# DRAFT Traffic Impact Analysis

# GLENDALE COMMUNITY COLLEGE DISTRICT

## 2019 FACILITIES MASTER PLAN UPDATE TO THE 2015 FACILITIES MASTER PLAN

Prepared for:
Glendale Community College District (GCCD)

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# 1. Introduction

The purpose of this Traffic Impact Analysis (TIA) is to identify potential traffic-related impacts associated with the Glendale Community College District's (GCCD) 2019 Facilities Master Plan Update to the 2015 Facilities Master Plan within the City of Glendale (City).

The objectives of this traffic study include documenting the existing and future traffic conditions and identifying additional circulation system features or system management actions needed to achieve the City's levels of service and vehicle miles traveled requirements with implementation of the proposed project.

## *1.1 – Project Description*

The proposed project recommends site and facilities improvements for the three GCCD campuses: the historic Verdugo Campus (located at 1500 North Verdugo Road), the Garfield Campus (located at 1122 Garfield Avenue), and the Professional Development Center (located in Montrose at 2340 Honolulu Avenue). The regional and local context of the campuses are shown in Figures 1 through 4 and the improvements are described as such:

- Verdugo Campus improvements would result in 228,853 square feet of renovation, 52,443 square feet of new construction, and 170,387 square feet of demolition. In addition, the Proposed Projects at the Verdugo Campus would add 650 parking spaces to the campus. The number of full-time equivalent students (FTES) of the Verdugo campus in 2017-2018 was 11,853. The number of FTES is anticipated to remain at 11,800 with the improvements. The traffic analysis focuses on the peak construction phase of the project.
- Garfield Campus improvements would result in 43,090 square feet of renovation and approximately 36,000 square feet of demolition. The Garfield campus number of FTES in 2017-2018 at 2,929 and the number is expected to remain approximately the same with the improvements. Therefore, the traffic analysis also focuses on the peak construction phase of the project.
- Montrose Campus improvements would result in 21,559 square feet of renovation and 17,611 square feet of new construction. In addition, the Proposed Projects at the Montrose Campus would add up to approximately 100 parking spaces to the campus. The improvements would result in approximately 1,000 FTES. The traffic analysis focuses on the build-out year of 1,000 FTES (which provides a more conservative and permanent scenario than the construction phase).

The improvements are summarized in Table 1 below and a detailed project description is provided in Appendix A based on the Initial Study / Notice of Preparation for the Glendale Community College 2019 Facilities Master Plan Update to the 2015 Facilities Master Plan.

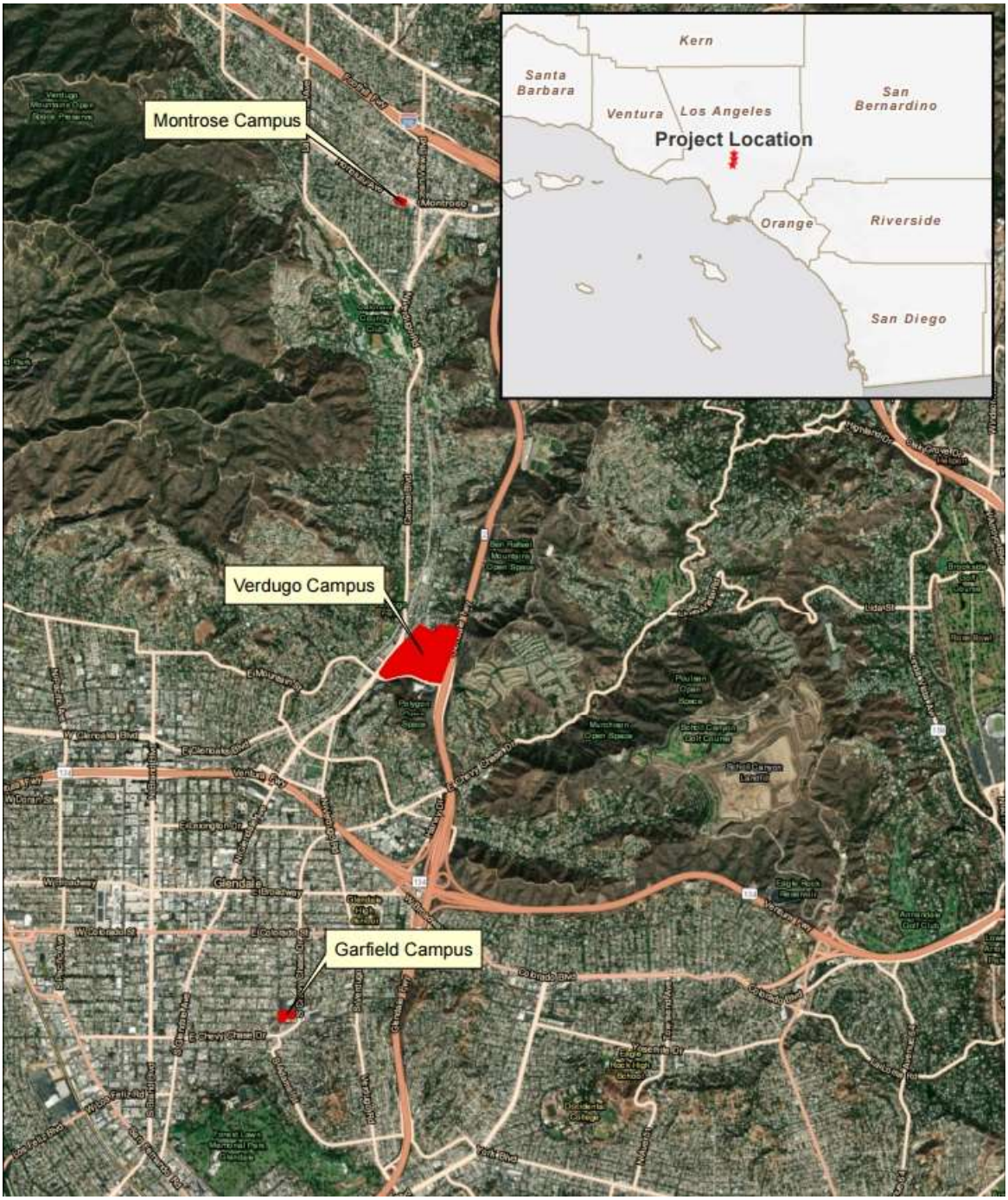
Table 1. **Summary of 2019 Facilities Master Plan Update**

| Campus | Construction (SF)[1] | Renovation (SF) | Demolition (SF) | Changes in FTES[2] |
|---|---|---|---|---|
| Verdugo | 52,443 | 228,853 | 170,387 | - |
| Garfield | - | 43,090 | 36,000 | - |
| Montrose | 17,611 | 21,559 | | 1,000 |

1. Source: GCCD 2015 Master Plan Update Project Description May 1, 2020
2. SF: Square Feet
3. FTES = Full Time Equivalent Students

This TIA has been prepared consistent with the City's Traffic Impact Analysis Preparation Guidelines.

Figure 1. Regional and Local Settings

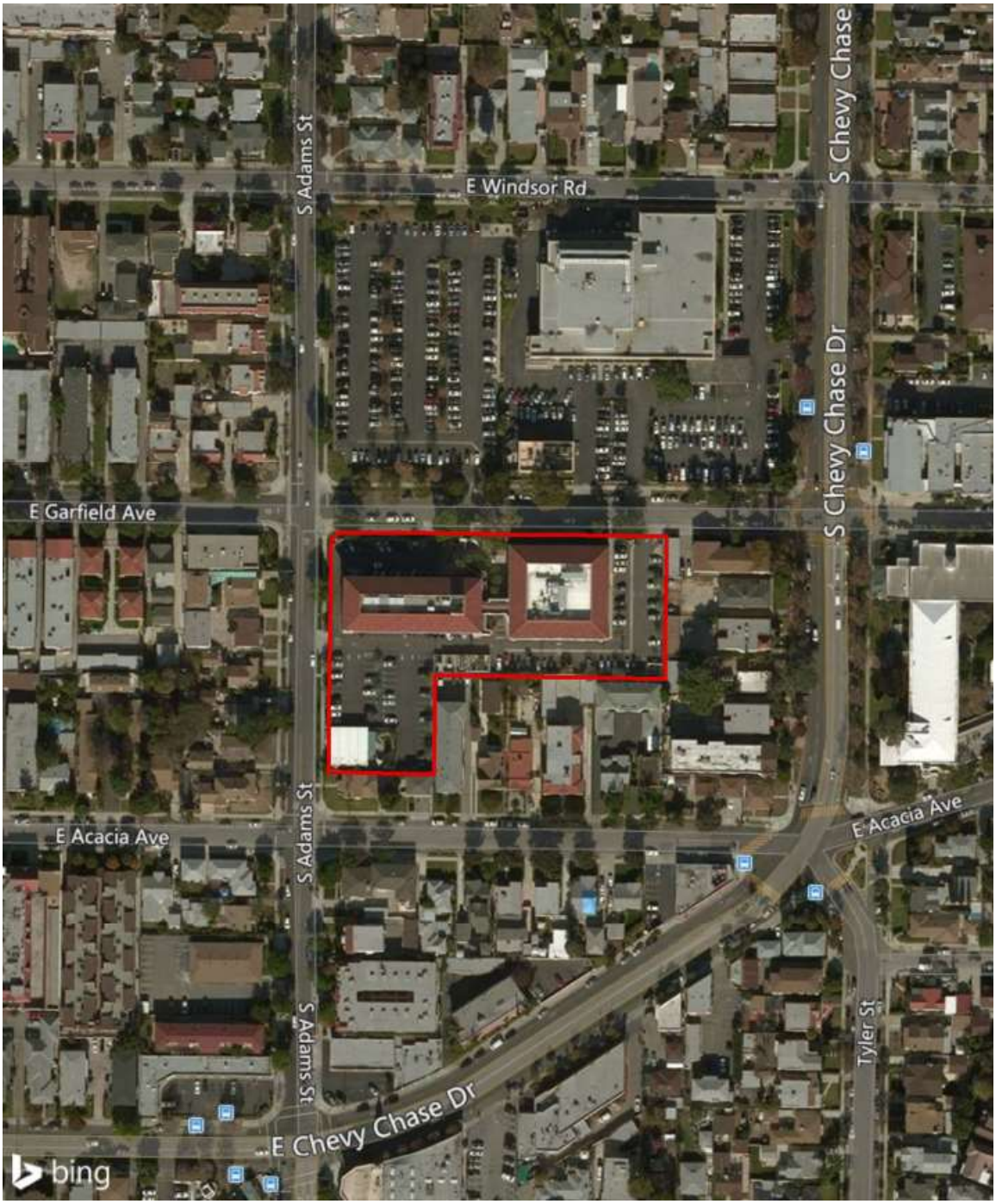



*Source: Chambers Group*

Figure 2. Existing Verdugo Campus

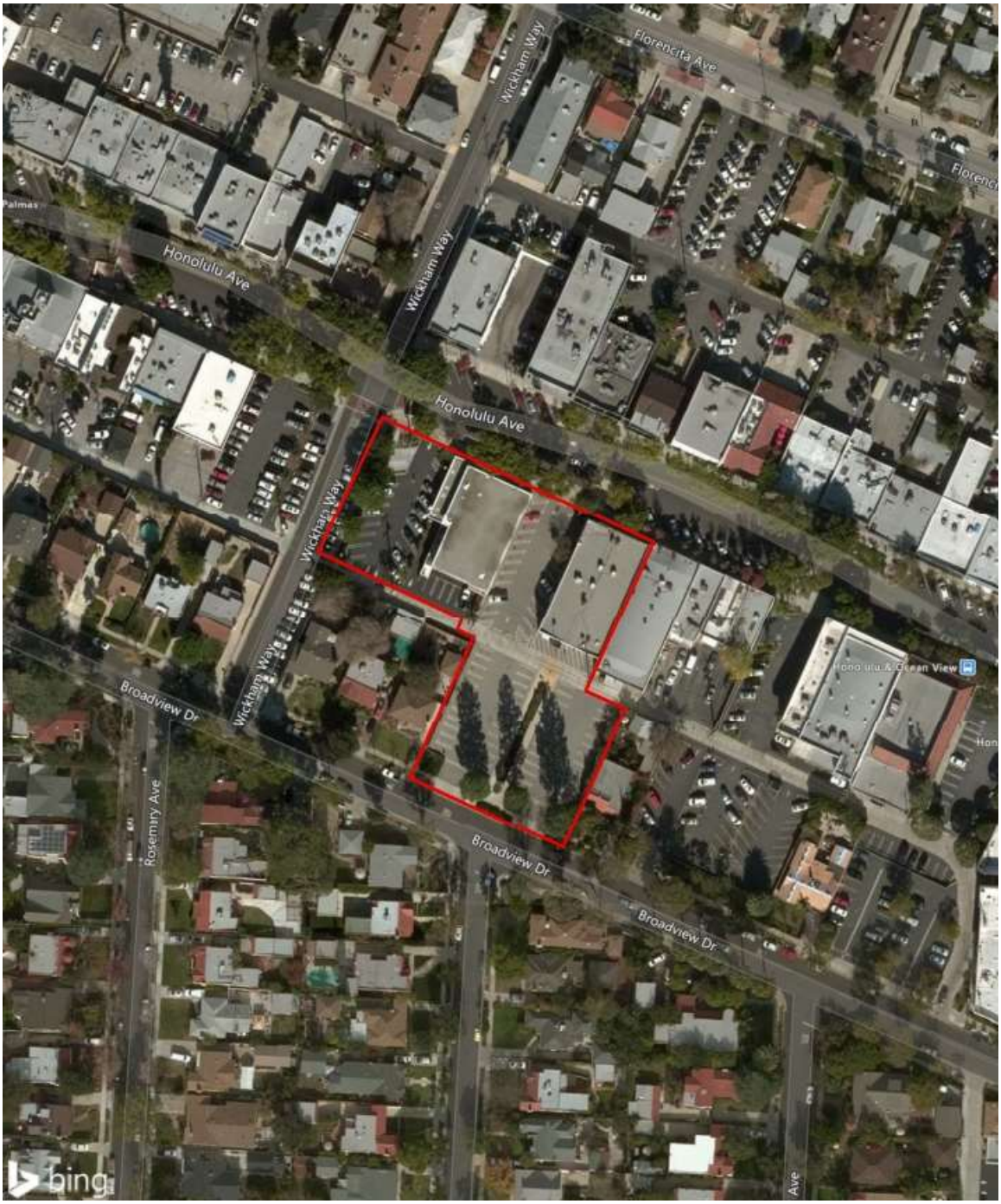
*Source: Chambers Group*

Figure 3. Existing Garfield Campus




*Source: Chambers Group*

Figure 4. Existing Professional Development Center




*Source: Chambers Group*

## *1.2 – Methodology*

### Vehicle-Miles-Travelled (VMT)

Senate Bill 743 (SB 743) was signed into law in September 2013 and requires changes to guidelines for the California Environmental Quality Act (CEQA) for transportation analyses. The purpose of SB 743 is to promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

Prior to implementation of SB 743, CEQA transportation analyses of individual projects typically determined impacts on the circulation system in terms of traffic delay and/or capacity usage at specific locations, such as street intersections or roadway segments. SB 743 requires changes to the guidelines for CEQA transportation analysis. The changes include the elimination of traffic delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts.

