to be generated by the Project was analyzed as an incremental addition to the future traffic conditions without Project condition, resulting in the Phase 1 completion (Year 2026) and Full Buildout (Year 2037) with Project condition.

Under the HCM methodology, level of service (LOS) at signalized and unsignalized intersections is defined based on the delay experienced per vehicle as seen on **Attachment I.** LADOT has reviewed this analysis and determined that it adequately disclosed operation concerns.

Queuing Evaluation

A queuing evaluation was conducted using the Future Project traffic at completion of Phase 1 and at Full Buildout (Phase 2) on all intersections studied as part of the Project. The vehicle queuing lengths for various movements through the intersections were based of the 95th percentile queue length. The analysis focused on locations where the Project would add at least 50 feet to queues that could exceed turn pocket lengths during one or both peak hours. As see on **Attachment J,** there are 13 locations which met this criteria at completion of Phase 1. At Full Buildout, five new intersections would be

affected, along with two additional movements at intersections which were identified at Phase 1. However, note that two intersections which were affected at Phase 1 completion would no longer be affected at Full Buildout (Phase 2). LADOT has reviewed this analysis and determined that it adequately disclosed queuing concerns.

Residential Street Cut-Through Analysis

The objective of the residential street cut-through analysis is to determine potential increases in average daily traffic volumes on designated Local Streets, as classified in the City's General Plan, that provide opportunity for cut-through trips generated by the Project that can adversely affect the character and function of those streets. This analysis was prepared by grouping streets which met the criteria, into three distinct neighborhoods – Northwest Neighborhood, Northeast Neighborhood, and Southeast Neighborhood as seen on **Attachment K**. A total of 12 streets were identified.

Due to the COVID-19 pandemic and resulting shelter-in-place orders throughout the state during the preparation of the traffic study, existing average daily traffic (ADT) counts on the 12 streets could not be collected. These traffic counts will be collected once traffic conditions return to a more typical level prior to the completion of any portion of the Project to establish daily trip thresholds.

In the interim, the analysis identified excessive Project traffic burdens on each street segment based on the lowest threshold and a conservative estimate of potential cut-through traffic was prepared for each of the three neighborhoods considering the following at each of the neighborhoods:

- Northwest Neighborhood - This neighborhood could potentially attract cut-through traffic traveling between Burbank Boulevard to the west or SR 170 to the north and Blocks 7 and 8. Additionally, it could attract traffic to and from the West Lot, which can only be accessed from Chandler Boulevard (North), a one-way street. It is unlikely that traffic to or from any Block east of Lankershim Boulevard would travel through the Northwest Neighborhood because it does not provide a viable alternative to using Lankershim Boulevard.

- Northeast Neighborhood - This neighborhood could potentially attract cut-through traffic traveling between Burbank Boulevard and Parcel 1. While it primarily would connect Parcel 1 to the northeast direction, traffic to and from the northwest could also use the Northeast Neighborhood streets to avoid turning at the intersection of Lankershim Boulevard and Burbank Boulevard.

- Southeast Neighborhood - This neighborhood could potentially attract cut-through traffic traveling to and from Parcel 1 and Block 8 from the southeast direction. While it primarily would connect Parcel 1 to the southeast direction, traffic to and from Block 8 could also travel through the Southeast Neighborhood via Weddington Street to avoid driving on Lankershim Boulevard.

Based on LADOT's lowest threshold, it is expected that three of the street segments within the Northwest Neighborhood and two of the street segments within the Southeast Neighborhood will meet the TAG criteria for cut-through burdens. The applicant will engage in a process set forth by the LADOT at the completion of the Project which will assess the affected neighborhoods to determine which traffic calming measures are preferred as part of a Neighborhood Traffic Management Plan

(NTMP). The applicant or its successor would fund and coordinate the implementation of the NTMP process for the Project. The budget for the improvements has been identified as $200,000. The consultant time to administer the process and develop the NTMP would be separately funded by the applicant and would not count against the improvement budget.

PROJECT REQUIREMENTS

A. <u>CEQA-Related Mitigation</u>

There are no CEQA related mitigation measures for this project.

B. <u>Corrective Measures (Non-CEQA Analysis)</u>

As required per the adopted TAG and pursuant to the City's Site Plan Review Authority (L.A.M.C. 16.05 and relevant code sections), the analysis included a review of current deficiencies and potential future deficiencies that may result from this project. The following corrective measures have been identified for the project to address potential deficiencies:

<u>Repaint/upgrade at the existing pedestrian crosswalks at the following locations:</u>

- Tujunga Avenue & Chandler Boulevard (North)
- Tujunga Avenue & Chandler Boulevard (South)
- Lankershim Boulevard & Chandler Boulevard (North)
- Lankershim Boulevard & Chandler Boulevard (South)
- Across the Block 0 West access point on Tujunga Avenue

<u>Install new pedestrian crosswalks at the following locations:</u>

- Across the south leg of Tujunga Avenue & Chandler Boulevard (North)
- Across the north leg of Tujunga Avenue & Chandler Boulevard (South)
- Across the south leg of Lankershim Boulevard & Chandler Boulevard (North)
- Across the west leg of District Way & Fair Avenue

<u>Install and upgrade Bicycle Infrastructure:</u>

- Install a new two-way bicycle route through the Project site (District Way)
- Improve westbound bicycle lane on Chandler Boulevard (North) between Tujunga Avenue and Lankershim Boulevard to a Class IV facility
- Install a bicycle crossing signal across Lankershim Boulevard and Chandler Boulevard (North)
- Install long-term and short-term bicycle parking at each Block
- Provide parking for at least 100 bicycles at one or more Metro Bike Hubs
- Provide space for Metro's Bikeshare or similar first mile/last mile option

<u>TDM Measures:</u>

- Promotions and marketing
- Pedestrian network improvements
- Traffic calming improvements
- Implement on-street bicycle facilities

Neighborhood Traffic Calming:

- Existing traffic counts to be collected at the 12 residential streets listed on Attachment K once traffic conditions return to a more typical level prior to the completion of any portion of the Project to establish daily trip thresholds.
- The budget for NTMP improvements is $200,000. The applicant will separately fund the consultant's time to administer the process and develop the NTMP for each neighborhood.

CCTV Monitoring Cameras and connections to ATSAC at the following locations:

- Colfax Avenue & Burbank Boulevard
- Lankershim Boulevard/Tujunga Avenue & Burbank Boulevard
- Lankershim Boulevard & Magnolia Boulevard
- Colfax Avenue & Chandler Boulevard

Extended northbound left-turn pocket at the following location:

- Lankershim Boulevard/Tujunga Avenue & Burbank Boulevard

New protected-permissive left-turn signal phasing at the following locations:

- SR-170 Southbound Ramp & Magnolia Boulevard for Westbound direction
- Lankershim Boulevard & Cumpston Street for Southbound direction

New GridSmart Pedestrian Safety Crossing Control at the following locations:

- Lankershim Boulevard & Cumpston Street
- Lankershim Boulevard & Chandler Boulevard (North)
- Lankershim Boulevard & Chandler Boulevard

Upgrade pedestrian ADA ramps at the following location:

- Bakman Avenue & Weddington Street

Install new transit infrastructure adjacent to the Project site such as:

- Bus shelters
- Bus benches
- Bus stops

C. Parking Requirements

The Project proposes to provide up to 3,313 parking spaces and 274 on-site spaces which will be designated for Metro users. Additionally, the Project proposes to provide up to 915 off-site spaces between the West and East Lot. The Project proposes to provide up to 1,158 bicycle parking spaces. Bicycle parking spaces will be installed in compliance with the Los Angeles Municipal Code (LAMC). The applicant should check with the Departments of Building and Safety on the number of Code-required parking spaces needed for this project.

D. Highway Dedication and Street Widening Requirements

Per the Mobility Plan 2035, the streets adjacent to the Project site will be brought up to standard unless a waiver of dedication is approved. The streets include:

- Lankershim Boulevard – Boulevard II
- Chandler Boulevard – Boulevard II
- Chandler Boulevard (North) – Boulevard II
- Chandler Boulevard (South) – Boulevard II
- Tujunga Avenue – Avenue II
- Cumpston Street – Collector Street
- Weddington Avenue – Local Street
- Bakman Avenue – Local Street

The street's existing and required roadway width, sidewalk width, and half-ROW width are outlined in **Attachment L**, as well as the Project's proposed dedications, waivers of dedication, and vacations of right-of-way. The applicant should check with the Bureau of Engineering's Land Development Group to determine if there are any other applicable highway dedication, street widening and/or sidewalk requirements for this project.

E. <u>Construction Impacts</u>

LADOT recommends that a construction worksite traffic control plan be submitted to LADOT's Citywide Temporary Traffic Control Section for review and approval prior to the start of any construction work. Refer to https://ladot.lacity.org/businesses/temporary-traffic-control-plans to determine which section to coordinate review of the worksite traffic control plan. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. LADOT also recommends that construction related traffic be restricted to off-peak hours to the extent possible.

F. <u>Driveway Access and Circulation</u>

Vehicular access to the Project is provided to each Block. The Blocks are separated by public and publicly accessible private streets. The new driveways to each block are located along the minor streets as illustrated on **Attachment M**. The Project also proposed three passenger loading zones. On northbound Lankershim Boulevard north of Chandler Boulevard (North), a curb currently designated for taxi operations is proposed to be modified to allow pick-up or drop-off by transportation network companies (TNCs) such as Uber and Lyft. The Project also proposes to install a passenger loading zone for westbound Chandler Boulevard west of Klump Avenue in a turnout. Lastly, the Project proposes to install a passenger loading zone along District Way, a publicly accessible private street. LADOT does not currently support the modification of the taxi zone to a passenger loading zone along Lankershim Boulevard, and the proposed turnout on Chandler Boulevard may be affected by the City's Chandler Bikeway Project, however, the Applicant will continue to coordinate with LADOT to explore curbside management strategies and passenger loading zone options prior to Project occupancy.

The review of this study does not constitute approval of the access and circulation scheme with regard to this Project. Those elements require separate review and approval and should be coordinated with LADOT's Valley Planning Coordination Section (6262 Van Nuys Boulevard, Rm 320, @ 818-374-4699). To minimize and prevent last-minute design changes, the applicant should contact LADOT before the commencement of building or parking layout design efforts, for driveway width and internal circulation requirements. The applicant should check with the Department of City Planning regarding the Project's vehicular access and design.

G. <u>Transportation Demand Management Ordinance</u>

The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods.
- Rely on a broader range of strategies that be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance upon its approval. The updated ordinance is expected to be completed prior to the anticipated start of construction of this Project.