Unlike LOS, with VMT the traffic impacts of projects must now be measured based on total travel rather than congestion at specific points such as intersections. VMT is the measure of the distance traveled by project users via private vehicles to and from a project, and accounts for the total use of roadway facilities by project users. It can be measured on a ratio basis (e.g. VMT per resident or per employee of a project) or total VMT generated by all project users. Therefore, reducing the vehicle miles driven by project users (whether through higher transit use, more walking and biking, reducing trip lengths, or promoting infill development) reduces greenhouse gas emissions and is tied to emission reduction efforts.

Under SB 743, a project's effect on traffic delay shall not constitute a significant environmental impact under CEQA. Therefore, level of service (LOS) thresholds used by the City of Glendale may no longer serve as transportation impact metrics for CEQA analysis. The California Office of Planning and Research (OPR) has recommended vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts under CEQA. OPR provided a final technical advisory for jurisdictions in December 2018 which included recommendations on how to approach SB 743 compliance.

Beginning on July 1, 2020 the City of Glendale must analyze the effects of projects on the transportation network in a manner that is consistent with SB 743. This analysis will be based on the interim transportation analysis guidelines developed specifically for the City of Glendale which will include VMT-related thresholds and methodologies.

The City interim guidelines (per the City Council Meeting staff report of July 21, 2020) notes that for redevelopment projects where the project replaces other uses and results in a net decrease in overall VMT, a less-than-significant impact finding should be assumed. In the context of this study, it implies that Verdugo and Garfield projects would generate a less-than-significant impact and Montrose Campus will have to be analyzed using the City's VMT methodology.

In addition to VMT, the City guidelines call for assessing the impacts to pedestrians, bicyclists, transit, safety/design hazards, and emergency vehicle access.

### Level of Service and Other Vehicular Analyses

While VMT is the preferred quantitative metric for assessing potentially significant transportation impacts under CEQA, it should be noted that SB 743 does not prevent a city or county from using metrics such as LOS as part of the application of local general plan policies, municipal and zoning codes, conditions of approval, or any other planning requirements through a city's planning approval process; cities can still ensure adequate operation of the transportation system in terms of transportation congestion measures related to vehicular delay and roadway capacity. As such, the City of Glendale can continue

to require congestion-related transportation analysis and mitigation projects through planning approval processes outside CEQA.

The guidelines require the LOS analyses for purposes such as local circulation and site access to:

- Analyze Opening Year and Cumulative LOS for project driveways and intersections adjacent to and around the project, residential streets connected to these intersections, as well as any other locations necessary as determined by City staff during scoping.
- Conduct required site-specific analyses such as site access, on-site circulation, driveway queuing, parking, and driveway sight distance analysis.
- Any additional analysis that is deemed necessary by City staff to be determined through a scoping meeting, such as passenger loading and freight loading demand analysis.

Per the City of Glendale TIA guidelines, signalized intersections are analyzed using the Intersection Capacity Utilization (ICU) methodology. This method compares the traffic volumes to the intersection capacity and assigns a numerical value called the volume-to-capacity ratio (V/C ratio) and a corresponding letter value to the intersection.

Unsignalized study area intersections were analyzed under the latest version of the *Highway Capacity Manual* (HCM) "Operations" methodology using the *Synchro* level of service (LOS) software program which is consistent with the HCM methodology. The HCM methodology determines the control delay a driver may experience at the intersection.

The degree of congestion at an intersection is described by the level of service, which ranges from LOS A to LOS F, with LOS A representing free-flow conditions with little delay and LOS F representing over-saturated traffic flow throughout the peak hour. A complete description of the meaning of level of service can be found in the Highway Research Board, *Highway Capacity Manual*. Brief descriptions of the six levels of service for signalized and unsignalized intersections based on the HCM methodology and LOS definitions are shown in Table 2.

Table 2. **Level of Service Definitions for Intersections**

| Level of Service | Signalized Intersections (Equivalent ICU) | Unsignalized Intersections (Control Delay in Seconds) |
|---|---|---|
| A | 0.0 - 0.60 | 0.0 – 10.0 seconds |
| B | 0.61 - 0.07 | 10.1 – 15.0 seconds |
| C | 0.71 – 0.80 | 15.1 – 25.0 seconds |
| D | 0.81 – 0.90 | 25.1 – 35.0 seconds |
| E | 0.91 – 1.00 | 35.1 – 50.0 seconds |
| F | Not Applicable | 50.1 seconds or greater |

Descriptions per the Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

LOS A. No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.

LOS B. This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.

LOS C. This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

LOS D. This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.

LOS E. Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.

LOS F. This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

As far as roadways, the City of Glendale Circulation Element contains the following "residential" street classifications: Local; Neighborhood Collector; Community Collector; and Urban Collector. The Circulation Element assigns a capacity of 2,500 Average Daily Traffic (ADT) to a Local; 5,000 ADT to a Neighborhood Collector; and 10,000 ADT to both a Community and Urban collector.

## Significance Criteria

As mentioned above, starting July 1, 2020 the City can no longer apply its LOS standards and methodologies to assess CEQA transportation impacts; potential VMT impacts must be analyzed instead. As a result, the City has updated its transportation analysis guidelines to incorporate VMT-related metrics in addition to level of service analysis, and the City is working on finalizing the final guidelines and tools. Table 3 outlines the thresholds identified by the interim guidelines for land use project and area plans.

Table 3. **VMT Thresholds of Significance**

| Element | Approach |
|---|---|
| **Land Use Projects** | |
| Thresholds of Significance | **Residential Projects**: Home-based VMT per resident exceeding 85% of the existing citywide average.<br>**Office/Employment Projects**: Home-based work VMT per employee exceeding 85% of the existing citywide average.<br>**Retail Projects**: Net increase in total citywide VMT.<br>**Mixed-Use Projects**: Analyze each use separately.<br>**Cumulative Impact Thresholds**:<br>- Inconsistency with SCAG RTP/SCS.<br>- Net increase in total citywide VMT under cumulative year conditions. |
| Screening Criteria (no detailed VMT analysis required) | **Map-Based VMT Screening**: A residential or office/employment project can be screened out if located in a low-VMT zone.<br>**Local-Serving Retail and Public Facilities**: A project can be screened out if it is:<br>- Local-serving retail of 50,000 square feet gross floor area or less.<br>- Local-serving public facilities such as public services (e.g. police, fire stations, public utilities), local-serving neighborhood schools, or neighborhood parks.<br>**Small Projects**: A project can be screened out if it generates fewer than 145 daily vehicle trips.<br>**Adjacency to High-Quality Transit**: A project located within a half mile of an existing major transit stop or an existing stop along a high-quality transit corridor can be screened out provided it does not meet any of the following criteria:<br>- Has a floor area ratio of less than 0.75<br>- Parking is provided in excess of minimum requirements<br>- Inconsistent with the SCAG RTP/SCS<br>- Replaces affordable residential units with a smaller number of moderate- or high-income residential units<br>- Does not contain a use that is transit supportive (such as residential, office, and/or retail).<br>**Affordable Housing**: A residential project can be screened out if it consists of 100 percent affordable housing. To qualify for this screening criteria, the project should be located in a high-quality transit area or within walking and bicycling distance of non-residential uses. |
| Analyzing Redevelopment Projects | If a project replaces other uses and results in a net decrease in overall VMT, assume a less-than-significant impact finding. |
| Impact Mitigation | Calculate and establish mitigation measures if a VMT impact is found, using built environment and Transportation Demand Management (TDM) strategies. |
| **Area Plans** | |
| Analyzing General Plans, Specific Plans, or Other Area Plans | Compare total VMT per service population (residents + employees) in the plan area under both existing (no project) and horizon year (no project or previous plan) scenarios to the horizon year plus project scenario, with a significant impact threshold of no increase in VMT per service population with the proposed project compared to no project or previous plan conditions. |

The City of Glendale TIA guidelines define the following significance levels (which are no longer considered CEQA thresholds but are rather used to ensure compliance with the general plan and other City planning documents):

- For signalized intersections, a significant impact would occur if a proposed project increases the V/C ratio by 0.020 or more at LOS D, E, or F.
- At unsignalized intersections, a significant impact would occur if the project increases the intersection delay by three (3) seconds or more and LOS D, E, or F occurs.
- For roadways, a significant impact occurs if the street's "environmental" capacity is exceeded with or without the Project and the Project increases the without-Project ADT by more than 10 percent.

## *1.3 – Traffic Analysis Scenarios*

This traffic study analyzed the following traffic scenarios per campus:

### Existing Conditions

The existing traffic scenario constitutes the environmental setting in accordance with the *California Environmental Quality Act* (CEQA) analysis at the time that the hearing body reviews the proposed project.

Traffic volumes were collected at the study intersections at various times and adjusted to pre-COVID-19 traffic conditions as agreed with the City's traffic engineer. Pre-Covid-19 traffic conditions were considered more conservative for this analysis given that traffic volumes have decreased during the pandemic driven primarily by stay-at-home orders.

### Existing With Project Conditions

The traffic volumes for this scenario were calculated by adding the project traffic for each of the campuses to the Existing (2020) Conditions.

### Horizon Year Conditions

The campus improvements are expected to be completed by the Year 2025. Thus, this year was chosen as the horizon analysis year. For the Verdugo and Garfield campuses the year 2023 coincides with Phase III of the construction which is the busiest phase in terms of number of workers and trucks on-site. As such 2023 was the horizon year for analyzing construction traffic impacts.

Traffic volumes for the Horizon year were analyzed by using growth factors from the 2010 Los Angeles County Congestion Management Plan (2020 LA County CMP). A growth factor of 1.0136[1] was used to project volumes from 2020 to 2025. In addition, a list of approved/pending (cumulative) projects in the City of Glendale was obtained, and any project that would affect the specific study area would be included.

### Horizon Year With Project Conditions

The project specific traffic from each campus was added to the Horizon Year (2023) scenario mentioned previously.

[1] The 2010 CMP shows growth factor for Glendale at 1.027 in 2020 and 1.041 in 2025 relative to the base year of 2010. The growth factor for 2025 relative to 2020 was derived as 1.041 / 1.027 = 1.0136

# 2. Verdugo Campus

## *2.1 – Project Description*

The Verdugo campus recommended new facilities, renovations of existing facilities and demolitions of older facilities are intended to improve the experience of the campus population. Neither the number of students nor employees is anticipated to grow between 2020 and 2025.

The Verdugo Campus had a headcount of 20,598 and a FTES of 11,853 from 2017-2018. The master plan horizon (2025) student enrollment is estimated at 11,800 FTES and a 20,200 unduplicated student headcount. It should be noted the Verdugo campus has experienced a decrease in the number of students over the past few years. In addition, current employees at the Verdugo Campus total to approximately 1,113, including 754 faculty members and 359 staff members. The Verdugo campus employees are not expected to increase through the 2025 buildout year.

Figure 5 presents the GCCD 2019 Facilities Master Plan and the project details for each building are presented in Table 4.

Overall, the GCCD 2019 Facilities Master Plan Verdugo Campus improvements would result in 228,853 square feet of renovation, 52,443 square feet of new construction, and 170,387 square feet of demolition. In addition, the Proposed Projects at the Verdugo Campus would add 650 parking spaces to the campus.

## *2.2 – Existing Conditions*

This section describes the existing conditions of the multi-modal transportation systems serving the Verdugo campus.

### Roadway Network

**Glendale Freeway (SR 2)**: is a north-south freeway connecting between I-5 and SR 134 to the south and I-210 to the north. In the project vicinity, SR 2 consists of 5 northbound general-purpose lanes and 4 southbound general-purpose lanes. Access to the campus is achieved via the diamond interchange with Mountain St.

**Mountain St:** is a Major Arterial between SR 2 and Verdugo Road per the City's Circulation Element. Westbound (going downhill to Verdugo Rd) it is 3 lanes per direction and eastbound (going uphill to SR 2) it is 2 lanes per direction. Sidewalks exist on both sides except for the westbound direction between the freeway ramp and the parking entrance. Intersections along Mountain St are signalized except for the intersection with Chaparro Dr which is stop-controlled for the minor (Chaparro) approach. It has a posted speed limit of 35mph.

**N Verdugo Rd:** is a Major Arterial south of Canada Blvd and a Minor Arterial North of Canada Blvd. It is 4 lanes per direction between Mountain St and Canada Blvd and 2 lanes per direction north of Canada Blvd. It has a posted speed limit of 40mph south of Canada and 35mph north of Canada. Sidewalks exist on both sides. Signalized intersections exist at the junctions with Mountain St, Canada Blvd, the Civic Auditorium Entrance, and Towne St. A pick-up/ drop-off zone that serves that campus exists on Verdugo north of the Canada Blvd intersection.

Table 4. **2019 Facilities Master Plan Update Verdugo Campus Improvements**

| Building | Project | Scope |
|---|---|---|
| Aviation Art (AA) | Repurpose the former Fire Academy space in AA building to expand the welding program; create new machine technology laboratory; upgrade restrooms | Renovation – 5,757 GSF |
| Arroyo Seco (AS) | Existing building will be demolished and removed | Remove – 17,977 GSF |
| Advanced Technology Center (ATC) | Renovate spaces within the ATC building to expand the Computer-Assisted Manufacturing laboratory | Renovation (TBD) |
| Auditorium (AU) | Renovation will include new instructional labs; performance, audience, and backstage spaces will be upgraded | Renovation - 46,465 GSF |
| Camino Real (CR) | Reorganize science and math instructional and support space | Renovation – 21,890 GSF |
| EOPS Annex (EA) | Existing temporary facility will be demolished and removed | Demolition – 1,953 GSF |
| Art Gallery (G)/Library (LB) | Update library with learning resources and media center, update interior to provide collaborative studying environment | Renovation – 71,866 GSF |
| Instructional Building and Conference Center (IBCC) | New multi-story building to be a collaborative and cross-disciplinary environment for classrooms, laboratories, and studio space | New construction - 73,613 ASF/82,446 GSF |
| Santa Anita (SA) | Existing temporary facility will be demolished and removed | Demolition - 4,000 GSF |
| Santa Barbara (SB) | Existing building will be demolished and removed | Demolition - 5,200 GSF |
| Science Building (SCI) | New multi-story science building to replace outdated space in San Gabriel, Arroyo Seco, and Camino Real buildings | New construction - 95,941 ASF |
| San Fernando Complex (SF) | Temporary facilities will be demolished and removed | Demolition - 19,440 GSF |
| San Gabriel (SG) | Renovations to provide instructional lab space, instructional media space, and exhibition space | Renovation – 65,509 GSF |
| Sierra Madre (SM) | Building will be renovated with a student visitor welcome and information center, and will also provide additional indoor and outdoor dining space. | Renovation – 17,366 GSF |
| Sierra Nevada Gym (SN) | Existing building will be demolished and removed | Demolition – 17,620 GSF |
| District Storage Facility (ST) | New construction to provide space for district-wide long-term document, furniture, and equipment storage. | New construction - 12,000 GSF |
| College-wide Energy Projects | Improving HVAC systems, provide solar shade structures in Parking Lot B, install water efficient plumbing, | New construction/renovation |
| Parking and Circulation Upgrades | Consolidate and improve parking areas, upgrade pedestrian circulation paths, evaluate vertical stair climbs, maintain agreement for joint-use of City parking lots | Renovation |
| Security and Safety Upgrades | Installing security cameras and monitoring system, expand intrusion alarm system, upgrade phone system, and installing manual locking door hardware | Renovation |
| South Parking Structure | Provide approximately 175 stalls per level for about 650 parking stalls total. The six tennis courts will be placed on the upper decks. | New construction - (TBD) |
| Verdugo Gym Trailers | Existing temporary facilities will be demolished and removed | Demolition – 4,230 GSF |
| Signage, Wayfinding, & Visual Display Upgrades | Upgrades to campus signage, visual displays, and room identification; providing campus directories; include parking signage | New Construction |

Figure 5. Verdugo Campus – 2019 Facilities Master Plan

*Source: Glendale CCD 2015 Facilities Master Plan – 2019 Update*

**Canada Blvd:** is a north-south Major Arterial starting from Verdugo Rd and runs north where it joins Verdugo Rd again south of Montecito Park. In in the campus vicinity it is 2 lanes per direction with a posted speed limit of 35mph and sidewalks on both sides. A pedestrian bridge connects the municipal parking lots, Canada Blvd pedestrian traffic, southbound Verdugo pedestrian traffic and the campus.