H. <u>Development Review Fees</u>

Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

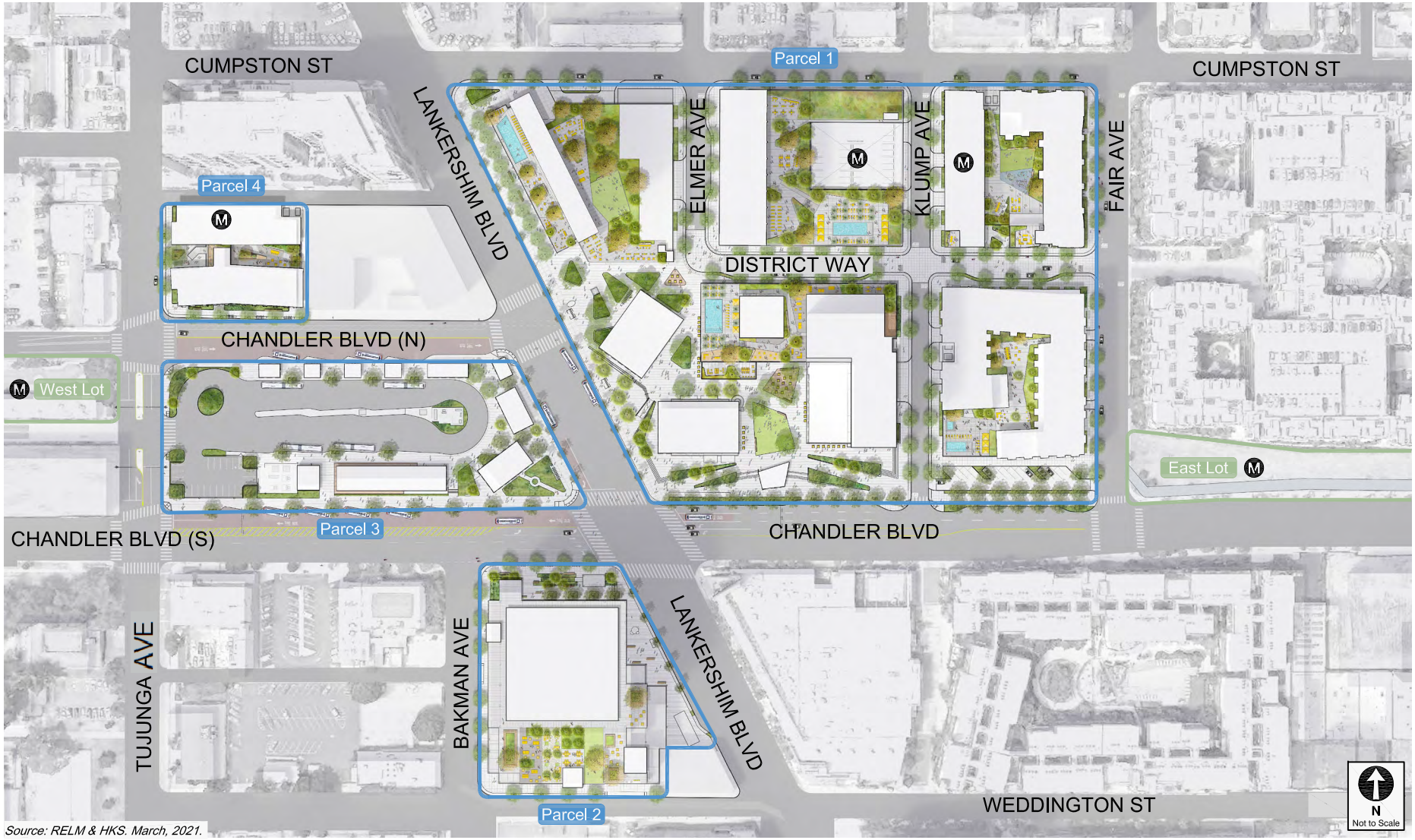
If you have any questions, please contact Shirley Zamora of my staff at (818) 374-4692.

Attachments

J:\Projects\SFV\5430Lankershim Bl

c: Sahag Yedalian, Council District 2
Steve Rostam, LADOT East Valley District
Vincent Chan, LADOT B-Permit
Ali Nahass, BOE Valley District
Quyen Phan, BOE Land Development Group
Claudia Rodriguez, LACP Valley Planning
Jonathan Chambers, Gibson Transportation Consulting, Inc.
Karen Shorr, Trammell Crow Company

ATTACHMENT A



Source: RELM & HKS. March, 2021.

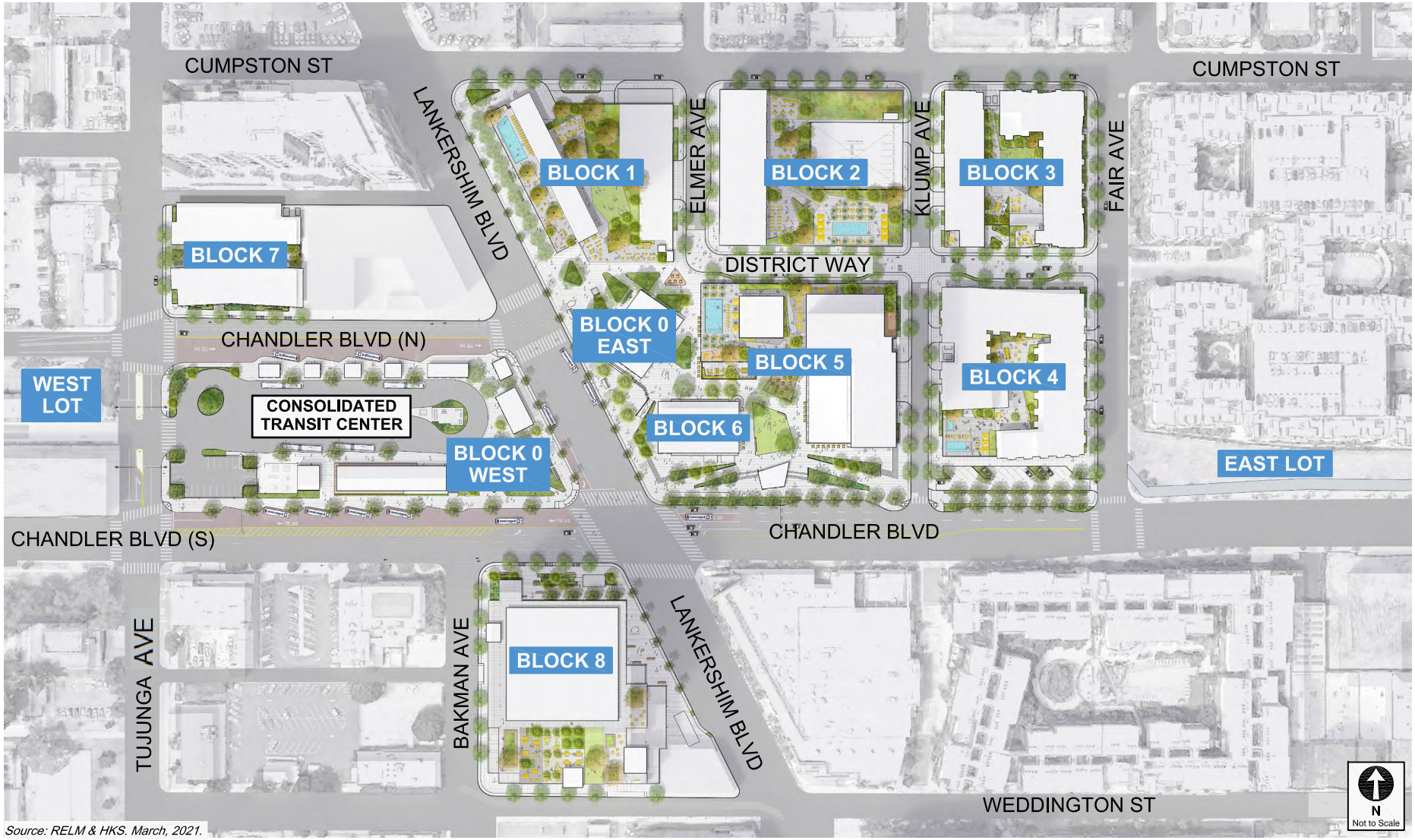
LEGEND

Project Site Parcels | Potential Off-Site Metro Parking Areas | Proposed Metro Parking

PROJECT SITE PLAN OVERVIEW

FIGURE 1

ATTACHMENT B



Source: RELM & HKS. March, 2021.

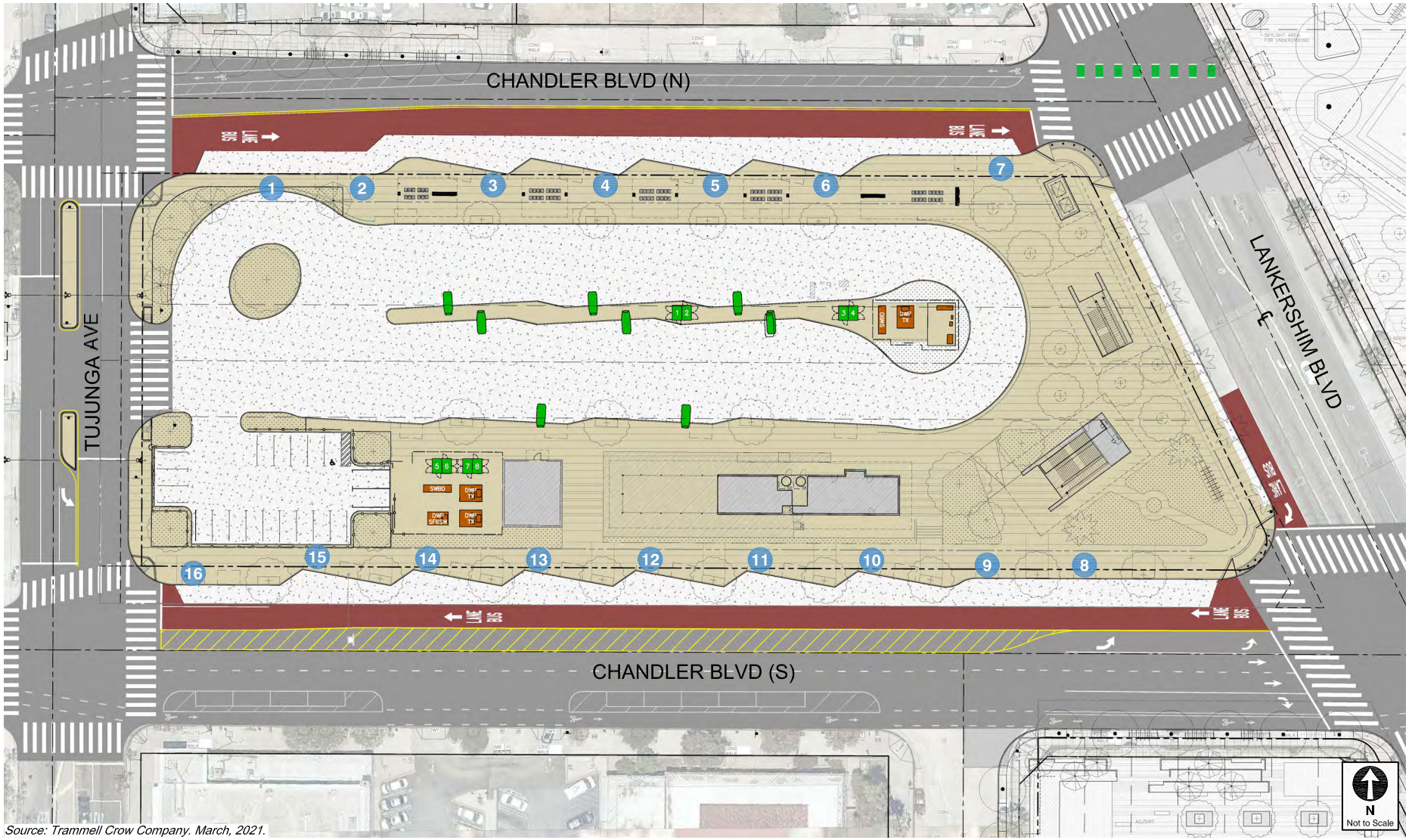
LEGEND

Block Number

CONCEPTUAL GROUND-LEVEL PROJECT SITE PLAN

FIGURE 2

ATTACHMENT C



Source: Trammell Crow Company. March, 2021.

LEGEND

Local Bus Loading Area

CONCEPTUAL PLAN FOR CONSOLIDATED TRANSIT CENTER

FIGURE 3

ATTACHMENT D

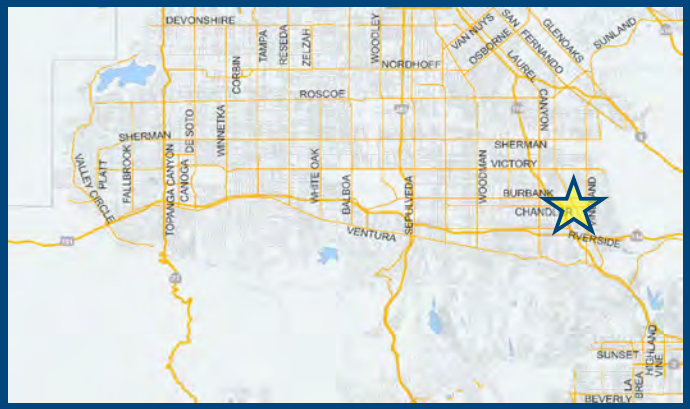
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Phase 1

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	400	DU
Retail | General Retail	4.218	ksf
Retail | High-Turnover Sit-Down Restaurant	53.69	ksf
Office | General Office	580.374	ksf
Housing | Affordable Housing - Family	151	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
☐ Proposed Prj ☑ Mitigation
- 2458 city code parking provision for the project site
- 1979 actual parking provision for the project site

Unbundle Parking
☐ Proposed Prj ☐ Mitigation
- 175 monthly parking cost (dollar) for the project site

Parking Cash-Out
☐ Proposed Prj ☐ Mitigation
- 50 percent of employees eligible

Price Workplace Parking
☐ Proposed Prj ☐ Mitigation
- 6.00 daily parking charge (dollar)
- 50 percent of employees subject to priced parking

Residential Area Parking Permits
☐ Proposed Prj ☐ Mitigation
- 200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
8,988 Daily Vehicle Trips	**7,674** Daily Vehicle Trips
79,534 Daily VMT	**67,913** Daily VMT
4.8 Household VMT per Capita	**4.1** Household VMT per Capita
10.4 Work VMT per Employee	**8.9** Work VMT per Employee

Significant VMT Impact?

Household: No Threshold = 9.4 15% Below APC	**Household: No** Threshold = 9.4 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

7/14/2020

ATTACHMENT D (continued)

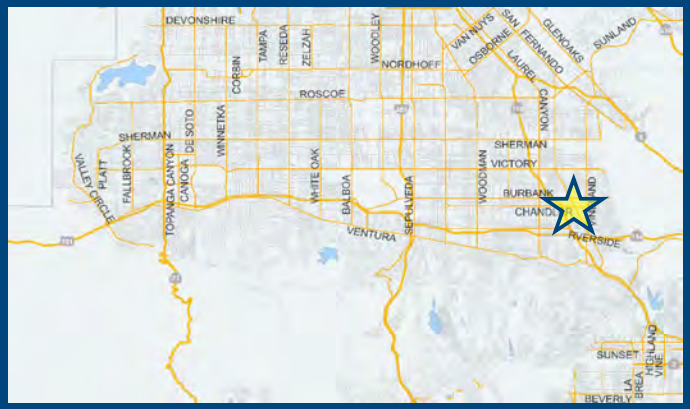
CITY OF LOS ANGELES VMT CALCULATOR Version 1.3

Project Information

Project: District NoHo

Scenario: Full Buildout

Address: 34.168819, -118.375779



Proposed Project Land Use Type	Value	Unit
Housing | Multi-Family	1216	DU
Retail | General Retail	30.125	ksf
Retail | High-Turnover Sit-Down Restaurant	75	ksf
Office | General Office	580.374	ksf
Housing | Affordable Housing - Family	311	DU

TDM Strategies

Select each section to show individual strategies

Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	No	No
Max Work Based TDM Achieved?	No	No

A Parking

Reduce Parking Supply (☐ Proposed Prj ☑ Mitigation)	4291	city code parking provision for the project site
	3313	actual parking provision for the project site
Unbundle Parking (☐ Proposed Prj ☐ Mitigation)	175	monthly parking cost (dollar) for the project site
Parking Cash-Out (☐ Proposed Prj ☐ Mitigation)	50	percent of employees eligible
Price Workplace Parking (☐ Proposed Prj ☐ Mitigation)	6.00	daily parking charge (dollar)
	50	percent of employees subject to priced parking
Residential Area Parking Permits (☐ Proposed Prj ☐ Mitigation)	200	cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

	Proposed Project	With Mitigation
Daily Vehicle Trips	14,823	12,425
Daily VMT	123,802	103,775
Household VMT per Capita	5.3	4.5
Work VMT per Employee	10.4	8.7

Significant VMT Impact?

	Proposed Project	With Mitigation
Household	No (Threshold = 9.4, 15% Below APC)	No (Threshold = 9.4, 15% Below APC)
Work	No (Threshold = 11.6, 15% Below APC)	No (Threshold = 11.6, 15% Below APC)

Measuring the Miles

ATTACHMENT E

TABLE 16
FREEWAY OFF-RAMP QUEUING SAFETY ANALYSIS - YEAR 2026

Off-ramp	Ramp Storage Length [a]	Peak Hour	95th Percentile Queue [b]		Exceeds Ramp Storage [c]
			Future without Project Conditions	Future with Phase 1 Conditions	
SR 170 Southbound Off-ramp to Burbank Boulevard (Intersection #1)	1,550	AM	970	1,140	NO
		PM	343	355	NO
SR 170 Southbound Off-ramp to Magnolia Boulevard (Intersection #27)	1,725	AM	1,398	1,498	NO
		PM	313	320	NO
SR 170 Northbound Off-ramp to Magnolia Boulevard (Intersection #28)	1,175	AM	383	430	NO
		PM	628	723	NO
US 101 Eastbound Off-ramp to Tujunga Avenue (Intersection #35)	750	AM	8	25	NO
		PM	53	73	NO
SR 134 Westbound Off-ramp to Lankershim Boulevard (Intersection #37)	825	AM	270	270	NO
		PM	238	235	NO

Notes:

[a] Includes ramp length to gore point, in feet, as well as half the length of any auxiliary lane, if provided.

[b] Queue length provided in feet, based on 25 feet per vehicle.

[c] Based on Future with Phase 1 Conditions queue.

ATTACHMENT E (continued)

TABLE 17
FREEWAY OFF-RAMP QUEUING SAFETY ANALYSIS - YEAR 2037

Off-ramp	Ramp Storage Length [a]	Peak Hour	95th Percentile Queue [b]		Exceeds Ramp Storage [c]
			Future without Project Conditions	Future with Full Buildout Conditions	
SR 170 Southbound Off-ramp to Burbank Boulevard (Intersection #1)	1,550	AM	1,130	1,325	NO
		PM	360	383	NO
SR 170 Southbound Off-ramp to Magnolia Boulevard (Intersection #27)	1,725	AM	1,605	1,725	NO
		PM	328	338	NO
SR 170 Northbound Off-ramp to Magnolia Boulevard (Intersection #28)	1,175	AM	408	493	NO
		PM	708	1,025	NO
US 101 Eastbound Off-ramp to Tujunga Avenue (Intersection #35)	750	AM	8	30	NO
		PM	60	113	NO
SR 134 Westbound Off-ramp to Lankershim Boulevard (Intersection #37)	825	AM	288	288	NO
		PM	248	258	NO

Notes:
[a] Includes ramp length to gore point, in feet, as well as half the length of any auxiliary lane, if provided.
[b] Queue length provided in feet, based on 25 feet per vehicle.
[c] Based on Future with Full Buildout Conditions queue.

ATTACHMENT F

TABLE 11
PROJECT VMT ANALYSIS

Description	Phase 1		Full Buildout	
Land Use Inputs				
Affordable Housing	151 units		311 units	
Market-Rate Housing	400 units		1,216 units	
Office	580,374 sf		580,374 sf	
Retail	4,218 sf		30,125 sf	
Restaurant	53,690 sf		75,000 sf	
VMT Analysis [a]				
Resident Population	1,375		3,717	
Employee Population	2,545		2,682	
Project Area Planning Commission	South Valley		South Valley	
Project Travel Behavior Zone	Compact Infill (Zone 3)		Compact Infill (Zone 3)	
	Before TDM	After TDM	Before TDM	After TDM
Total Daily VMT [b]	79,534	67,913	123,802	103,775
Home-Based Production VMT [c]	6,669	5,695	19,785	16,584
Home-Based Work Attraction VMT [c]	26,498	22,626	27,938	23,419
Household VMT per Resident	4.8	4.1	5.3	4.5
Impact Threshold	9.4	9.4	9.4	9.4
Significant Impact	NO	NO	NO	NO
Work VMT per Employee	10.4	8.9	10.4	8.7
Impact Threshold	11.6	11.6	11.6	11.6
Significant Impact	NO	NO	NO	NO

Notes:

Phase 1 consists of development of Blocks 0, 5, 6, 7, and 8.

[a] Project Analysis is from VMT Calculator version 1.3 output reports.

[b] See VMT Calculator Report 1.

[c] See VMT Calculator Report 4.