**Towne St:** is a 2-lane local street connecting between Verdugo Rd and Canada Blvd to the north of the campus. A signalized intersection at Verdugo Rd serves the campus access. Sidewalks and parallel parking exist on both sides.

**Campus Way:** is an internal road running north of the campus connecting Mountain St parking garage entrance to Verdugo Rd. It serves primarily as an access to the parking structure, on-campus surface parking lots as well as an emergency access road.

**Chaparro Dr:** is an internal road running south of the tennis courts. It is one lane per direction and connects Mountain St to the inside of the campus.

**College Circle Dr:** is an internal road to the west of the campus running in one direction (northbound) and connecting Verdugo Rd to the surface parking lots on the west campus.

## Transit

The Verdugo campus is served by the following bus lines with bus stops being primarily in front of the campus on Verdugo Rd:

**Glendale Beeline Routes 3/31/32:** Route 3 operates Monday to Friday from Downtown Glendale to the Jet Propulsion Laboratory (JPL) Via Glendale Ave, Verdugo Rd, Honolulu Ave, and Foothill Blvd. Route 31 operates Saturday from Downtown to La Crescenta only. Route 32 operates Monday to Friday from Downtown to the Verdugo campus only. The weekday bus frequencies at the campus stops vary from 10 to 40 minutes between 5.30 AM and 9 PM. Saturday frequencies vary from 20 to 30 minutes between 9.30 AM and 5.30 PM. Stops exist on both sides of Verdugo Road across from College Circle Dr.

**Glendale Beeline Route 7:** runs from Riverside Rancho to the Verdugo campus via Western Ave, Glenoaks Blvd, Stocker St, and Glendale Ave. Weekday frequencies are about 30 minutes between 7 AM and 7 PM with three extra trips operated between August and June on school days only. Saturday service operates between 9 AM and 4 PM with about 45 minute frequency. Stops exist on both sides of Verdugo Road across from College Circle Dr.

**Metro Line 685:** runs on Verdugo Blvd from the campus south towards Glassell Park. It is operated on weekdays only between 6AM and 9PM with about 60 minutes frequency and connects the campus to the destinations along Verdugo Rd. The 685-bus stop is on Canada Blvd adjacent to the pedestrian bridge ramps.

**Metro Line 90/91:** runs from downtown Los Angeles to Sylmar with stops along the way including Glendale Station which provides connection to Metro 183, Glendale Beeline Routes 1, 2, 11, 12, Metrolink Antelope Valley Line, Ventura County Line, and Amtrak.
It is operated on weekdays only between 5.30AM and midnight with 30 -40 minutes frequencies. The 90/91-bus stops are on Canada Blvd adjacent to the pedestrian bridge ramps.

### Bicycle Facilities

While no defined bicycle routes exist on the roads surrounding the campus, the internal movements on campus include bicycles, scooters and other rolling modes. The City's Bicycle Transportation Plan (2012) proposes a bicycle routes along Verdugo and Canada Blvd in the immediate vicinity of the campus.

## *2.3 – VMT Analysis*

Per the City's interim guidelines "if a project replaces other uses and results in a net decrease in overall VMT, assume a less-than-significant impact finding."
The project at hand primarily replaces existing uses and includes a decrease in the number of students which in turn implies a decrease in the number of vehicle trips made to campus. As VMT (vehicle miles traveled), is a metric that accounts for the number of vehicle trips generated by a project and the length or distance of those trips, a decrease in the number of vehicle trips leads to a net decrease in the overall VMT (all else unchanged); hence, a less-than significant impact is assumed.

It should be noted, that although the project is adding a parking structure, the intent of this parking is to serve existing demand and reduce the spillover parking to the neighborhoods. The proximity of the proposed garage to the freeway will further reduce the VMT as it reduces the number of vehicles searching for parking within the campus and also in the surrounding communities. The reduction in "cruising" for parking will contribute to the reduction in VMT.

In discussing parking, it is important to highlight that parking is well managed on GCC campus. Students, faculty, and staff are required to display a valid parking permit while parked on campus 365 days a year. Parking is not free: semester and daily permits are available to purchase and there are no grace periods. Valid parking permits are always required (vehicles not displaying a valid parking permit, are subject to citation).

Moreover, the campus is served by Glendale Beeline and Metro as noted earlier, providing what the district labels as "an economical and stress-free alternative to parking". Discounts are available for students, the disabled, and seniors. More recently, the district has been working with Metro and Glendale BeeLine to establish a U-pass program for GCCD. The program provides a semester transit pass to students as part of the GCCD student ID and is good for unlimited rides on all Metro services in Los Angeles County, including Metro Rail, Metro Rapid and Express buses, and local buses. The intent of this program is to encourage the use of alternative transportation modes as well as reduce the demand for parking.

Furthermore, the district works with Go-Glendale, a membership-based nonprofit organization working with local employers and property managers to reduce traffic congestion, improve air quality, accessibility and mobility in Glendale. As part of this Travel Demand Management program the district offers various incentives for ridesharing, transit use, and biking/walking including[2]:

- $10/person and the ability to park in any parking lot on campus for people who are in a 3+ person carpool
- A Santa Clarita/Palmdale Vanpool with current fees of $5 per day round trip from Santa Clarita and $10 per day round-trip from Palmdale
- $25 per working month if one uses a bicycle or walks to work. An additional incentive includes a $30 gift card for riding a bicycle for 90 days

[2] Source: http://goglendale.org/gcc/

- Reimbursements for Metrolink and bus riders where GCC covers one-half of the monthly cost up to $130/month
- Guaranteed Ride Home which provides a free ride home from work to those commuters who regularly vanpool, bike, walk, or take the transit should an emergency arise.

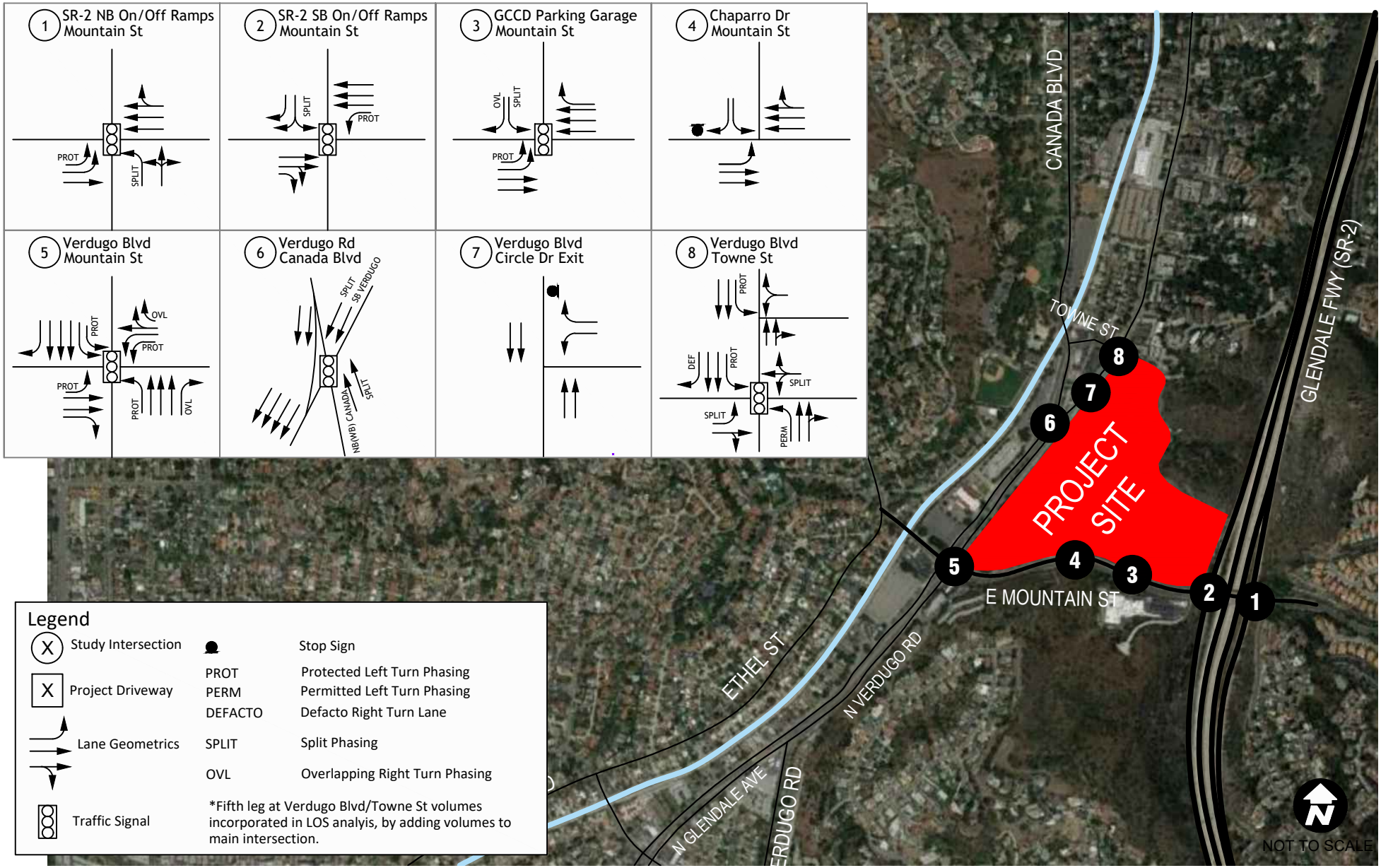
## *2.4 – Level of Service Analysis*

The campus generated trips are assumed to remain the same (or slightly decrease) between existing 2020 and future 2025 conditions. As such, the purpose of the LOS analysis is to identify potential transportation-related impacts associated with the construction activities of the Verdugo campus. The proposed project includes demolition, new construction, and renovation of facilities. If needed, mitigation measures will be identified that would offset or reduce the temporary construction-related impacts.

Per discussion with the City's Traffic engineer, the project access points were assessed as part of this analysis. Caltrans ramps were also added to the studies intersections which include:

- SR-2 Northbound On/Off-Ramps and Mountain St
- SR-2 Southbound On/Off-Ramps and Mountain St
- GCCD Parking Garage Entrance and Mountain St
- Chaparro Dr and Mountain St
- Verdugo Blvd and Mountain St
- Verdugo Blvd and Canada Blvd
- Verdugo Blvd and Circle Dr. Exit
- Verdugo Blvd and Towne St

All intersections are signalized intersections except for the Chaparro Dr and Mountain St intersection and Verdugo Blvd and Circle Dr. Exit which are one-way stop-controlled for the minor movements (Chaparro Dr and Circle Dr). The signalized intersections LOS was carried out using the ICU methodology whereas the unsignalized intersection was assessed using the HCM methodology as noted earlier. The intersection geometries in terms of approach lanes are illustrated in Figure 6.




GENERAL TECHNOLOGIES & SOLUTIONS

Source: Google Earth, 01/2019.

# Verdugo Campus Intersection Geometrics

*Glendale Community College District Master Plan*

*Figure 6*

### 2.4.1 Existing Conditions

Traffic counts for 2020 conditions were obtained from various sources and adjusted to 2020 pre-COVID-19 conditions as such:

- SR-2 Ramps with Mountain St intersection data was obtained from a count in 2/2016 and that was adjusted to 2/2020 conditions based on the Mountain St traffic volumes obtained in 2/2020
- GCCD Parking Garage Entrance and Chaparro Dr with Mountain St intersections were obtained in 2/2020 and used to adjust the up-stream and downstream intersections.
- Verdugo Blvd and Mountain St was obtained in 9/2019 and adjusted based on 2/2020 counts
- Verdugo Blvd intersections with Canada Blvd and Towne St were based on 2/2020 counts.

The raw count data is provided in Appendix B and the 2020 volumes for the AM and PM peak periods are shown in Figure 7.

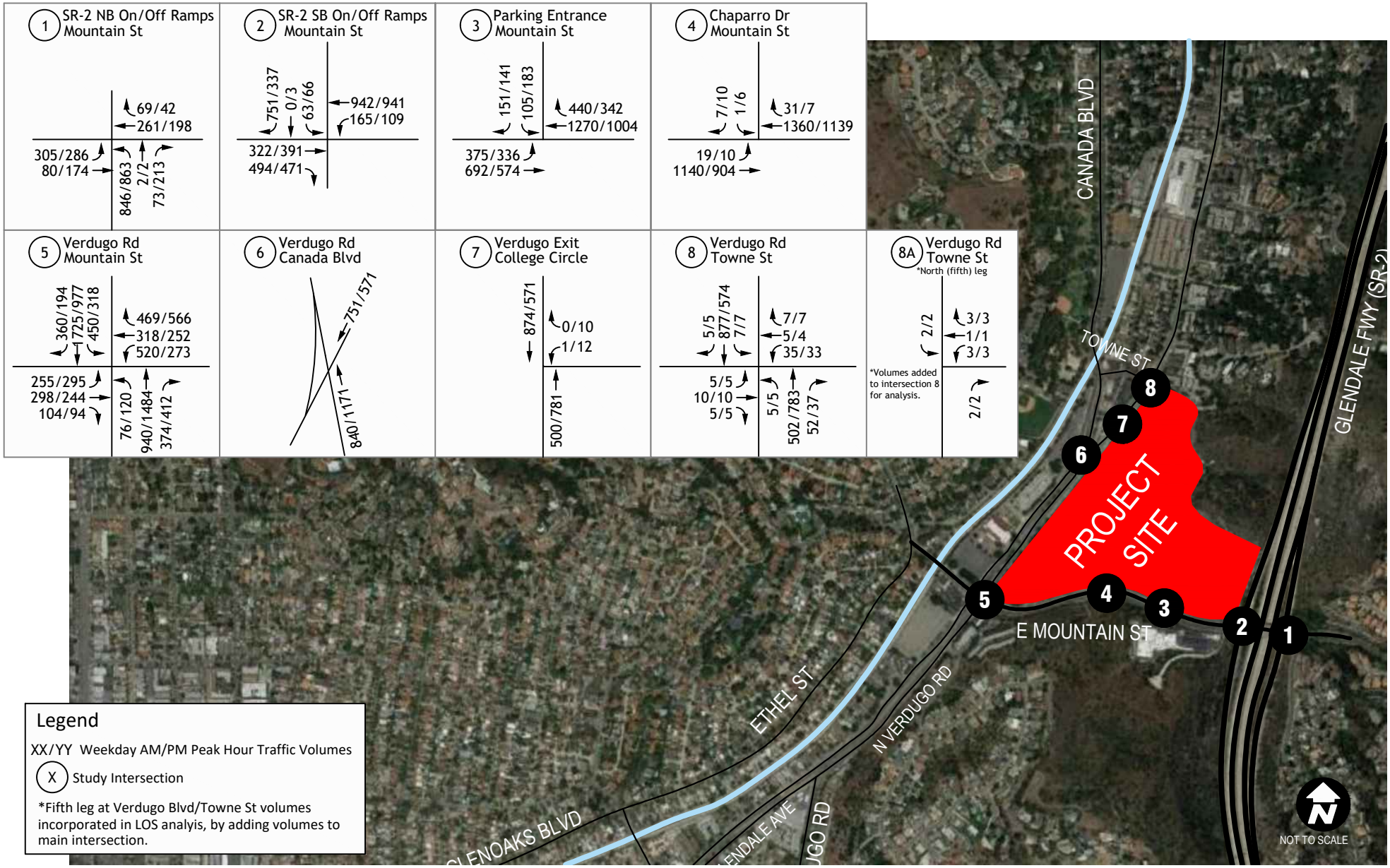
The LOS analyses were prepared for the Existing conditions per the City's requirements and are shown in Table 5. Detailed LOS worksheets are provided in Appendix C.