ATTACHMENT F (continued)

TABLE 12
VMT ANALYSIS FOR INDIVIDUAL PROJECT LAND USES
PHASE 1

Description	Phase 1 Complete [a]	Affordable Housing		Market-Rate Housing		Office	
		Without Affordable Housing [b]	Affordable Housing Only [c]	Without Market-Rate Housing [b]	Market-Rate Housing Only [c]	Without Office [b]	Office Only [c]
Resident Population	1,375	901	474	474	901	1,375	0
Employee Population	2,545	2,545	0	2,545	0	223	2,322
Total Daily VMT [d]	79,534	75,714	3,820	67,587	11,947	43,693	35,841
Home-Based Production VMT [e]	6,669	4,725	1,944	1,190	5,479	7,453	-784
Home-Based Work Attraction VMT [e]	26,498	26,596	-98	26,511	-13	2,769	23,729
Household VMT per Resident [f]	4.8		4.1		6.1		
Impact Threshold	9.4		9.4		9.4		n/a
Significant Impact	NO		NO		NO		
Work VMT per Employee [g]	10.4						10.2
Impact Threshold	11.6		n/a		n/a		11.6
Significant Impact	NO						NO

Notes:

Phase 1 consists of development of Blocks 0, 5, 6, 7, and 8.

[a] See Table 11.

[b] VMT Calculator results when run with all Phase 1 land uses except the indicated use.

[c] The difference between the complete Phase 1 results and the results excluding the indicated land use, which represents the incremental effect on population and VMT of the indicated land use when accounting for trips between Project land uses.

[d] See VMT Calculator Report 1.

[e] See VMT Calculator Report 4.

[f] Household VMT per Capita = Home-Based Production VMT / Resident Population.

[g] Work VMT per Employee = Home-Based Work Attraction VMT / Employee Population.

ATTACHMENT F (continued)

TABLE 13
VMT ANALYSIS FOR INDIVIDUAL PROJECT LAND USES
FULL BUILDOUT

Description	Full Buildout Complete [a]	Affordable Housing		Market-Rate Housing		Office	
		Without Affordable Housing [b]	Affordable Housing Only [c]	Without Market-Rate Housing [b]	Market-Rate Housing Only [c]	Without Office [b]	Office Only [c]
Resident Population	3,717	2,740	977	977	2,740	3,717	0
Employee Population	2,682	2,682	0	2,682	0	360	2,322
Total Daily VMT [d]	123,802	115,871	7,931	88,443	35,359	88,699	35,103
Home-Based Production VMT [e]	19,785	15,874	3,911	3,164	16,621	20,774	-989
Home-Based Work Attraction VMT [e]	27,938	28,084	-146	28,243	-305	4,233	23,705
Household VMT per Resident [f]	5.3		4.0		6.1		
Impact Threshold	9.4		9.4		9.4		n/a
Significant Impact	NO		NO		NO		
Work VMT per Employee [g]	10.4						10.2
Impact Threshold	11.6		n/a		n/a		11.6
Significant Impact	NO						NO

Notes:

[a] See Table 11.

[b] VMT Calculator results when run with all Project land uses except the indicated use.

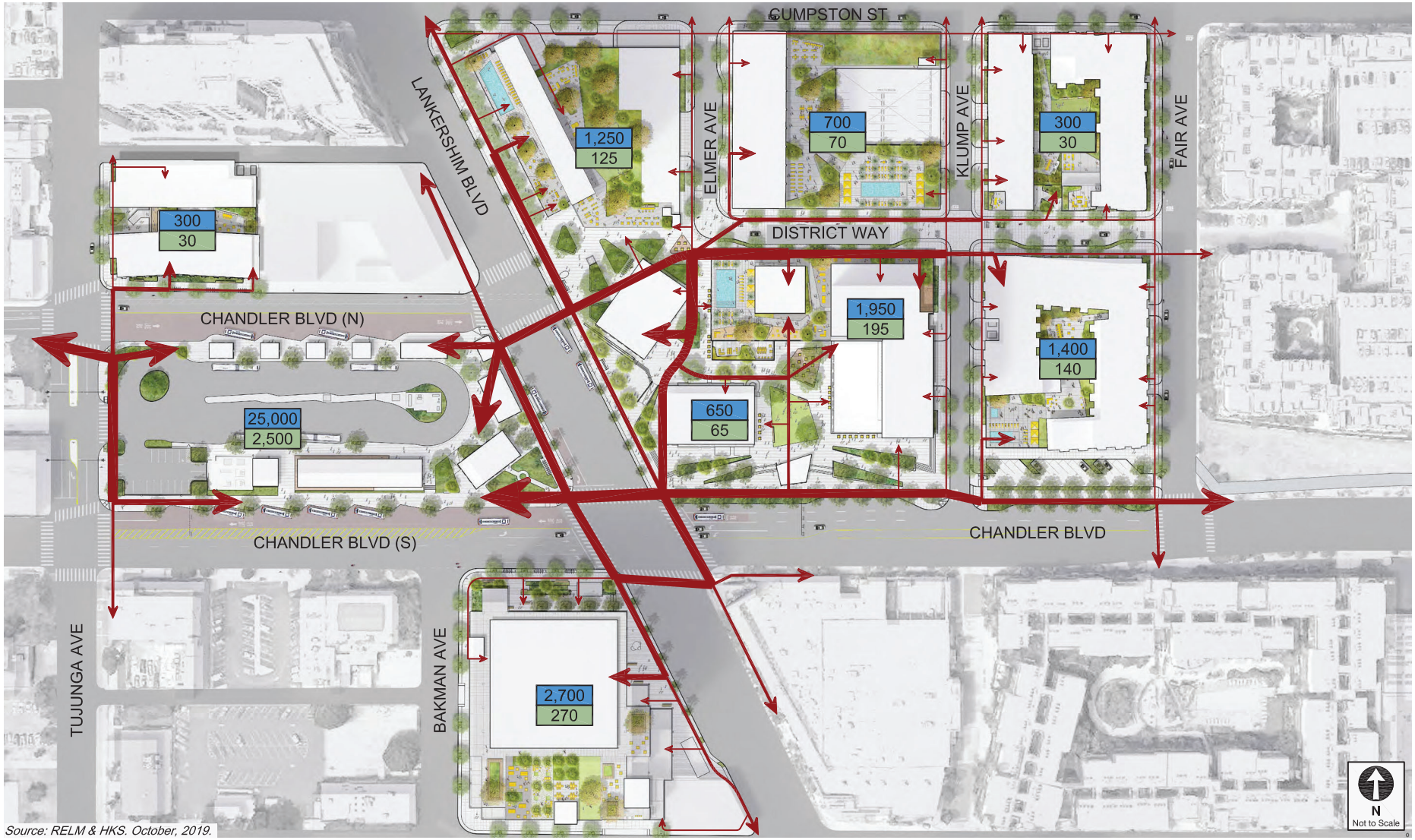
[c] The difference between the complete Project results and the results excluding the indicated land use, which represents the incremental effect on population and VMT of the indicated land use when accounting for trips between Project land uses.

[d] See VMT Calculator Report 1.

[e] See VMT Calculator Report 4.

[f] Household VMT per Capita = Home-Based Production VMT / Resident Population.

[g] Work VMT per Employee = Home-Based Work Attraction VMT / Employee Population.



Source: RELM & HKS. October, 2019.

LEGEND

X,XXX — Estimated Daily Pedestrian Trips
X,XXX — Estimated Peak Hour Pedestrian Trips

PEDESTRIAN PATHS OF TRAVEL

Minimal Pedestrian Activity (~10 trips/hr)

Maximum Pedestrian Activity (up to 800 trips/hr)

ESTIMATED PROJECT-RELATED PEDESTRIAN ACTIVITY

FIGURE 13

ATTACHMENT H

TABLE 20
PROJECT TRIP GENERATION RATES

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Affordable Family Housing	[a]	per du	37%	63%	0.49	56%	44%	0.35
Multi-Family Housing (Mid-Rise) [b]	221	per du	26%	74%	0.34	61%	39%	0.43
Multi-Family Housing (High-Rise) [c]	222	per du	24%	76%	0.29	61%	39%	0.35
Office [d]	710	per 1,000 sf	86%	14%	0.99	16%	84%	1.04
Shopping Center	820	per 1,000 sf	62%	38%	0.94	48%	52%	3.81
High-Turnover (Sit-Down) Restaurant	932	per 1,000 sf	55%	45%	9.94	62%	38%	9.77

Notes:

du = dwelling unit; sf = square feet.

Trip generation rates are from *Trip Generation Manual, 10th Edition* (Institute of Transportation Engineers, 2017), except as noted below.

[a] Affordable family housing trip generation rates from Table 3.3-2 of LADOT's Transportation Assessment Guidelines for projects within a Transit Priority Area.

[b] Multi-family housing (Mid-Rise) trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 194 apartment units on Block 4.

Daily: $T = 5.45(X) - 1.75$ T = Average Vehicle Trips X = 1,000 sf

Morning Peak Hour: $Ln(T) = 0.98\ Ln(X) - 0.98$

Afternoon Peak Hour: $Ln(T) = 0.96\ Ln(X) - 0.63$

[c] Multi-family housing (High-Rise) morning and afternoon peak hour trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 1,022 apartment units between Blocks 1, 2, and 5:

Morning Peak Hour: $T = 0.28(X) + 12.86$ T = Average Vehicle Trips X = 1,000 sf

Daily trip generation rate is the average rate provided in *Trip Generation Manual, 10th Edition*.

[d] Office trip generation rates are based on the following fitted-curve equations from *Trip Generation Manual, 10th Edition* for 580,374 sf of office between Blocks 0, 5, and 8:

Daily: $Ln(T) = 0.97\ Ln(X) + 2.50$ T = Average Vehicle Trips X = 1,000 sf

Morning Peak Hour: $T = 0.94\ (X) + 26.49$

Afternoon Peak Hour: $Ln(T) = 0.95\ Ln(X) + 0.36$

ATTACHMENT H (continued)

TABLE 21
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 0								
Office	710	709 sf	1	0	1	0	1	1
Transit/Walk Adjustment - 25%			*0*	*0*	*0*	*0*	*0*	*0*
Retail	820	1,643 sf	1	1	2	3	3	6
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*0*	*(1)*	*(1)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(1)*	*(1)*	*(2)*
Restaurant	932	6,497 sf	36	29	65	39	24	63
Internal Capture - 10%			*(4)*	*(3)*	*(7)*	*(4)*	*(2)*	*(6)*
Transit/Walk Adjustment - 25%			*(8)*	*(7)*	*(15)*	*(9)*	*(5)*	*(14)*
Pass-By Adjustment - 20%			*(5)*	*(4)*	*(9)*	*(6)*	*(3)*	*(9)*
Block 0 Subtotal			**19**	**16**	**35**	**22**	**15**	**37**
Block 1								
Multi-Family Housing (High-Rise)	222	313 du	22	69	91	67	43	110
Retail	820	10,507 sf	6	4	10	19	21	40
Internal Capture - 10%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Transit/Walk Adjustment - 25%			*(1)*	*(1)*	*(2)*	*(4)*	*(5)*	*(9)*
Pass-By Adjustment - 50%			*(2)*	*(2)*	*(4)*	*(7)*	*(7)*	*(14)*
Restaurant	932	7,985 sf	43	36	79	48	30	78
Internal Capture - 10%			*(4)*	*(4)*	*(8)*	*(5)*	*(3)*	*(8)*
Transit/Walk Adjustment - 25%			*(10)*	*(8)*	*(18)*	*(11)*	*(7)*	*(18)*
Pass-By Adjustment - 20%			*(6)*	*(5)*	*(11)*	*(6)*	*(4)*	*(10)*
Block 1 Subtotal			**47**	**89**	**136**	**99**	**66**	**165**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

ATTACHMENT H (continued)

TABLE 21 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 2								
Multi-Family Housing (High-Rise)	222	309 du	22	68	90	66	42	108
Retail	820	2,975 sf	2	1	3	5	6	11
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*(1)*	*(2)*	*(3)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Block 2 Subtotal			**22**	**69**	**91**	**68**	**43**	**111**
Block 3								
Affordable Family Housing	n/a	160 du	29	49	78	31	25	56
Block 3 Subtotal			**29**	**49**	**78**	**31**	**25**	**56**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

ATTACHMENT H (continued)

TABLE 21 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 4								
Multi-Family Housing (Mid-Rise)	221	194 du	17	49	66	51	32	83
Retail [a]	820	12,425 sf	7	5	12	23	24	47
Internal Capture - 10%			*(1)*	*0*	*(1)*	*(2)*	*(3)*	*(5)*
Transit/Walk Adjustment - 25%			*(2)*	*(1)*	*(3)*	*(5)*	*(6)*	*(11)*
Pass-By Adjustment - 50%			*(2)*	*(2)*	*(4)*	*(8)*	*(8)*	*(16)*
Restaurant	932	13,325 sf	73	59	132	81	49	130
Internal Capture - 10%			*(7)*	*(6)*	*(13)*	*(8)*	*(5)*	*(13)*
Transit/Walk Adjustment - 25%			*(17)*	*(13)*	*(30)*	*(18)*	*(11)*	*(29)*
Pass-By Adjustment - 20%			*(10)*	*(8)*	*(18)*	*(11)*	*(7)*	*(18)*
Block 4 Subtotal			**58**	**83**	**141**	**103**	**65**	**168**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.
[a] For future flexibility, 450 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 4.

ATTACHMENT H (continued)

TABLE 21 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 5								
Multi-Family Housing (High-Rise)	222	400 du	28	88	116	85	55	140
Office	710	91,345 sf	77	13	90	15	80	95
Transit/Walk Adjustment - 25%			*(20)*	*(3)*	*(23)*	*(4)*	*(20)*	*(24)*
Retail	820	2,575 sf	1	1	2	5	5	10
Internal Capture - 10%			*0*	*0*	*0*	*0*	*(1)*	*(1)*
Transit/Walk Adjustment - 25%			*(1)*	*0*	*(1)*	*(1)*	*(1)*	*(2)*
Pass-By Adjustment - 50%			*(1)*	*0*	*(1)*	*(2)*	*(2)*	*(4)*
Restaurant	932	15,227 sf	83	68	151	92	57	149
Internal Capture - 10%			*(8)*	*(7)*	*(15)*	*(9)*	*(6)*	*(15)*
Transit/Walk Adjustment - 25%			*(19)*	*(15)*	*(34)*	*(21)*	*(13)*	*(34)*
Pass-By Adjustment - 20%			*(11)*	*(9)*	*(20)*	*(12)*	*(8)*	*(20)*
Block 5 Subtotal			**129**	**136**	**265**	**148**	**146**	**294**
Block 6								
Restaurant	932	13,024 sf	71	58	129	79	48	127
Internal Capture - 10%			*(7)*	*(6)*	*(13)*	*(8)*	*(5)*	*(13)*
Transit/Walk Adjustment - 25%			*(16)*	*(13)*	*(29)*	*(18)*	*(11)*	*(29)*
Pass-By Adjustment - 20%			*(9)*	*(8)*	*(17)*	*(11)*	*(6)*	*(17)*
Block 6 Subtotal			**39**	**31**	**70**	**42**	**26**	**68**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

ATTACHMENT H (continued)

TABLE 21 (CONTINUED)
PROJECT TRIP GENERATION ESTIMATES BY BLOCK

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Block 7								
Affordable Family Housing	n/a	151 du	27	47	74	30	23	53
Block 7 Subtotal			**27**	**47**	**74**	**30**	**23**	**53**
Block 8								
Office	710	488,320 sf	415	68	483	81	427	508
Transit/Walk Adjustment - 25%			*(104)*	*(17)*	*(121)*	*(20)*	*(107)*	*(127)*
Retail [a]	820	0 sf	0	0	0	0	0	0
Restaurant	932	18,942 sf	103	85	188	115	70	185
Internal Capture - 10%			*(10)*	*(9)*	*(19)*	*(12)*	*(7)*	*(19)*
Transit/Walk Adjustment - 25%			*(23)*	*(19)*	*(42)*	*(26)*	*(16)*	*(42)*
Pass-By Adjustment - 20%			*(14)*	*(11)*	*(25)*	*(16)*	*(9)*	*(25)*
Block 8 Subtotal			**367**	**97**	**464**	**122**	**358**	**480**
TOTAL - PROPOSED PROJECT			**737**	**617**	**1,354**	**665**	**767**	**1,432**

Notes:
du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.
[a] For future flexibility, 10,284 sf of retail space was analyzed as restaurant (a higher trip generator) in Block 8.

ATTACHMENT H (continued)

TABLE 22
PROJECT TRIP GENERATION SUMMARY

Block Number and Primary Land Use	Phase	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Block 0 *Transit Center*	1	19	16	35	22	15	37
Block 1 *Market-Rate Housing*	2	47	89	136	99	66	165
Block 2 *Market-Rate Housing*	2	22	69	91	68	43	111
Block 3 *Affordable Housing*	2	29	49	78	31	25	56
Block 4 *Market-Rate Housing*	2	58	83	141	103	65	168
Block 5 *Market-Rate Housing / Office*	1	129	136	265	148	146	294
Block 6 *Retail and Restaurant*	1	39	31	70	42	26	68
Block 7 *Affordable Housing*	1	27	47	74	30	23	53
Block 8 *Office*	1	367	97	464	122	358	480
Phase 1 Trip Generation		**581**	**327**	**908**	**364**	**568**	**932**
Full Buildout Trip Generation		**737**	**617**	**1,354**	**665**	**767**	**1,432**

Notes:
Trip generation estimates from Table 21.

ATTACHMENT H (continued)

TABLE 23
PROJECT TRIP GENERATION WITH LAND USE EXCHANGE

Land Use	ITE Land Use	Rate or Size	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
Affordable Family Housing	220	311 du	56	96	152	61	48	109
Multi-Family Housing (Mid-Rise)	221	194 du	17	49	66	51	33	84
Multi-Family Housing (High-Rise)	222	1,022 du	72	227	299	217	139	356
Office	710	655,374 sf	553	90	643	109	570	679
Transit/Walk Adjustment - 25%			*(138)*	*(23)*	*(161)*	*(27)*	*(143)*	*(170)*
Retail	820	0 sf [a]	0	0	0	0	0	0
Restaurant	932	30,125 sf [a]	164	135	299	182	112	294
Internal Capture - 10%			*(17)*	*(13)*	*(30)*	*(18)*	*(11)*	*(29)*
Transit/Walk Adjustment - 25%			*(37)*	*(30)*	*(67)*	*(41)*	*(25)*	*(66)*
Pass-By Adjustment - 20%			*(22)*	*(18)*	*(40)*	*(25)*	*(15)*	*(40)*
TOTAL - PROPOSED PROJECT WITH LAND USE EXCHANGE			**648**	**513**	**1,161**	**509**	**708**	**1,217**

Notes:

du = dwelling unit; sf = square feet. Estimates based on trip generation rates from Table 20.

[a] With the land use exchange, all of the retail space was assumed to become office space.

ATTACHMENT I

TABLE 27
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Phase 1 Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
1.	SR 170 Southbound Off-ramp & Burbank Boulevard	A.M. P.M.	53.7 26.3	D C	60.3 27.6	E C	6.6 1.3
2. [a]	SR 170 Northbound On-ramp & Burbank Boulevard	A.M. P.M.	0.0 0.0	A A	0.0 0.0	A A	0.0 0.0
3.	Colfax Avenue & Burbank Boulevard	A.M. P.M.	16.0 17.5	B B	16.2 30.5	B C	0.2 13.0
4.	Troost Avenue / SR 170 Northbound Off-ramp & Burbank Boulevard	A.M. P.M.	23.5 50.3	C D	24.2 49.4	C D	0.7 -0.9
5.	Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard	A.M. P.M.	81.4 125.1	F F	90.7 122.1	F F	9.3 -3.0
6.	Vineland Avenue & Burbank Boulevard	A.M. P.M.	29.4 27.1	C C	34.0 27.3	C C	4.6 0.2
7. [b]	Tujunga Avenue & Cumpston Street (West)	A.M. P.M.	12.2 11.5	B B	15.4 11.6	C B	3.2 0.1
8. [b]	Tujunga Avenue & Cumpston Street (East)	A.M. P.M.	12.0 11.6	B B	15.3 12.0	C B	3.3 0.4
9.	Lankershim Boulevard & Cumpston Street	A.M. P.M.	18.8 28.5	B C	19.6 18.8	B B	0.8 -9.7
10. [c]	Elmer Avenue & Cumpston Street	A.M. P.M.	11.3 12.0	B B	10.0 10.3	A B	-1.3 -1.7
11. [c]	Klump Avenue & Cumpston Street	A.M. P.M.	8.5 8.5	A A	9.4 9.8	A A	0.9 1.3
12. [b]	Bonner Avenue / Fair Avenue & Cumpston Street	A.M. P.M.	13.1 13.3	B B	13.2 14.4	B B	0.1 1.1
13. [c,d]	Fair Avenue & District Way	A.M. P.M.	10.6 10.7	B B	9.3 9.2	A A	-1.3 -1.5

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Intersection configuration modified, or intersection constructed, by the Project.