Table 5. **Existing Peak Hour Intersection LOS (Verdugo)**

| | AM Peak | | PM Peak | |
|---|---|---|---|---|
| **Intersection** | **LOS[1]** | **V/C or Delay[2]** | **LOS[1]** | **V/C or Delay[2]** |
| SR-2 Northbound On/Off-Ramps and Mountain St | A | 0.562 | A | 0.586 |
| SR-2 Southbound On/Off-Ramps and Mountain St | B | 0.627 | A | 0.475 |
| GCCD Parking Garage Entrance and Mountain St | A | 0.560 | A | 0.540 |
| Chaparro Dr and Mountain St (Unsignalized)[3,4] | D | 25.2 | D | 27.7 |
| Verdugo Blvd and Mountain St | E | 0.912 | E | 0.960 |
| Verdugo Blvd and Canada Blvd | A | 0.597 | B | 0.644 |
| Verdugo Blvd and College Circle Dr. (Unsignalized) [3,4] | C | 20.5 | C | 19.0 |
| Verdugo Blvd and Towne St | A | 0.413 | A | 0.398 |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported

As shown in the table, all of the study intersections operate at satisfactory LOS D or better during the weekday AM and PM peak hours under Existing conditions with the exception of Verdugo Blvd and Mountain St which operates with a LOS E.




GENERAL TECHNOLOGIES & SOLUTIONS

Source: Google Earth, 01/2019.

# Existing AM and PM Peak Hour Traffic Volumes (Verdugo)

*Glendale Community College District Master Plan*

*Figure 7*

## 2.4.2 Existing With Project Conditions

This section documents project-generated traffic impacts during the peak construction phase on the surrounding transportation system and at the study intersections. The additional traffic generated by the construction activities would be temporary, and last only through the phases of construction.

**Construction Trips**

Trip generation for the peak construction phase was determined based on the operational construction characteristics derived from the Air Model (CalEEMod) for the GCCD Facilities Master Plan that estimates the construction daily trips for each phase of construction (shown in Appendix D). The peak construction phase occurs in year 2023 where the daily construction trips include 264 workers and 103 vendor trucks.

It is important to note that construction hours are limited according to the Glendale Municipal Code section 8.36.080 to 7:00 AM to 7:00 PM (Monday through Saturday). Construction is not allowed on Sundays or holidays.

It is assumed for the purpose of this analysis that conservatively 75% of the workers arrive in the AM peak hour and leave in the PM peak hour. Daily trucks are equally divided over an 8 hour shift with about 13 trucks/hour. These truck trips were adjusted with a Passenger-Car Equivalence (PCE) factor of 2.5 PCE. The peak construction activity trip generation estimates are shown in Table 6.

Table 6. **Project Peak Hour Construction Activity Trip Generation**

| | | | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|
| **Construction Trip Data** | **Units** | **Daily** | **IN** | **OUT** | **TOTAL** | **IN** | **OUT** | **TOTAL** |
| ***Construction Trip Data*** | | | | | | | | |
| Construction Workers | Worker | 264 | | | | | | |
| Construction Trucks | Trucks | 103 | | | | | | |
| ***Vehicle Trips*** | | | | | | | | |
| Construction Workers | Trip Ends | 528 | 198 | 0 | 198 | 0 | 198 | 198 |
| Construction Trucks | Trip Ends | 206 | 7 | 6 | 13 | 6 | 7 | 13 |
| ***PCE Trips*** | | | | | | | | |
| Construction Workers | PCE Trip Ends | 528 | 198 | 0 | 198 | 0 | 198 | 198 |
| Construction Trucks | PCE Trip Ends | 515 | 18 | 15 | 33 | 15 | 18 | 33 |
| **Total PCE Trips** | | **1,043** | **216** | **15** | **231** | **15** | **216** | **231** |

1. PCE = Passenger Car Equivalent of 2.5 was used
2. Refer to Appendix D for trips during the various phases

As shown in the table, the peak construction activity of the project would generate approximately 1,043 daily PCE trips, 231 AM PCE peak hour trips (216 inbound and 15 outbound), and 231 PM PCE peak hour trips (15 inbound and 216 outbound).

**Construction Trips Distribution and Assignment**

Project construction phase trips were distributed to the study area intersections using logical travel paths between the project and other land uses, as well as the location of the project in relation to local and regional transportation facilities. Project truck trips were distributed using major roadways and designated truck routes in the study area. The distributions utilized for construction workers and construction truck trips are shown in Figures 8 and 9. The trip assignments for construction traffic is shown in Figures 10 and 11.

Project trips were assigned to the study area intersections by multiplying the project trip generation by the trip distribution percent at each location.

**LOS Analysis**

Existing With Project Traffic volumes were determined by adding the project construction trips to the existing traffic volumes. Figure 12 shows the Existing With Project Traffic AM and PM peak hour traffic volumes.

Intersection operations were calculated using the LOS methodology described previously. Table 7 provides a comparison between the Existing and Existing With Project Traffic operations for the weekday AM and PM peak hours. Detailed LOS worksheets are included in Appendix C.

As shown in the table, all of the study intersections are forecast to continue to operate at LOS D or better during the AM and PM peak hours under the Existing With Project traffic conditions with the exception of the unsignalized intersection of Chaparro Dr and Mountain St. For the other intersections, the project does not increase the delays per the City's significance impact criteria and therefore, there would be no significant traffic impacts at the study area intersections with the addition of project construction traffic.

The mitigation measures for the Chaparro Dr and Mountain St intersection are presented in a following section.

Table 7. **Existing With Project Conditions Peak Hour Intersection LOS**

| Intersection | Existing | | | | Existing + Project | | | | Change in V/C or LOS | | Impact? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | AM Peak | | PM Peak | | | | | |
| | LOS[1] | V/C or Delay[2] | LOS[1] | V/C or Delay[2] | LOS[1] | V/C or Delay[2] | LOS[1] | V/C or Delay[2] | AM | PM | AM | PM |
| SR-2 Northbound On/Off-Ramps and Mountain St | A | 0.562 | A | 0.586 | B | 0.611 | B | 0.605 | 0.049 | 0.019 | No | No |
| SR-2 Southbound On/Off-Ramps and Mountain St | B | 0.627 | A | 0.475 | B | 0.644 | A | 0.516 | 0.017 | 0.041 | No | No |
| GCCD Parking Garage Entrance and Mountain St | A | 0.560 | A | 0.540 | A | 0.585 | B | 0.634 | 0.025 | 0.094 | No | No |
| Chaparro Dr and Mountain St (Unsignalized)[3,4] | D | 25.2 | D | 27.7 | D | 27.9 | E | 42.2 | 2.7 | 14.5 | No | **Yes** |
| Verdugo Blvd and Mountain St | E | 0.912 | E | 0.960 | E | 0.927 | E | 0.972 | 0.015 | 0.012 | No | No |
| Verdugo Blvd and Canada Blvd | A | 0.597 | B | 0.644 | A | 0.598 | B | 0.657 | 0.001 | 0.013 | No | No |
| Verdugo Blvd and College Circle Dr. Exit | C | 20.5 | C | 19 | C | 21.8 | C | 18 | 1.3 | -1 | No | No |
| Verdugo Blvd and Towne St | A | 0.413 | A | 0.398 | A | 0.415 | A | 0.427 | 0.002 | 0.029 | No | No |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported

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Source: Google Earth, 01/2019.

Verdugo Campus - Construction Trip Distributions (Workers)

*Glendale Community College District Master Plan*

*Figure 8*

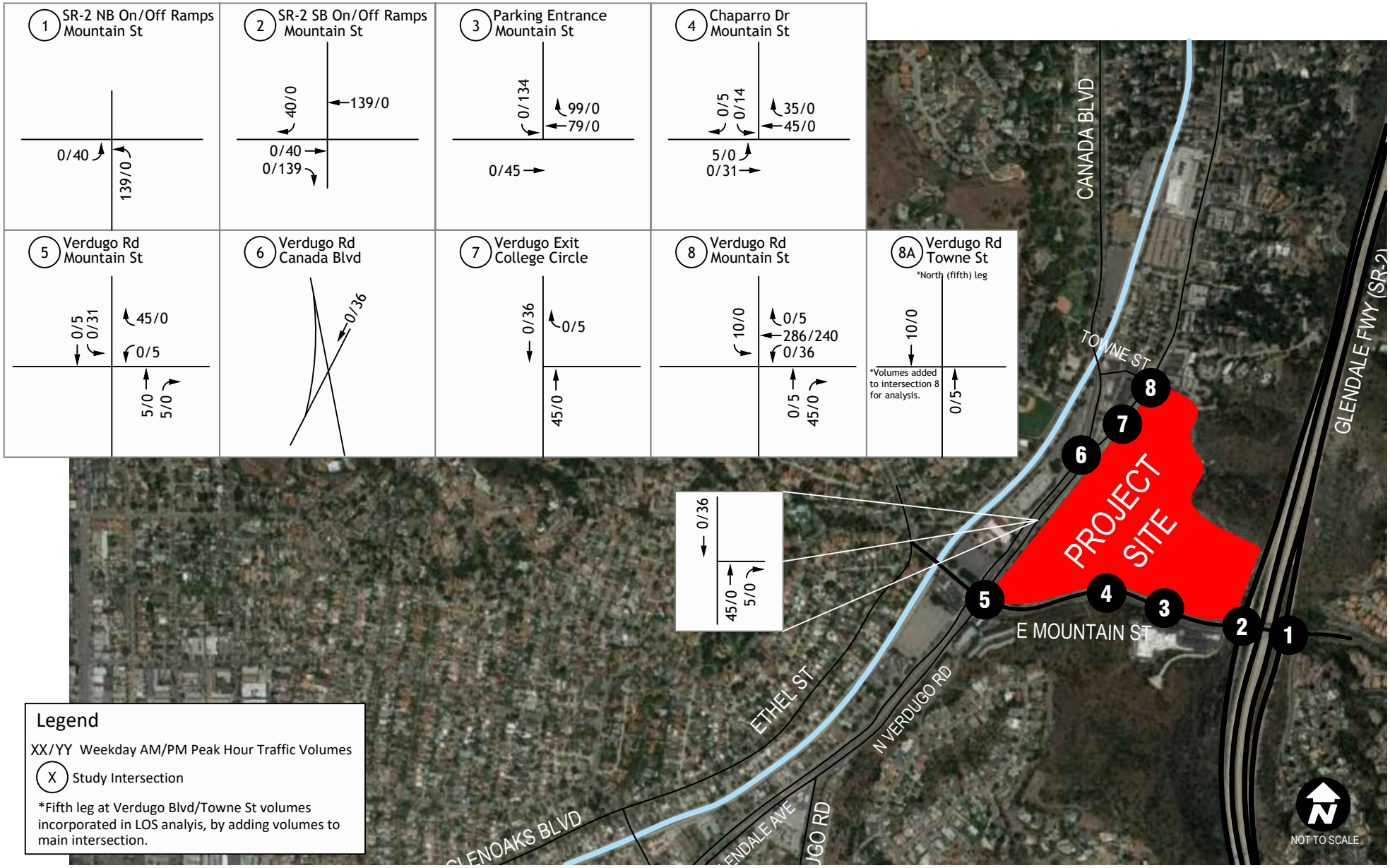
GENERAL TECHNOLOGIES & SOLUTIONS

Source: Google Earth, 01/2019.

Verdugo Campus - Construction Trip Distributions (Trucks)

*Glendale Community College District Master Plan*

*Figure 9*

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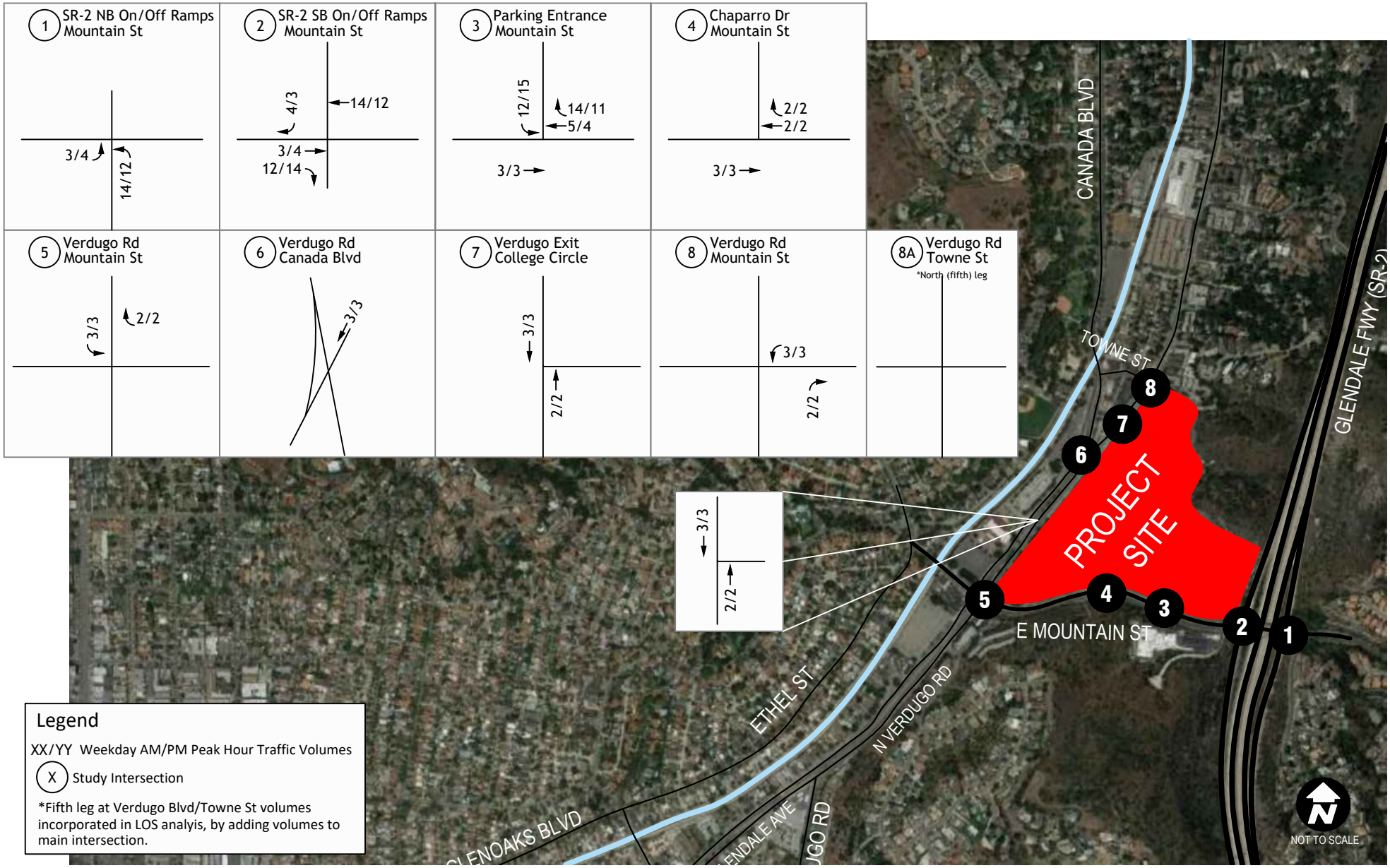
Source: Google Earth, 01/2019.