ATTACHMENT I (continued)

TABLE 27 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026) INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Phase 1 Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
14.	Colfax Avenue & Chandler Boulevard	A.M. P.M.	49.6 40.0	D D	50.6 40.1	D D	1.0 0.1
15. [d]	Tujunga Avenue & Chandler Boulevard (North)	A.M. P.M.	20.8 18.0	C B	25.9 20.3	C C	5.1 2.3
16. [d]	Lankershim Boulevard & Chandler Boulevard (North)	A.M. P.M.	4.7 14.1	A B	44.2 22.5	D C	39.5 8.4
17.	Tujunga Avenue & Metro G (Orange) Line Busway	A.M. P.M.	3.7 4.2	A A	2.8 3.5	A A	-0.9 -0.7
18. [d]	Tujunga Avenue & Chandler Boulevard (South)	A.M. P.M.	47.7 44.3	D D	30.3 26.5	C C	-17.4 -17.8
19. [b,d]	Bakman Avenue & Chandler Boulevard (South)	A.M. P.M.	15.1 14.8	B B	15.5 17.0	B B	0.4 2.2
20. [d]	Lankershim Boulevard & Chandler Boulevard	A.M. P.M.	30.2 30.2	C C	31.5 32.4	C C	1.3 2.2
21. [b,d]	Klump Avenue & Chandler Boulevard	A.M. P.M.	11.6 14.1	B B	27.6 70.3	D F	16.0 56.2
22.	Fair Avenue & Chandler Boulevard	A.M. P.M.	13.5 12.5	B B	14.3 13.0	B B	0.8 0.5
23.	Vineland Avenue & Chandler Boulevard (West Leg)	A.M. P.M.	16.2 16.6	B B	18.0 17.9	B B	1.8 1.3
24.	Vineland Avenue & Chandler Boulevard (East Leg)	A.M. P.M.	7.4 11.7	A B	7.7 12.4	A B	0.3 0.7
25. [c]	Bakman Avenue & Weddington Street	A.M. P.M.	9.7 8.1	A A	11.6 10.6	B B	1.9 2.5
26.	Lankershim Boulevard & Weddington Street	A.M. P.M.	8.5 11.0	A B	10.5 12.7	B B	2.0 1.7

Notes:
Intersections are signalized except as otherwise noted.
[a] Intersection is uncontrolled.
[b] Intersection is 2-way stop-controlled
[c] Intersection is all-way stop-controlled.
[d] Intersection configuration modified, or intersection constructed, by the Project.

ATTACHMENT I (continued)

TABLE 27 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026) INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Phase 1 Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
27.	SR 170 Southbound Ramps & Magnolia Boulevard	A.M. P.M.	106.3 42.3	F D	133.7 73.2	F E	27.4 30.9
28.	SR 170 Northbound Ramps & Magnolia Boulevard	A.M. P.M.	18.4 36.9	B D	20.4 43.3	C D	2.0 6.4
29.	Tujunga Avenue & Magnolia Boulevard	A.M. P.M.	61.1 21.2	E C	66.7 27.9	E C	5.6 6.7
30.	Lankershim Boulevard & Magnolia Boulevard	A.M. P.M.	41.5 40.4	D D	53.8 53.0	D D	12.3 12.6
31.	Vineland Avenue & Magnolia Boulevard	A.M. P.M.	39.7 52.3	D D	43.8 55.4	D E	4.1 3.1
32.	Tujunga Avenue / Riverside Drive & Camarillo Street	A.M. P.M.	104.9 63.8	F E	119.8 67.9	F E	14.9 4.1
33.	Lankershim Boulevard / Vineland Avenue & Camarillo Street	A.M. P.M.	96.7 67.6	F E	107.6 68.3	F E	10.9 0.7
34. [a]	Tujunga Avenue & US 101 Westbound On-ramp	A.M. P.M.	0.0 0.0	A A	0.0 0.0	A A	0.0 0.0
35. [b]	Tujunga Avenue & US 101 Eastbound Off-ramp	A.M. P.M.	12.9 16.9	B C	13.7 19.1	B C	0.8 2.2
36.	Vineland Avenue & Riverside Drive	A.M. P.M.	81.9 44.0	F D	82.1 44.2	F D	0.2 0.2
37.	Lankershim Boulevard & SR 134 Westbound Off-ramp	A.M. P.M.	14.4 13.6	B B	14.8 14.0	B B	0.4 0.4
38.	Lankershim Boulevard & Riverside Drive	A.M. P.M.	25.7 42.7	C D	25.8 45.4	C D	0.1 2.7
39.	Lankershim Boulevard & Moorpark Street	A.M. P.M.	33.8 18.0	C B	36.7 18.3	D B	2.9 0.3

Notes:
Intersections are signalized except as otherwise noted.
[a] Intersection is uncontrolled.
[b] Intersection is 2-way stop-controlled
[c] Intersection is all-way stop-controlled.
[d] Intersection configuration modified, or intersection constructed, by the Project.

ATTACHMENT I (continued)

TABLE 28
FUTURE CONDITIONS (YEAR 2037) INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Full Buildout Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
1.	SR 170 Southbound Off-ramp & Burbank Boulevard	A.M. P.M.	65.0 31.9	E C	73.3 35.8	E D	8.3 3.9
2. [a]	SR 170 Northbound On-ramp & Burbank Boulevard	A.M. P.M.	0.0 0.0	A A	0.0 0.0	A A	0.0 0.0
3.	Colfax Avenue & Burbank Boulevard	A.M. P.M.	17.5 22.0	B C	18.3 49.8	B D	0.8 27.8
4.	Troost Avenue / SR 170 Northbound Off-ramp & Burbank Boulevard	A.M. P.M.	27.2 58.4	C E	29.6 62.4	C E	2.4 4.0
5.	Lankershim Boulevard / Tujunga Avenue & Burbank Boulevard	A.M. P.M.	99.6 145.9	F F	111.8 143.6	F F	12.2 -2.3
6.	Vineland Avenue & Burbank Boulevard	A.M. P.M.	43.2 31.7	D C	51.9 33.2	D C	8.7 1.5
7. [b]	Tujunga Avenue & Cumpston Street (West)	A.M. P.M.	12.5 11.6	B B	16.5 12.0	C B	4.0 0.4
8. [b]	Tujunga Avenue & Cumpston Street (East)	A.M. P.M.	12.2 11.8	B B	16.6 12.5	C B	4.4 0.7
9.	Lankershim Boulevard & Cumpston Street	A.M. P.M.	19.8 31.9	B C	22.5 35.5	C D	2.7 3.6
10. [c]	Elmer Avenue & Cumpston Street	A.M. P.M.	11.8 12.5	B B	12.0 12.2	B B	0.2 -0.3
11. [c]	Klump Avenue & Cumpston Street	A.M. P.M.	8.6 8.6	A A	10.6 10.8	B B	2.0 2.2
12. [b]	Bonner Avenue / Fair Avenue & Cumpston Street	A.M. P.M.	13.5 13.7	B B	13.6 15.1	B C	0.1 1.4
13. [c,d]	Fair Avenue & District Way	A.M. P.M.	10.7 10.9	B B	9.5 9.4	A A	-1.2 -1.5

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Intersection configuration modified, or intersection constructed, by the Project.

ATTACHMENT I (continued)

TABLE 28 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037) INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Full Buildout Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
14.	Colfax Avenue & Chandler Boulevard	A.M. P.M.	53.4 41.0	D D	55.2 41.4	E D	1.8 0.4
15. [d]	Tujunga Avenue & Chandler Boulevard (North)	A.M. P.M.	20.6 18.0	C B	30.9 20.8	C C	10.3 2.8
16. [d]	Lankershim Boulevard & Chandler Boulevard (North)	A.M. P.M.	5.0 13.0	A B	65.0 23.3	E C	60.0 10.3
17.	Tujunga Avenue & Metro G (Orange) Line Busway	A.M. P.M.	3.7 4.0	A A	2.5 3.2	A A	-1.2 -0.8
18. [d]	Tujunga Avenue & Chandler Boulevard (South)	A.M. P.M.	48.3 44.9	D D	30.8 26.0	C C	-17.5 -18.9
19. [b,d]	Bakman Avenue & Chandler Boulevard (South)	A.M. P.M.	15.9 15.4	B B	16.8 19.9	B B	0.9 4.5
20. [d]	Lankershim Boulevard & Chandler Boulevard	A.M. P.M.	31.0 30.9	C C	36.9 32.9	D C	5.9 2.0
21. [b,d]	Klump Avenue & Chandler Boulevard	A.M. P.M.	11.8 14.6	B B	361.6 985.8	F F	349.8 971.2
22.	Fair Avenue & Chandler Boulevard	A.M. P.M.	13.8 12.7	B B	15.3 13.9	B B	1.5 1.2
23.	Vineland Avenue & Chandler Boulevard (West Leg)	A.M. P.M.	16.3 16.8	B B	20.2 20.7	C C	3.9 3.9
24.	Vineland Avenue & Chandler Boulevard (East Leg)	A.M. P.M.	7.5 12.3	A B	8.0 13.8	A B	0.5 1.5
25. [c]	Bakman Avenue & Weddington Street	A.M. P.M.	10.0 8.2	A A	12.2 10.9	B B	2.2 2.7
26.	Lankershim Boulevard & Weddington Street	A.M. P.M.	8.7 11.4	A B	11.6 13.4	B B	2.9 2.0

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is uncontrolled.

[b] Intersection is 2-way stop-controlled

[c] Intersection is all-way stop-controlled.

[d] Intersection configuration modified, or intersection constructed, by the Project.

ATTACHMENT I (continued)

TABLE 28 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037) INTERSECTION LEVELS OF SERVICE

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Full Buildout Conditions		
			Delay	LOS	Delay	LOS	Δ Delay
27.	SR 170 Southbound Ramps & Magnolia Boulevard	A.M. P.M.	127.4 54.0	F D	195.6 112.0	F F	68.2 58.0
28.	SR 170 Northbound Ramps & Magnolia Boulevard	A.M. P.M.	19.2 42.6	B D	24.2 57.4	C E	5.0 14.8
29.	Tujunga Avenue & Magnolia Boulevard	A.M. P.M.	82.0 23.1	F C	110.0 53.9	F D	28.0 30.8
30.	Lankershim Boulevard & Magnolia Boulevard	A.M. P.M.	53.5 48.7	D D	74.0 66.8	E E	20.5 18.1
31.	Vineland Avenue & Magnolia Boulevard	A.M. P.M.	52.3 60.1	D E	59.5 66.2	E E	7.2 6.1
32.	Tujunga Avenue / Riverside Drive & Camarillo Street	A.M. P.M.	119.5 72.4	F E	139.6 81.5	F F	20.1 9.1
33.	Lankershim Boulevard / Vineland Avenue & Camarillo Street	A.M. P.M.	111.1 69.8	F E	130.3 74.5	F E	19.2 4.7
34. [a]	Tujunga Avenue & US 101 Westbound On-ramp	A.M. P.M.	0.0 0.0	A A	0.0 0.0	A A	0.0 0.0
35. [b]	Tujunga Avenue & US 101 Eastbound Off-ramp	A.M. P.M.	13.3 18.1	B C	14.6 24.1	B C	1.3 6.0
36.	Vineland Avenue & Riverside Drive	A.M. P.M.	92.8 49.8	F D	94.0 50.7	F D	1.2 0.9
37.	Lankershim Boulevard & SR 134 Westbound Off-ramp	A.M. P.M.	15.2 14.2	B B	16.3 15.2	B B	1.1 1.0
38.	Lankershim Boulevard & Riverside Drive	A.M. P.M.	27.1 49.5	C D	30.0 55.0	C D	2.9 5.5
39.	Lankershim Boulevard & Moorpark Street	A.M. P.M.	54.3 19.5	D B	62.4 20.3	E C	8.1 0.8

Notes:
Intersections are signalized except as otherwise noted.
[a] Intersection is uncontrolled.
[b] Intersection is 2-way stop-controlled
[c] Intersection is all-way stop-controlled.
[d] Intersection configuration modified, or intersection constructed, by the Project.

ATTACHMENT J

TABLE 29
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Phase 1 Conditions	Project Contribution to Queue Length
Intersection #1, SR 170 Southbound Off-ramp & Burbank Boulevard					
Southbound Left-Turn *from SR 170 Southbound to Burbank Boulevard*	330	A.M.	553	635	82
		P.M.	275	280	5
Intersection #3, Colfax Avenue & Burbank Boulevard					
Northbound Left-Turn *from Colfax Avenue to Burbank Boulevard*	65	A.M.	218	220	2
		P.M.	298	733	435
Intersection #5, Lankershim Boulevard & Burbank Boulevard					
Eastbound Right-Turn *from Burbank Boulevard to Lankershim Boulevard*	250 [a]	A.M.	628	878	250
		P.M.	358	650	292
Northbound Left-Turn *from Lankershim Boulevard to Burbank Boulevard*	160	A.M.	260	358	98
		P.M.	343	315	-28
Intersection #6, Vineland Avenue & Burbank Boulevard					
Westbound Left-Turn *from Burbank Boulevard to Vineland Avenue*	140	A.M.	163	218	55
		P.M.	115	133	18
Intersection #16, Lankershim Boulevard & Chandler Boulevard (North)					
Northbound Left-Turn *from Lankershim Boulevard to Chandler Boulevard (North)*	50	A.M.	200	398	198
		P.M.	308	400	92

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[a] The eastbound travel lane ends in a right-turn pocket, and therefore the queue does not block through traffic.

ATTACHMENT J (continued)

TABLE 29 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026) INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Phase 1 Conditions	Project Contribution to Queue Length
Intersection #18, Tujunga Avenue & Chandler Boulevard (South)					
Eastbound Right-Turn *from Tujunga Avene to Chandler Boulevard (South)*	75	A.M.	430	618	188
		P.M.	168	268	100
Intersection #20, Lankershim Boulevard & Chandler Boulevard (South)					
Westbound Right-Turn *from Chandler Boulevard to Lankershim Boulevard*	340	A.M.	240	260	20
		P.M.	338	475	137
Intersection #26, Lankershim Boulevard & Weddington Street					
Westbound Left-Turn *from Weddington Street to Lankershim Boulevard*	60	A.M.	10	80	70
		P.M.	18	38	20
Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard					
Westbound Left-Turn *from Magnolia Boulevard to SR 170 Southbound*	430	A.M.	1,020	1,353	333
		P.M.	893	1,450	557
Southbound Left-Turn *from SR 170 Southbound to Magnolia Boulevard*	675 [b]	A.M.	1,200	1,273	73
		P.M.	248	250	2

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[b] The off-ramp extends an additional 500 feet beyond the point where the left-turn and right-turn lanes diverge.

ATTACHMENT J (continued)

TABLE 29 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026) INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Phase 1 Conditions	Project Contribution to Queue Length
Intersection #28, SR 170 Northbound Ramps & Magnolia Boulevard					
Northbound Left-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	293	338	45
		P.M.	473	560	87
Northbound Right-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	383	430	47
		P.M.	628	723	95
Intersection #30, Lankershim Boulevard & Magnolia Boulevard					
Eastbound Left-Turn *from Magnoila Boulevard to Lankershim Boulevard*	140	A.M.	328	485	157
		P.M.	365	438	73
Northbound Left-Turn *from Lankershim Boulevard to Magnoila Boulevard*	205	A.M.	183	295	112
		P.M.	255	263	8
Intersection #31, Vineland Avenue & Magnolia Boulevard					
Southbound Left-Turn *from Vineland Avenue to Magnolia Boulevard*	150	A.M.	405	463	58
		P.M.	653	660	7
Intersection #38, Lankershim Boulevard & Riverside Drive					
Southbound Right-Turn *from Lankershim Boulevard to Riverside Drive*	100	A.M.	210	213	3
		P.M.	443	510	67

Notes:
All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

ATTACHMENT J (continued)

TABLE 30
FUTURE CONDITIONS (YEAR 2037) INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #1, SR 170 Southbound Off-ramp & Burbank Boulevard					
Southbound Left-Turn *from SR 170 Southbound to Burbank Boulevard*	330	A.M.	640	740	100
		P.M.	285	298	13
Intersection #3, Colfax Avenue & Burbank Boulevard					
Eastbound Left-Turn *from Burbank Boulevard to Colfax Avenue*	125	A.M.	53	55	2
		P.M.	123	323	200
Northbound Left-Turn *from Colfax Avenue to Burbank Boulevard*	65	A.M.	215	233	18
		P.M.	330	730	400
Intersection #5, Lankershim Boulevard & Burbank Boulevard					
Eastbound Right-Turn *from Burbank Boulevard to Lankershim Boulevard*	250 [a]	A.M.	630	1,058	428
		P.M.	260	298	38
Northbound Left-Turn *from Lankershim Boulevard to Burbank Boulevard*	160	A.M.	263	445	182
		P.M.	490	423	-67
Intersection #6, Vineland Avenue & Burbank Boulevard					
Westbound Left-Turn *from Burbank Boulevard to Vineland Avenue*	140	A.M.	150	213	63
		P.M.	143	185	42

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[a] The eastbound travel lane ends in a right-turn pocket, and therefore the queue does not block through traffic.

ATTACHMENT J (continued)

TABLE 30 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037) INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #9, Lankershim Boulevard & Cumpston Street					
Southbound Left-Turn *from Lankershim Boulevard to Cumpston Street*	150	A.M.	223	118	-105
		P.M.	313	568	255
Intersection #14, Colfax Avenue & Chandler Boulevard					
Westbound Right-Turn *from Chandler Boulevard to Colfax Avenue*	95	A.M.	85	93	8
		P.M.	58	293	235
Intersection #16, Lankershim Boulevard & Chandler Boulevard (North)					
Northbound Left-Turn *from Lankershim Boulevard to Chandler Boulevard (North)*	50	A.M.	210	443	233
		P.M.	288	395	107
Intersection #18, Tujunga Avenue & Chandler Boulevard (South)					
Eastbound Right-Turn *from Chandler Boulevard to Tujunga Avenue*	75	A.M.	453	650	197
		P.M.	178	275	97
Intersection #20, Lankershim Boulevard & Chandler Boulevard (South)					
Westbound Right-Turn *from Chandler Boulevard to Lankershim Boulevard*	340	A.M.	253	280	27
		P.M.	360	530	170
Intersection #23, Vineland Avenue & Chandler Boulevard (West Leg)					
Northbound Left-Turn *from Vineland Avenue to Burbank Boulevard*	215	A.M.	160	250	90
		P.M.	135	253	118

Notes:
All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

ATTACHMENT J (continued)

TABLE 30 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037) INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #27, SR 170 Southbound Ramps & Magnolia Boulevard					
Westbound Left-Turn *from Magnolia Boulevard to SR 170 Southbound*	430	A.M.	1,125	1,818	693
		P.M.	1,085	1,883	798
Southbound Left-Turn *from SR 170 Southbound to Magnolia Boulevard*	675 [b]	A.M.	1,395	1,480	85
		P.M.	255	260	5
Intersection #28, SR 170 Northbound Ramps & Magnolia Boulevard					
Eastbound Left-Turn *from Magnolia Boulevard to SR 170 Northbound*	170	A.M.	120	170	50
		P.M.	403	473	70
Northbound Left-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	308	375	67
		P.M.	523	670	147
Northbound Right-Turn *from SR 170 Northbound to Magnolia Boulevard*	350 [b]	A.M.	408	493	85
		P.M.	708	1,025	317
Intesection #29, Tujunga Avenue & Magnolia Boulevard					
Westbound Left-Turn *from Magnolia Boulevard to Tujunga Avenue*	140	A.M.	358	478	120
		P.M.	103	238	135

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

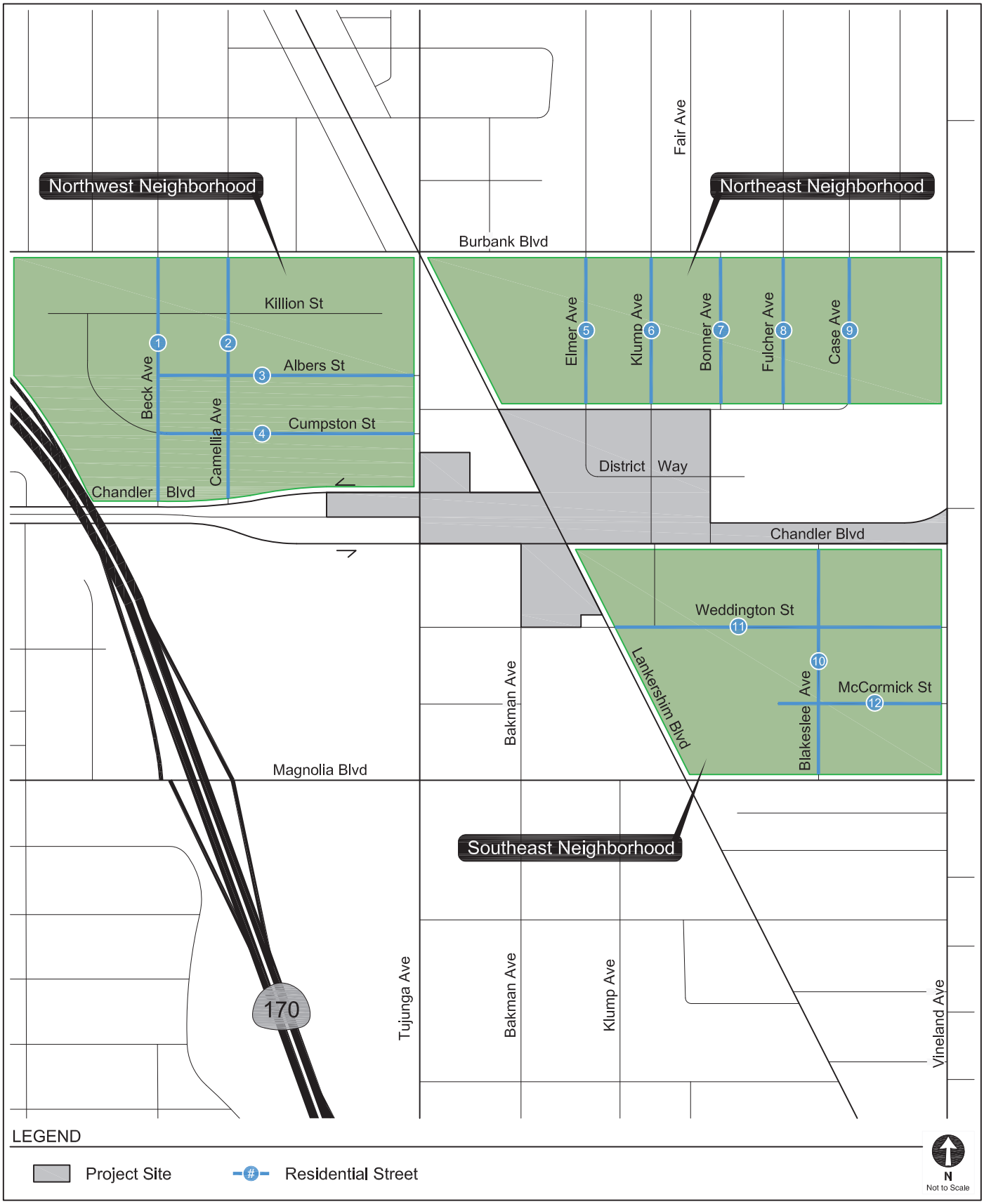
[b] The off-ramp extends an additional 500 feet beyond the point where the left-turn and right-turn lanes diverge.