# Verdugo Campus - Construction Trip Assignments (Workers)

*Glendale Community College District Master Plan*

*Figure 10*

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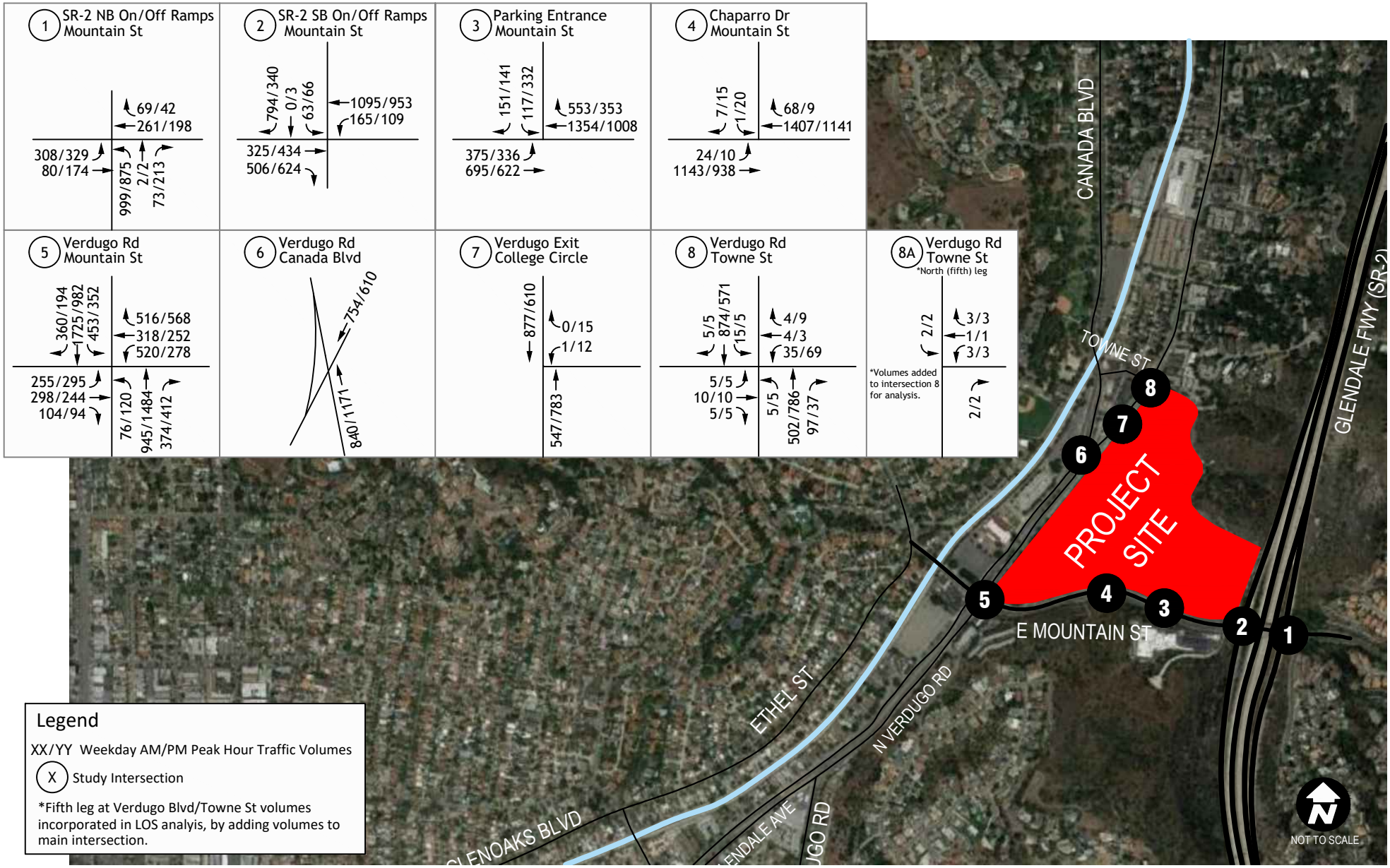
Source: Google Earth, 01/2019.

# Verdugo Campus - Construction Trip Assignments (Trucks in PCE)

*Glendale Community College District Master Plan*

*Figure 11*

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Source: Google Earth, 01/2019.

# Existing + Project - Peak Hour Volumes (Verdugo)

*Glendale Community College District Master Plan*

*Figure 12*

### 2.4.3 Horizon Year Conditions

This section describes Year 2023 Baseline Conditions within the project study area. As mentioned earlier the construction activities will be in full-swing and peak in 2023; and hence 2023 conditions are assessed to represent the more conservative scenario for the construction traffic impacts on the transportation system.

**Traffic Volumes**

As noted in the methodology section, the 2023 baseline traffic volumes were determined by adding the existing traffic volumes, the background growth derived from the Los Angeles CMP, as well as traffic from approved but not yet constructed projects (cumulative projects) in the vicinity of the project.

The location of each cumulative project is shown in Figure 13, while the projects are presented in Table 8. The full list of cumulative projects from the City is provided in Appendix E. Table 9 illustrates the trip generation for cumulative projects.

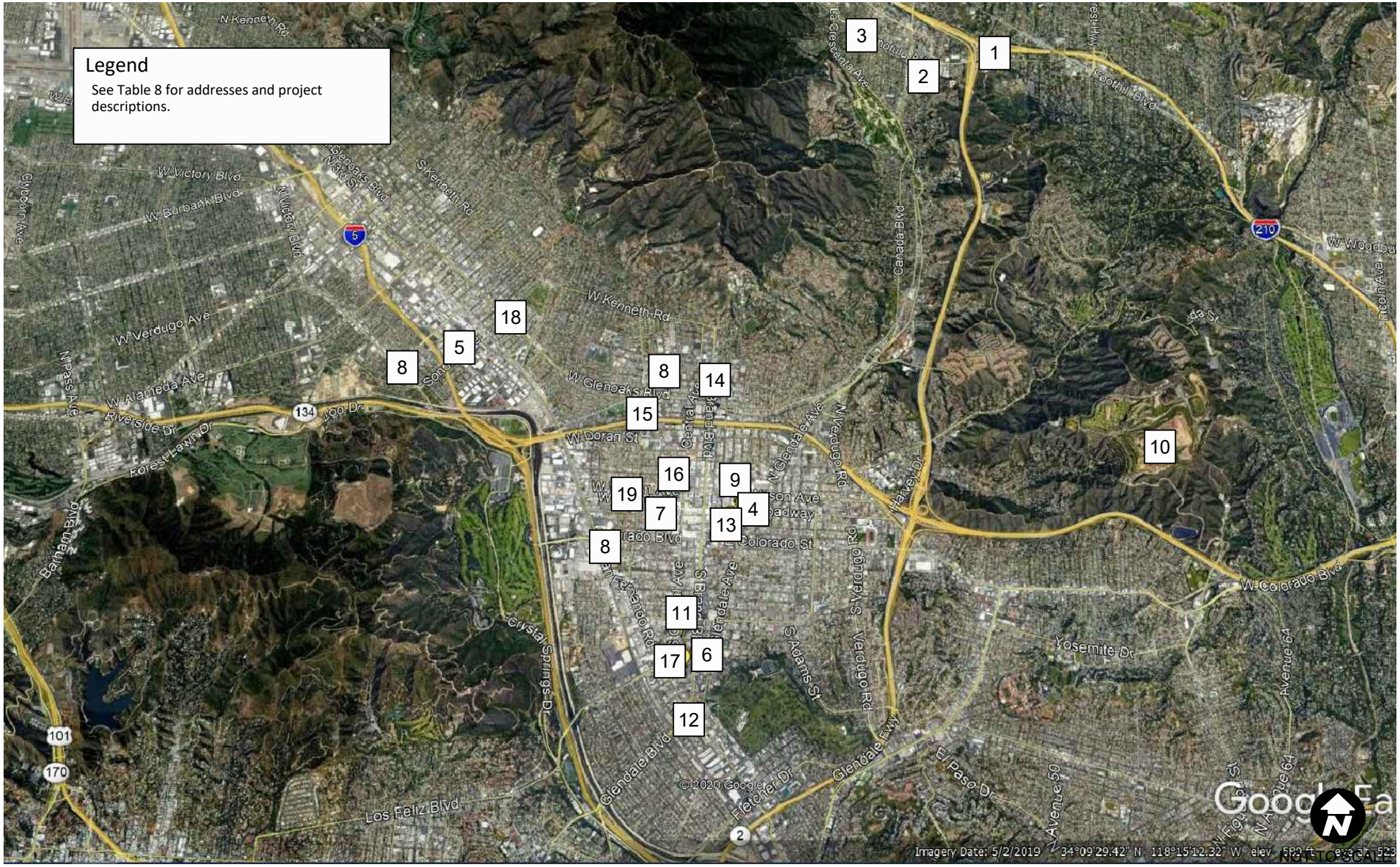
Table 8. **Cumulative Projects List**

| Project | Location | Description |
|---|---|---|
| 1 - 1809 Verdugo Blvd* | 1809 Verdugo Blvd | New assisted living/medical facility with 79 beds |
| 2 - 3506 North Verdugo Road* | 3506 North Verdugo Road | 14 multi-family residential units, 2,762 SF of retail/office space on ground floor |
| 3 - 2612 Honolulu Ave* | 2612 Honolulu Ave | Construct a 3 story 28 unit multi-family residential building |
| 4 - 517 East Broadway | 517 East Broadway | Demolish existing medical office building and construct a 5-story, 32,00 SF building with medical office, general office, and retail uses |
| 5 - 727 Sonora Avenue | 727 Sonora Avenue | Demolish 7,641 SF and 3,800 SF buildings, and construct 33,053 SF general office building. |
| 6 - 1304 South Brand Blvd | 1304 South Brand Blvd | Demo and construct 33,053 SF general office building. |
| 7 - 620 West Elk Avenue | 620 West Elk Avenue | Construct a 3-story mini storage facility totaling 214,745 SF |
| 8 - 401 Hawthorne Street | 401 Hawthorne Street | Construct 23 multi-family residential development and maintain 2 of the 5 existing units. Net new = 23 units. |
| 9 - 1633 Victory Blvd | 1633 Victory Blvd | Demolish existing one-story 3,537 square foot and commercial building and construct 64 room hotel. |
| 10 - 1112 N. Columbus | 1112 N. Columbus | 11 unit multi-family apartment building |
| 11 - 206 N. Kenwood St | 206 N. Kenwood St | 286 multi-family dwelling units |
| 12 - 3001 Scholl Canyon Road | 3001 Scholl Canyon Road | Construction of water treatment plant. |
| 13 - 206 West Chevy Chase Drive | 206 West Chevy Chase Drive | 25,705 SF commercial building with a mix of retail, medical office, and general office |
| 14 - 1820 South Brand Blvd | 1820 South Brand Blvd | 26 live-work units |
| 15 - 126 South Kenwood Street | 126 South Kenwood Street | Demolish existing structures, and construct a five story, 44 unit multi-family residential complex |
| 16 - 1100 North Brand Blvd | 1100 North Brand Blvd | Construct new 85 room hotel with 15,500 SF of other space |
| 17 - 707 North Pacific Avenue | 707 North Pacific Avenue | Demolish existing building and replace with 12,900 SF drugstore |
| 18 - 330 Salem Street | 330 Salem Street | Construct 3 story multi-family residential building. |
| 19 - 129 West Los Feliz Road | 129 West Los Feliz Road | New 24,600 SF medical office building on vacant 17,650 lot. |

Table 9. **Cumulative Projects Trip Generation**

| | | | | | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **LU** | **Variable** | | **Daily** | **IN** | **OUT** | **TOTAL** | **IN** | **OUT** | **TOTAL** |
| 1 - 1809 Verdugo Blvd* | 254 | 79 | BEDS | 205 | 9 | 6 | 15 | 8 | 13 | 21 |
| 2 - 3506 North Verdugo Road* | 231 | 14 | DU | 48 | 1 | 3 | 4 | 4 | 2 | 5 |
| 3 - 2612 Honolulu Ave* | 220 | 28 | DU | 186 | 3 | 11 | 14 | 11 | 6 | 17 |
| 4 - 517 East Broadway | 720 | 32.000 | TSF | 1114 | 69 | 20 | 89 | 31 | 80 | 111 |
| 5 - 727 Sonora Avenue | 710 | 33.053 | TSF | 322 | 33 | 5 | 38 | 6 | 32 | 38 |
| 6 - 1304 South Brand Blvd | 710 | 33.053 | TSF | 322 | 33 | 5 | 38 | 6 | 32 | 38 |
| 7 - 620 West Elk Avenue | 151 | 214.745 | TSF | 324 | 13 | 9 | 21 | 17 | 19 | 37 |
| 8 - 401 Hawthorne Street | 231 | 23 | DU | 79 | 2 | 5 | 7 | 6 | 2 | 8 |
| 9 - 1633 Victory Blvd | 310 | 64 | RMS | 535 | 18 | 12 | 30 | 20 | 19 | 38 |
| 10 - 1112 N. Columbus | 221 | 11 | DU | 28 | 0 | 2 | 2 | 1 | 1 | 2 |
| 11 - 206 N. Kenwood St | 221 | 286 | DU | 741 | 7 | 50 | 57 | 37 | 14 | 51 |
| 12 - 3001 Scholl Canyon Road | WTP | N/A | N/A | 100 | 50 | 25 | 75 | 25 | 50 | 75 |
| 13 - 206 West Chevy Chase Drive | 710/720 | 25.705 | TSF | 572 | 41 | 10 | 51 | 15 | 44 | 59 |
| 14 - 1820 South Brand Blvd | 221 | 26 | DU | 67 | 1 | 5 | 5 | 3 | 1 | 5 |
| 15 - 126 South Kenwood Street | 221 | 44 | DU | 114 | 1 | 8 | 9 | 6 | 2 | 8 |
| 16 - 1100 North Brand Blvd | 310 | 85 | RMS | 711 | 24 | 16 | 40 | 26 | 25 | 51 |
| 17 - 707 North Pacific Avenue | 881 | 12.900 | TSF | 1408 | 26 | 23 | 50 | 66 | 66 | 133 |
| 18 - 330 Salem Street | 221 | 12 | DU | 31 | 0 | 2 | 2 | 2 | 1 | 2 |
| 19 - 129 West Los Feliz Road | 720 | 24.600 | TSF | 856 | 53 | 15 | 68 | 24 | 61 | 85 |

1. Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.
2. DU = dwelling unit, TSF = thousand Square Feet, RMS = rooms
3. Water Treatment Plant

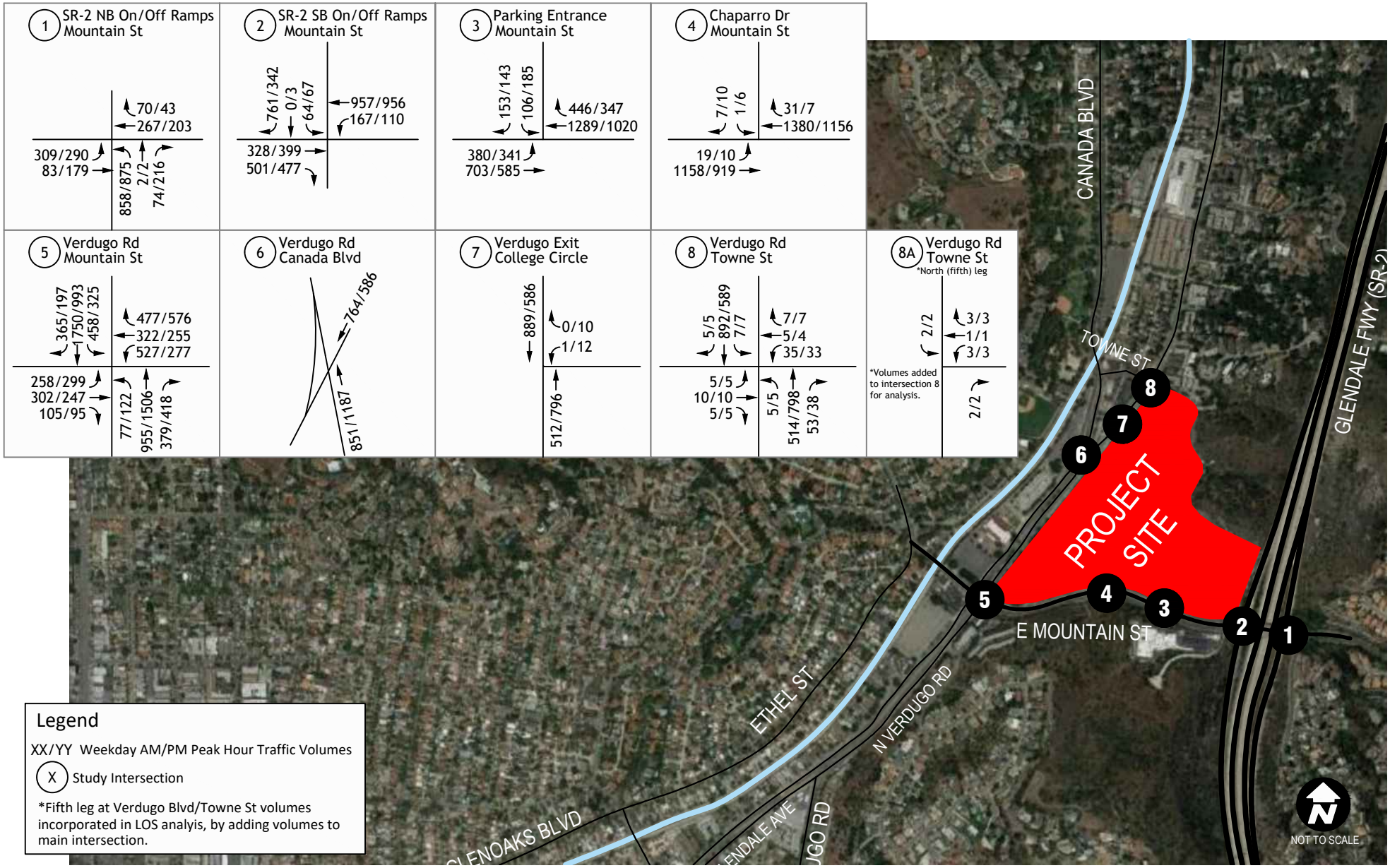



Source: Google Earth, 06/2020.

Cumulative Project Locations

*Glendale Community College District Master Plan*

*Figure 13*




GENERAL TECHNOLOGIES & SOLUTIONS

Source: Google Earth, 01/2019.

# Year 2023 Baseline - Peak Hour Volumes

*Glendale Community College District Master Plan*

*Figure 14*

**LOS Analysis**

An intersection operations analysis was conducted for the study area to evaluate the Year 2023 baseline weekday AM and PM peak hour conditions. Intersection operations were calculated using the LOS methodology described previously. The LOS analyses were prepared per the City requirements and are shown in Table 10. Detailed LOS worksheets are provided in Appendix C.

Table 10. **Year 2023 Baseline Peak Hour Intersection LOS**

| | AM Peak | | PM Peak | |
|---|---|---|---|---|
| **Intersection** | **LOS[1]** | **V/C or Delay[2]** | **LOS[1]** | **V/C or Delay[2]** |
| SR-2 Northbound On/Off-Ramps and Mountain St | A | 0.558 | A | 0.583 |
| SR-2 Southbound On/Off-Ramps and Mountain St | B | 0.635 | A | 0.480 |
| GCCD Parking Garage Entrance and Mountain St | A | 0.554 | A | 0.535 |
| Chaparro Dr and Mountain St (Unsignalized)[3,4] | D | 25.8 | D | 28.6 |
| Verdugo Blvd and Mountain St | E | 0.924 | E | 0.962 |
| Verdugo Blvd and Canada Blvd | B | 0.605 | B | 0.654 |
| Verdugo Blvd and College Circle Dr. (Unsignalized) [3,4] | C | 21.0 | C | 21.0 |
| Verdugo Blvd and Towne St | A | 0.418 | A | 0.403 |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections Delay measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported

As shown in the table, all of the study intersections continue to operate at LOS D or better during the weekday AM and PM peak hours under Year 2023 baseline conditions with the exception of Verdugo Blvd and Mountain St which operates at LOS E.

## 2.4.4 Horizon Year With Project Conditions

This section describes Year 2023 with the addition of construction traffic. As mentioned earlier the construction activities are in full-swing and peak in 2023; and hence 2023 conditions are assessed to represent the more conservative scenario for the construction traffic impacts on the transportation system.

**Traffic Volumes**

Year 2023 With Project traffic volumes were determined by adding the project trips to the Year 2023 Baseline traffic volumes. Figure 15 shows the Year 2023 With Project weekday AM and PM peak hour traffic volumes.

**Intersection Operations**

An intersection operations analysis was conducted to evaluate the Year 2023 With Project traffic weekday AM and PM peak hour conditions. Intersection operations were calculated using the LOS methodology described previously. Table 11 provides a comparison between the Year 2023 Baseline and Year 2023 With Project traffic conditions for the weekday AM and PM peak hours. Detailed LOS worksheets are included in Appendix C.

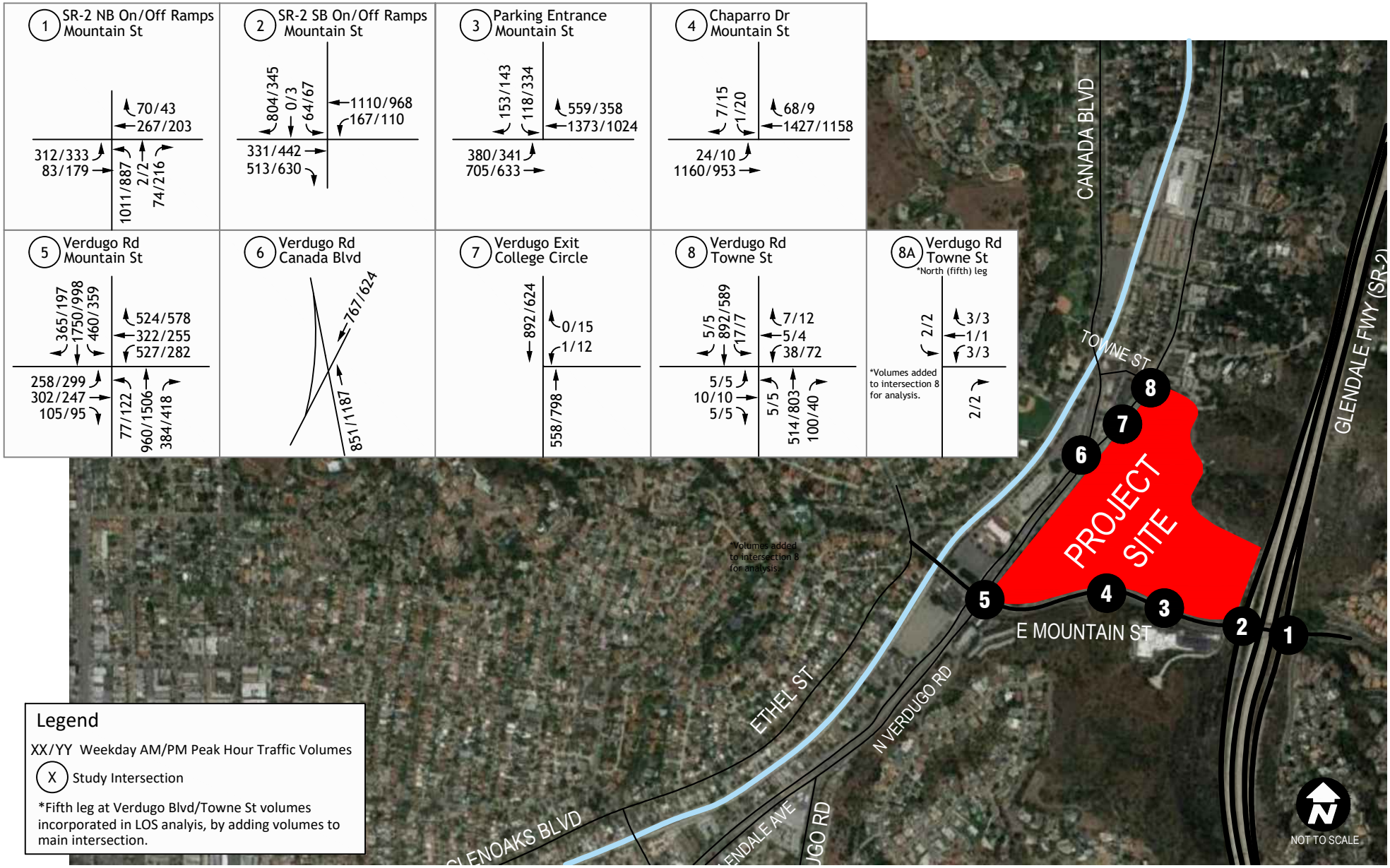
Table 11. **Year 2023 Baseline With Project Traffic – Peak Hour Intersection LOS**

| Intersection | 2023 Baseline | | | | 2023 + Project | | | | Change in V/C or Delay | | Impact? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | AM Peak | | PM Peak | | | | | |
| | LOS[1] | V/C or Delay[2] | LOS | V/C or Delay | LOS | V/C or Delay | LOS | V/C or Delay | AM | PM | AM | PM |
| SR-2 Northbound On/Off-Ramps and Mountain St | A | 0.558 | A | 0.583 | B | 0.602 | A | 0.596 | 0.044 | 0.013 | No | No |
| SR-2 Southbound On/Off-Ramps and Mountain St | B | 0.635 | A | 0.480 | B | 0.648 | A | 0.518 | 0.013 | 0.038 | No | No |
| GCCD Parking Garage Entrance and Mountain St | A | 0.554 | A | 0.535 | A | 0.570 | B | 0.619 | 0.016 | 0.084 | No | No |
| Chaparro Dr and Mountain St (Unsignalized)[3,4] | D | 25.8 | D | 28.6 | D | 28.3 | E | 33.0 | 2.5 | 4.4 | No | **Yes** |
| Verdugo Blvd and Mountain St | E | 0.924 | E | 0.962 | E | 0.939 | E | 0.973 | 0.015 | 0.011 | No | No |
| Verdugo Blvd and Canada Blvd | B | 0.605 | B | 0.654 | B | 0.605 | B | 0.665 | 0 | 0.011 | No | No |
| Verdugo Blvd and College Circle Dr. Exit (Unsignalized)[3,4] | C | 21.0 | C | 21.0 | C | 22.2 | C | 18.4 | 1.2 | -2.6 | No | No |
| Verdugo Blvd and Towne St | A | 0.418 | A | 0.403 | A | 0.420 | A | 0.432 | 0.002 | 0.029 | No | No |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported

As shown in the table, except for the Chaparro Dr and Mountain St unsignalized intersection, the study intersections are forecast to continue to operate at levels of service similar to baseline conditions during the AM and PM peak hours in the Year 2023 With Project traffic conditions. Except for the noted intersection, the project does not increase the delays per the City's significance impact criteria and therefore, there would be no significant traffic impacts at the study area intersections with the addition of the project construction traffic.

Mitigation measures for the Chaparro Dr and Mountain St intersection are discussed in the following sections.

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Source: Google Earth, 01/2019.

# Year 2023 + Project Traffic - Peak Hour Volumes

*Glendale Community College District Master Plan*

*Figure 15*

### 2.4.5 Mitigation Measures

As noted previously, the project construction phase is expected to increase the delays for the Chaparro Drive approach at the intersection of Chaparro Drive and Mountain Street. Given the temporary nature of the peak construction phase, no mitigation measures are proposed.

However, when the new parking structure will be constructed in the place of the existing tennis courts, it is assumed that this intersection will play a bigger role as a potential access to the new structure. As such it is recommended at that time to signalize this intersection and coordinate it with the existing intersection at the Parking Garage Entrance.

Upon signalization, the intersection will operate at an ICU LOS A and volume to capacity ratio of 0.389 in the PM peak hour. Even in the very conservative scenario of a full discharge of the proposed 600 space parking garage at this intersection, the LOS of the proposed intersection is still C and volume to capacity ratio of 0.722 in the PM peak hour of year 2025.

It should be further noted that the new parking structure will reduce cruising for parking in the adjacent communities. The location of the parking structure allows it to capture the student vehicular traffic before reaching to Verdugo and Mountain intersection and thereby leads to reducing the demand at the intersection. The presence of the parking in proximity of the freeway also leads to reduced cut-through traffic in the neighborhoods.

# 3. Garfield Campus

## *3.1 – Project Description*

The Garfield Campus had a headcount of 7,428 and a FTES (full time equivalent students) of 2,929 from 2017-2018. The 2019 Facilities Master Plan Update envisions the number of students remaining the same at about 7,500 unduplicated student headcount. It should be noted that the student headcount has been decreasing over the past few years[3]. Current employees at the school include 59 employees (10 faculty and 49 staff).

The planned updates to the campus include renovating the Tropico and Mariposa buildings, which results in 43,090 GSF of renovations. These renovations include campus-wide repurposing to address current needs and projected growth. Land acquisition of the areas surrounding the current Garfield campus are in progress, and these areas will be used temporarily for utility connection points, parking, and a loading zone/bus stop. At this time, some current buildings on the acquired land will be demolished to create a 200 space parking lot. Further discussion of development that would occur due to the land acquisition would need to take place to recommend long-range land uses.