ATTACHMENT J (continued)

TABLE 30 (CONTINUED)
FUTURE CONDITIONS (YEAR 2037) INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Full Buildout Conditions	Project Contribution to Queue Length
Intersection #30, Lankershim Boulevard & Magnolia Boulevard					
Eastbound Left-Turn *from Magnoila Boulevard to Lankershim Boulevard*	140	A.M.	518	618	100
		P.M.	473	625	152
Northbound Left-Turn *from Lankershim Boulevard to Magnoila Boulevard*	205	A.M.	195	408	213
		P.M.	250	315	65
Intesection #36, Vineland Avenue & Riverside Drive					
Southbound Left-Turn *from Vineland Avenue to Riverside Drive*	225	A.M.	205	273	68
		P.M.	90	125	35
Intersection #38, Lankershim Boulevard & Riverside Drive					
Southbound Right-Turn *from Lankershim Boulevard to Riverside Drive*	100	A.M.	225	240	15
		P.M.	500	595	95

Notes:
All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.



RESIDENTIAL NEIGHBORHOODS AND STREET SEGMENTS

FIGURE 28

ATTACHMENT L

TABLE 4
ROADWAY DEDICATIONS, VACATIONS, AND WAIVERS

Location & Classification	Existing Half-ROW			Required Half-ROW			Proposed Project Action	Proposed Half-ROW with Project		
	Roadway	Sidewalk	Total	Roadway	Sidewalk	Total		Roadway	Sidewalk	Total
Lankershim Boulevard *(Boulevard II)*										
West side, adjacent to Block 0	40	10	50	40	15	55	Waiver Requested [a]	40	10	50
East side, adjacent to Parcel 1	40	10	50	40	15	55	Waiver Requested [a]	40	10	50
West side, adjacent to Block 8	40	10	50	40	15	55	Waiver Requested [a]	40	10	50
Chandler Boulevard *(Boulevard II)*										
North side, adjacent to Parcel 1	40	15	55	40	15	55	10-foot Dedication for inset curb [b]	40	15	55
Chandler Boulevard (North) *(Boulevard II)*										
South side, adjacent to Block 0	16 - 29 (var)	11 - 24 (var)	40	40	15	55	Waiver Requested [c]	30 - 38 (var)	2 - 10 (var)	40
North side, adjacent to Block 7	25	15	40	40	15	55	Waiver Requested [c] [d]	25	15	40
Chandler Boulevard (South) *(Boulevard II)*										
North side, adjacent to Block 0	35	10	45	40	15	55	Waiver Requested [d]	35	10	45
South side, adjacent to Block 8	35	10	45	40	15	55	10-foot Dedication Offered	40	15	55

Notes:
ROW = Right-of-way; roadway classifications from Mobility Plan 2035.
[a] Additional sidewalk width would be provided on the Project Site meeting or exceeding the Boulevard II standard.
[b] The dedication would be for a portion of the frontage to provide an inset curb for passenger pick-up / drop-off and on-street parking.
[c] The Project proposes to maintain the existing 80-foot total ROW, which would include sawtooth bus parking spaces partially within Metro property. Sidewalks would be minimum 15 feet wide, including additional width on Metro property.
[d] The Project proposes sets of sawtooth bus parking spaces on Chandler Boulevard (North and South) adjacent to Block 0. Additional sidewalk width would be provided on Metro property meeting the Boulevard II standard.

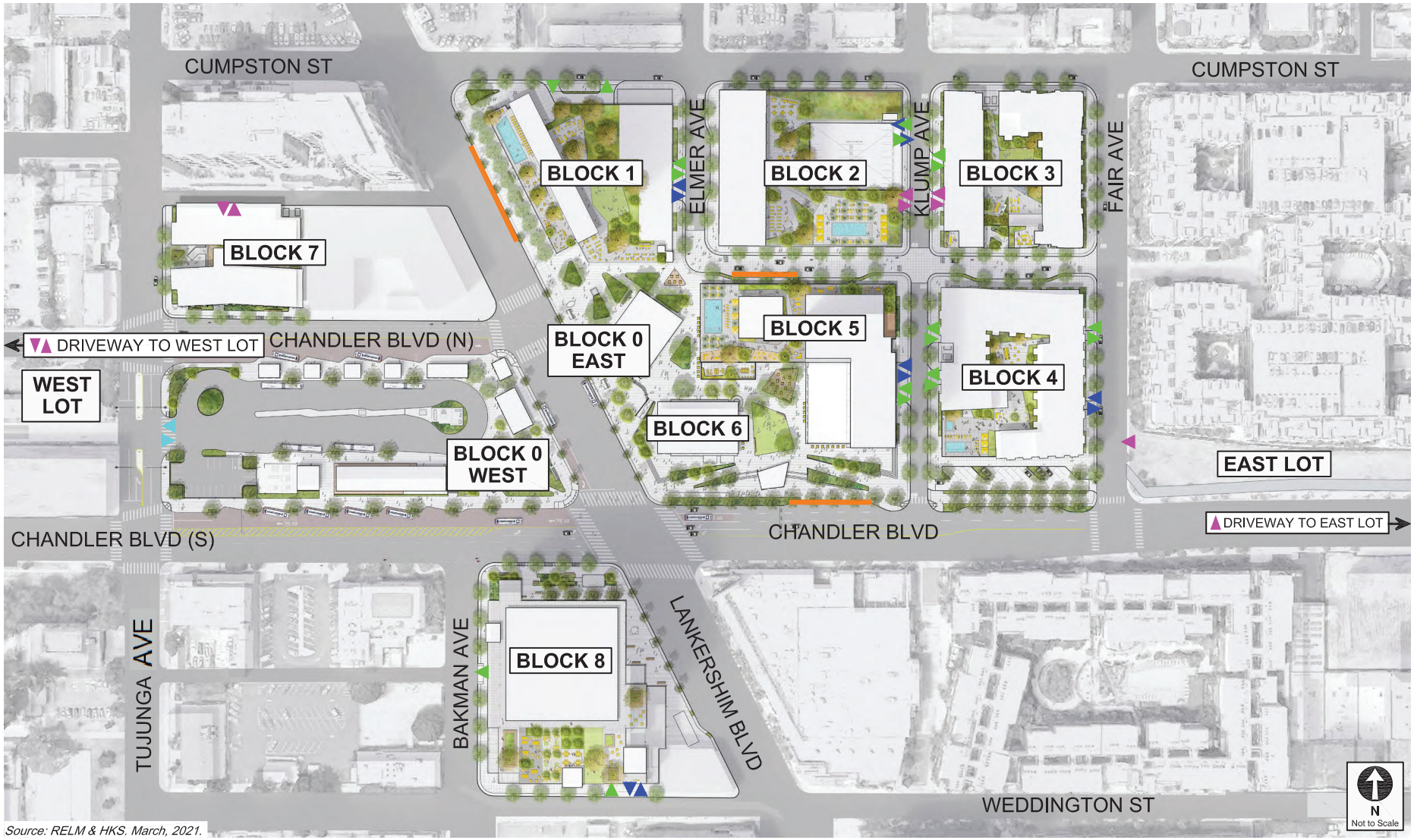
ATTACHMENT L (continued)

TABLE 4 (CONTINUED)
ROADWAY DEDICATIONS, VACATIONS, AND WAIVERS

Location & Classification	Existing Half-ROW			Required Half-ROW			Proposed Project Action	Proposed Half-ROW with Project		
	Roadway	Sidewalk	Total	Roadway	Sidewalk	Total		Roadway	Sidewalk	Total
Tujunga Avenue (Avenue II)										
East side, adjacent to Block 0	40	7	47	28	15	43	Waiver Requested [e]	40	7	47
East side, adjacent to Block 7	40	7	47	28	15	43	8-foot Dedication Offered [f]	40	15	55
Cumpston Street (Collector Street)										
South side, adjacent to Parcel 1	33	10	43	20	13	33	10-foot Vacation Requested	20	13	33
Weddington Avenue (Local Street)										
North side, adjacent to Block 8 (easterly) [g]	17	8	25	18	12	30	5-foot Dedication Offered	18	12	30
North side, adjacent to Block 8 (westerly) [h]	17	8	35 [i]	18	12	30	5-foot Vacation Requested	18	12	30
Bakman Avenue (Local Street)										
East side, adjacent to Block 8	26	14	40	18	12	30	10-foot Vacation Requested	18	12	30

Notes:
ROW = Right-of-way; roadway classifications from Mobility Plan 2035.
[e] The half-ROW exceeds the requirement, but the sidewalk within the public ROW is narrower than required. Additional sidewalk width would be provided on Metro property meeting the Avenue II standard.
[f] The half-ROW exceeds the requirement, but additional dedication is offered to increase the sidewalk width to the Avenue II standard.
[g] Only applies to the easterly portion of Block 8.
[h] Only applies to the westerly portion of Block 8.
[i] Ten feet of the ROW is located behind a fence.

Gibson transportation consulting, inc.



Source: RELM & HKS. March, 2021.

LEGEND

Transit | Metro Parking | Residential, Retail, Office | Commercial Loading | Proposed Passenger Loading

VEHICULAR SITE ACCESS

FIGURE 4