The GCCD 2019 Facilities Master Plan Update Garfield Campus improvements would result in 43,090 square feet of renovation and approximately 36,000 square feet of demolition. Figure 16 presents the GCCD 2019 Facilities Master Plan for Garfield campus.

## *3.2 – Existing Conditions*

This section describes the existing conditions of the multi-modal transportation systems serving the Garfield campus.

### Roadway Network

**Chevy Chase Dr.** is a minor arterial running north-south east of the Garfield campus and which curves to be east-west south of the campus. In the project vicinity Chevy Chase is 2 lanes per direction with parallel parking on both sides. Bike route (sharrows) are designated in both directions and sidewalks exist on both sides. Signals control the movements at the intersections with Garfield Ave and Acacia Ave. It has a posted speed limit of 35mph.

**Adams St.** is a north-south local street west of the Garfield campus and providing direct access to the campus. In the project vicinity Adams St is 1 lane per direction with parallel parking on both sides. It is a designated bike route (sharrows) in both directions and sidewalks exist on both sides. The movements at the intersections with Garfield Ave and Acacia Ave are stop controlled in all directions.

**Garfield Ave.** is an east-west local street north of and providing direct access to the campus. In the project vicinity Garfield Ave is 1 lane per direction with parallel parking and sidewalks on both sides.

**Acacia Ave.** is a local street east of Chevy Chase and an Urban Collector (with a designated bike route) from Chevy Chase to Verdugo. In the project vicinity Acacia Ave is 1 lane per direction with parallel parking and sidewalks on both sides. It has a posted speed limit of 25mph

[3] Source: https://www.glendale.edu/about-gcc/gcc-overview/institutional-effectiveness/research/campus-profile/campus-profile-enrollment

Figure 16. Garfield Campus - 2019 Facilities Master Plan

*Source: Glendale CCD 2015 Facilities Master Plan – 2019 Update*

## Transit

The Garfield campus is served by the following lines:

**Glendale Beeline Route 4:** which connects the campus to Glendale Galleria and downtown Glendale. Weekday bus frequencies are about 20 minutes from 6 AM to 6PM. Weekend frequencies are about 30 minutes from 9 AM to 5 PM. Stops exist on both sides of Chevy Chase at its intersection with Garfield.

**Metro Line 183:** runs on Chevy Chase and Acacia and connects to Downtown Glendale, North Hollywood, Burbank and Sherman Oaks. It is operated on weekdays only between 6.30 AM and 6.30 PM with about 50 minutes frequency and on weekends with about 1 hour frequencies. Stops exist on both sides of Chevy Chase at its intersections with Acacia and Adams.

## Bicycle Facilities

Bike routes are designated along Chevy Chase, Acacia east of Chevy Chase, and Adams St. Moreover, as Garfield and Acacia (west of Chevy Chase) being local streets, bikes can easily utilize them as bike routes though they are not officially designated as such.

# *3.3 – VMT Analysis*

The project at hand replaces existing uses and given that the number of students is staying relatively the same (actually decreasing), a less-than significant impact is assumed. Per the City's interim guidelines "if a project replaces other uses and results in a net decrease in overall VMT, assume a less-than-significant impact finding."

It should be noted, that although the project is adding parking, the intent of the proposed parking is to serve existing shortage in parking spaces and reduce the spillover parking to the neighborhoods. The total number of parking spaces onsite is currently about 172 spaces whereas the required spaces per the Glendale municipal code (estimated at 28.6 spaces per 1,000 SF of floor area used for instruction) yields 1,232 spaces. Another way of estimating the shortage in parking is by referencing the expressed demand rate (spaces per FTES) of various similar institutions in Southern California which estimated the demand rate at 0.34 to 0.47 spaces per FTES (Table 12 below). In other words, a campus similar in size to Garfield would require 996 to 1377 spaces. Even with the addition of parking spaces the campus parking will still be less than half of the prevailing supply for similar uses which along with the various travel demand management interventions that GCCD carries out (discussed briefly below) contribute to the reduction in VMT.

Table 12. **Existing Parking Supply Rate at California State University Campuses1**

| Campus | Spaces | Student FTES | Rate[2] |
|---|---|---|---|
| East Bay | 4,271 | 12,644 | 0.34 |
| Fullerton | 10,347 | 30,294 | 0.34 |
| Los Angeles | 7,557 | 19,981 | 0.38 |
| Northridge | 11,852 | 31,281 | 0.38 |
| Bakersfield | 3,552 | 8,157 | 0.44 |
| Long Beach | 14,016 | 29,749 | 0.47 |

1. Source: CSU Dominguez Hills - Guidelines for the Master Plan based on 2014-15 FTE enrollment and 2014-15 parking spaces. (https://www.csudh.edu/fpcm/campus-master-plan-update/)
2. Rate calculated as parking spaces per student FTE.

The addition of spaces as such is not intended to encourage driving by providing parking (for the reasons discussed below), but rather to reduce the number of vehicles searching

for parking in the surrounding communities which in turn contributes to increased VMT. The reduction is "cruising" for parking will itself contribute to the reduction in VMT.

In discussing parking, it is important to highlight that parking is well managed on GCC campus. Students, faculty, and staff are required to display a valid parking permit while parked on campus 365 days a year. Parking is not free: semester and daily permits are available to purchase and there are no grace periods. Valid parking permits are always required (vehicles not displaying a valid parking permit, are subject to citation).

Moreover, the campus is served by Glendale Beeline and Metro as noted earlier, providing what the district labels as "an economical and stress-free alternative to parking". Discounts are available for students, the disabled, and seniors. More recently, the district has been working with Metro and Glendale BeeLine to establish a U-pass program for GCCD. The program provides a semester transit pass to students as part of the GCCD student ID and is good for unlimited rides on all Metro services in Los Angeles County, including Metro Rail, Metro Rapid and Express buses, and local buses. The intent of this program is to encourage the use of alternative transportation modes as well as reduce the demand for parking.

Furthermore, the district works with Go-Glendale, a membership-based nonprofit organization working with local employers and property managers to reduce traffic congestion, improve air quality, accessibility and mobility in Glendale. As part of this Travel Demand Management program the district offers various incentives for ridesharing, transit use, and biking/walking including[4]:

- $10/person and the ability to park in any parking lot on campus for people who are in a 3+ person carpool
- A Santa Clarita/Palmdale Vanpool with current fees of $5 per day round trip from Santa Clarita and $10 per day round-trip from Palmdale
- $25 per working month if one uses a bicycle or walks to work. An additional incentive includes a $30 gift card for riding a bicycle for 90 days
- Reimbursements for Metrolink and bus riders where GCC covers one-half of the monthly cost up to $130/month
- Guaranteed Ride Home which provides a free ride home from work to those commuters who regularly vanpool, bike, walk, or take the transit should an emergency arise.

## *3.4 – Level of Service Analysis*

Based on the relatively minimal change in FTES (7,428 to 7,500), the campus generated trips are assumed to remain relatively the same between existing 2020 and future 2025 conditions. The construction trips provide a more conservative scenario than that of the build-out scenario (220 daily construction trips compared to the 83 daily trips for the build-out) and as such it is the subject of this analysis. The purpose of the LOS analysis is to identify potential transportation-related impacts associated with the construction activities of the Garfield campus.

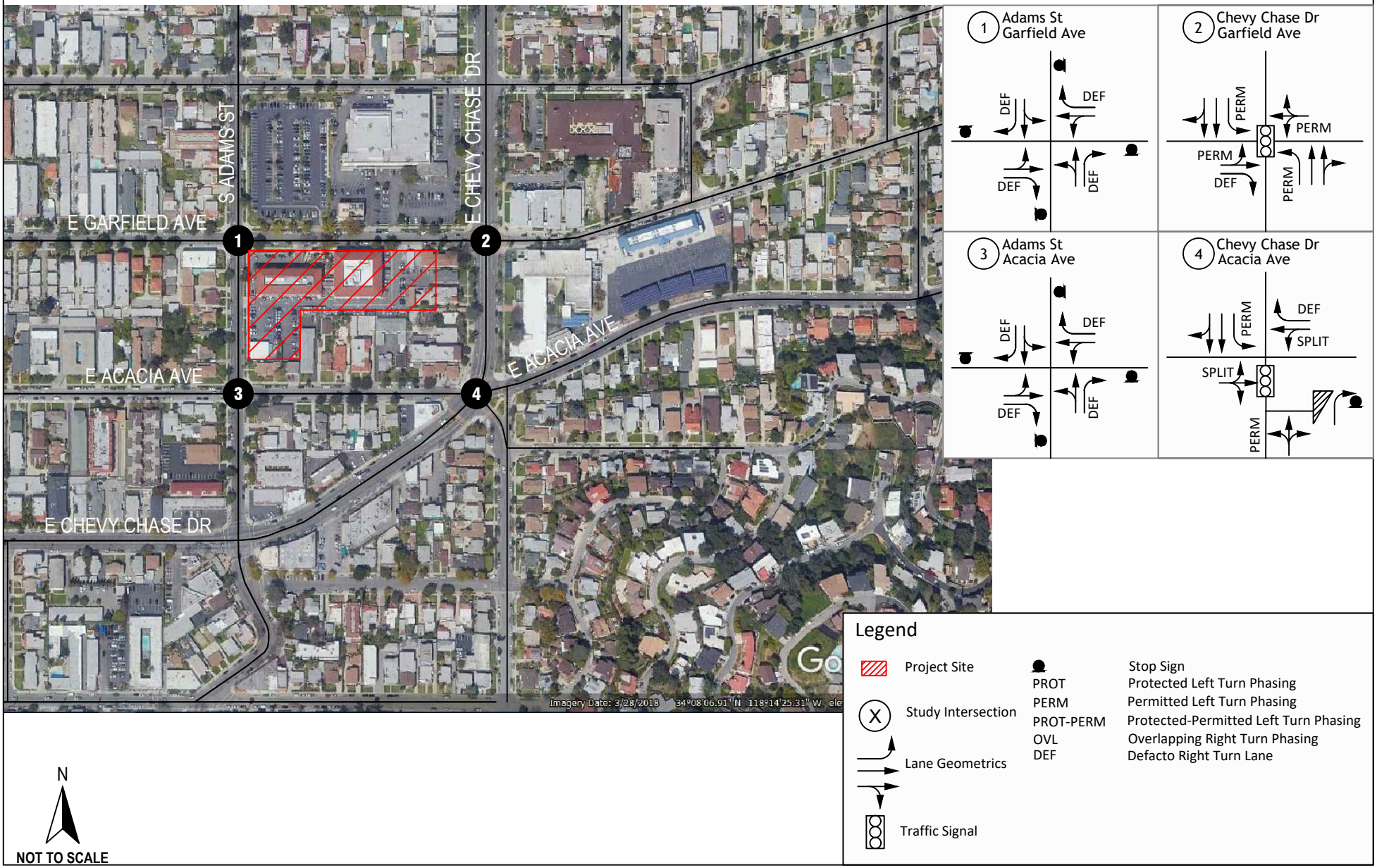
The proposed project includes demolition, new construction, and renovation of facilities. If needed, mitigation measures will be identified that would offset or reduce the temporary construction-related impacts.

Per discussion with the City's Traffic engineer, the project access points were assessed as part of this analysis. These include the following intersections:

[4] Source: http://goglendale.org/gcc/

- Chevy Chase Dr and Garfield Ave
- Chevy Chase Dr and Acacia Ave
- Adams St and Garfield Ave
- Adams Dr and Acacia Ave

The first two intersections listed above are signalized while the last two are all-way stop controlled. The signalized intersections LOS was carried out using the ICU methodology whereas the unsignalized intersection was assessed using the HCM methodology as noted earlier. The intersection geometries are illustrated in Figure 17.

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# Garfield Campus Intersection Geometries

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 17*

### 3.4.1 Existing Conditions

Traffic counts for 2020 conditions were obtained from various sources and adjusted to 2020 pre-COVID-19 conditions as such:

- Data at the 4 intersections was collected in August 2020
- Chevy Chase and Acacia 2014 and 2040 data was obtained from the South Glendale Community Plan Transportation Analysis Report
- The 2020 volumes were first adjusted based on the factor between 2014 and 2020 and then based on the growth rates for AM and PM per the South Glendale Community Plan Forecasts

The raw count data is provided in Appendix B and the adjusted 2020 volumes (to reflect pre-COVID conditions) for the AM and PM peak periods are shown in Figure 18.

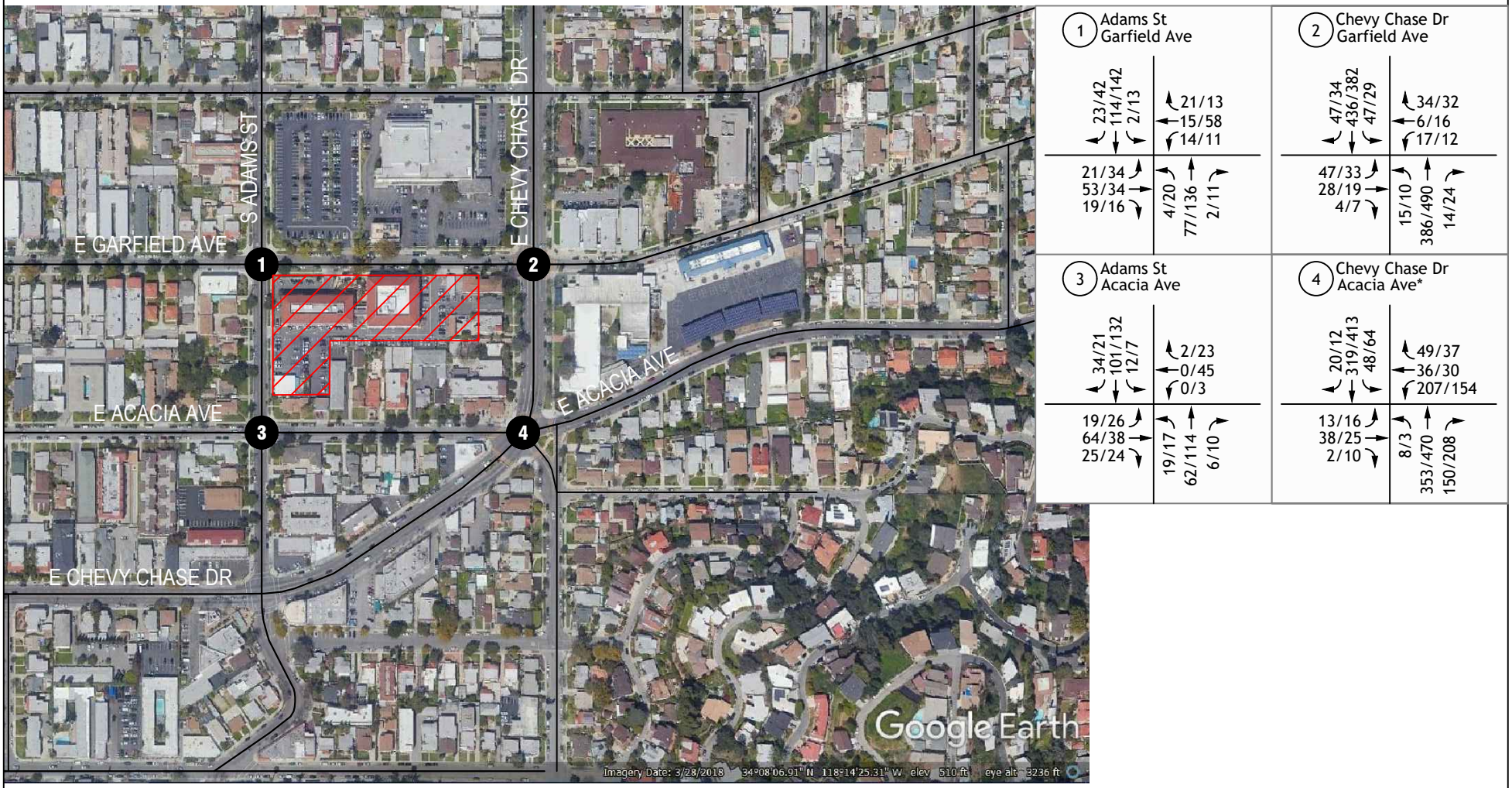
The LOS analyses were prepared for the Existing conditions per the City's requirements and are shown in Table 13. Detailed LOS worksheets are provided in Appendix C.

Table 13. **Existing Peak Hour Intersection LOS (Garfield)**

| | AM Peak | | PM Peak | |
|---|---|---|---|---|
| **Intersection** | **LOS[1]** | **V/C or Delay[2]** | **LOS[1]** | **Delay[2]** |
| Chevy Chase Dr and Garfield Ave | A | 0.325 | A | 0.337 |
| Chevy Chase Dr and Acacia Ave[5] | B | 0.634 | C | 0.713 |
| Adams St and Garfield Ave (Unsignalized)[3,4] | A | 8.3 | A | 9.1 |
| Adams Dr and Acacia Ave (Unsignalized) [3,4] | A | 8.2 | A | 8.7 |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported
5. Volumes from Tyler Street were combined to allow for ICU analysis

As shown in the table, all of the study intersections operate at satisfactory LOS during the weekday AM and PM peak hours under Existing conditions.

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Source: Google Earth, 12/2019.

# Existing AM and PM Peak Hour Volumes (Garfield)

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 18*

### 3.4.2 Existing With Project Conditions

This section documents project-generated traffic impacts during the peak construction phase on the surrounding transportation system and at the study intersections. The additional traffic generated by the construction activities would be temporary, and last only through the phases of construction.

**Construction Trips**

Trip generation for the peak construction phase was determined based on the operational construction characteristics derived from the Air Model (CalEEMod) for the GCCD Facilities Master Plan that estimates the construction daily trips for each phase of construction (shown in Appendix D). The peak construction phase occurs in year 2023 where the daily construction trips include 55 workers and 22 vendor trucks.

It is important to note that construction hours are limited according to the Glendale Municipal Code section 8.36.080 to 7:00 AM to 7:00 PM (Monday through Saturday). Construction is not allowed on Sundays or holidays.

It is assumed for the purpose of this analysis that conservatively 75% of the workers arrive in the AM peak hour and leave in the PM peak hour. Daily trucks are equally divided over an 8 hour shift with about 3 trucks/hour (2 entering and 1 leaving in AM peak hour and 1 entering and 2 leaving in the PM peak hour). These truck trips were adjusted with a Passenger-Car Equivalence (PCE) factor of 2.5 PCE. The peak construction activity trip generation estimates are shown in Table 14.

Table 14. **Project Peak Hour Construction Activity Trip Generation**

| | | | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|
| **Construction Trip Data** | **Units** | **Daily** | **IN** | **OUT** | **TOTAL** | **IN** | **OUT** | **TOTAL** |
| ***Construction Trip Data*** | | | | | | | | |
| Construction Workers | Worker | 55 | | | | | | |
| Construction Trucks | Trucks | 22 | | | | | | |
| ***Vehicle Trips*** | | | | | | | | |
| Construction Workers | Trip Ends | 110 | 42 | 0 | 42 | 0 | 42 | 42 |
| Construction Trucks | Trip Ends | 44 | 2 | 1 | 3 | 1 | 2 | 3 |
| ***PCE Trips*** | | | | | | | | |
| Construction Workers | PCE Trip Ends | 110 | 55 | 0 | 55 | 0 | 55 | 55 |
| Construction Trucks | PCE Trip Ends | 110 | 5 | 3 | 8 | 3 | 5 | 8 |
| **Total PCE Trips** | | 220 | 47 | 3 | 50 | 3 | 47 | 50 |

1. PCE = Passenger Car Equivalent of 2.5 was used
2. Refer to Appendix D for trips during the various phases

As shown in the table, the peak construction activity of the project would generate approximately 220 daily PCE trips, 50 AM PCE peak hour trips (47 inbound and 3 outbound), and 50 PM PCE peak hour trips (3 inbound and 47 outbound).

**Construction Trips Distribution and Assignment**

Project construction phase trips were distributed to the study area intersections using logical travel paths between the project and other land uses, as well as the location of the project in relation to local and regional transportation facilities. Project truck trips were distributed using major roadways and designated truck routes in the study area. The distributions utilized for construction workers and construction truck trips are shown in Figures 19 and 20. The trip assignments for construction traffic is shown in Figures 21 and

22. Project trips were assigned to the study area intersections by multiplying the project trip generation by the trip distribution percent at each location.

**LOS Analysis**

Existing With Project Traffic volumes were determined by adding the construction trips to the Existing traffic volumes. Figure 23 shows the Existing With Project (construction traffic) AM and PM peak hour volumes.

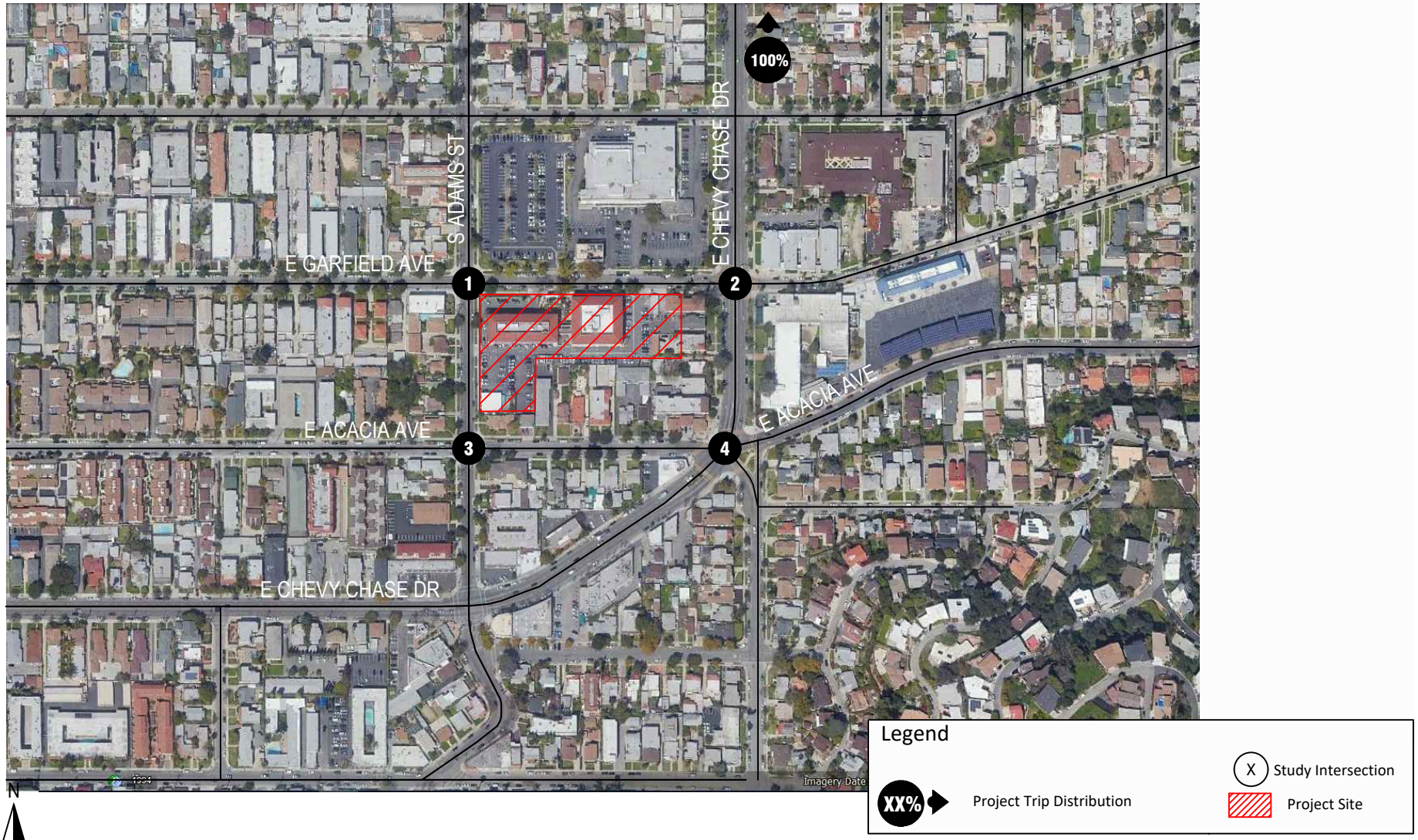
Intersection operations were calculated using the LOS methodology described previously. Table 15 provides a comparison between the Existing and Existing With Project operations for the weekday AM and PM peak hours. Detailed LOS worksheets are included in Appendix C.

As shown in the table, all of the study intersections are forecast to continue to operate at LOS A during the AM and PM peak hours under the Existing With Project traffic conditions. The project does not increase the delays per the City's significance impact criteria. Therefore, there would be no significant traffic impacts at the study area intersections with the addition of project construction traffic.

Table 15. **Existing With Project Conditions Peak Hour Intersection LOS**

| | Existing | | | | Existing + Project | | | | Change in V/C or Delay | | Impact? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | AM Peak | | PM Peak | | | | AM | PM |
| **Intersection** | **LOS[1]** | **V/C or Delay[2]** | **LOS** | **V/C or Delay** | **LOS** | **V/C or Delay** | **LOS** | **V/C or Delay** | **AM** | **PM** | | |
| Chevy Chase Dr and Garfield Ave | A | 0.325 | A | 0.337 | A | 0.342 | A | 0.365 | 0.017 | 0.028 | No | No |
| Chevy Chase Dr and Acacia Ave[5] | B | 0.634 | C | 0.713 | B | 0.634 | C | 0.716 | 0.000 | 0.003 | No | No |
| Adams St and Garfield Ave (Unsignalized)[3,4] | A | 8.3 | A | 9.1 | A | 8.3 | A | 9.1 | 0 | 0 | No | No |
| Adams Dr and Acacia Ave (Unsignalized)[3,4] | A | 8.2 | A | 8.7 | A | 8.2 | A | 8.8 | 0 | 0.1 | No | No |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported
5. Volumes from Tyler Street were combined to allow for ICU analysis

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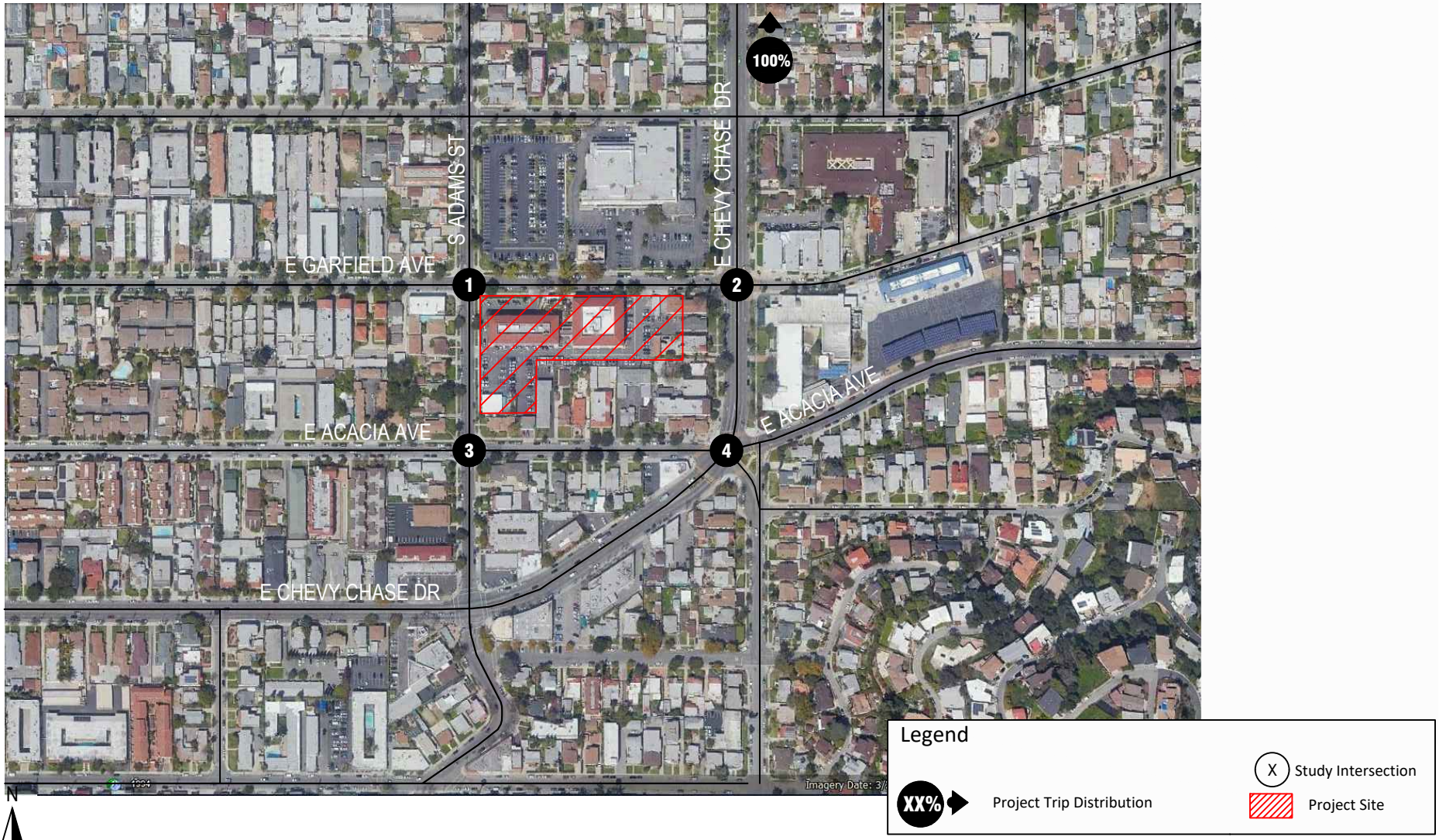
Source: Google Earth, 12/2019.

Garfield Campus - Construction Trip Distributions (Workers)

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 19*




N

NOT TO SCALE

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Source: Google Earth, 12/2019.

Garfield Campus - Construction Trip Distributions (Trucks)

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 20*

Legend

XX/YY Weekday AM/PM Peak Hour Trip Assignment
*Volumes from Tyler St were combined for ICU analysis

(X) Study Intersection

Project Site

N

NOT TO SCALE

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Source: Google Earth, 12/2019.

# Garfield Campus - Construction Trip Assignments (Workers)

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 21*

Legend

XX/YY Weekday AM/PM Peak Hour Trip Assignment
*Volumes from Tyler St were combined for ICU analysis

(X) Study Intersection

Project Site

N

NOT TO SCALE

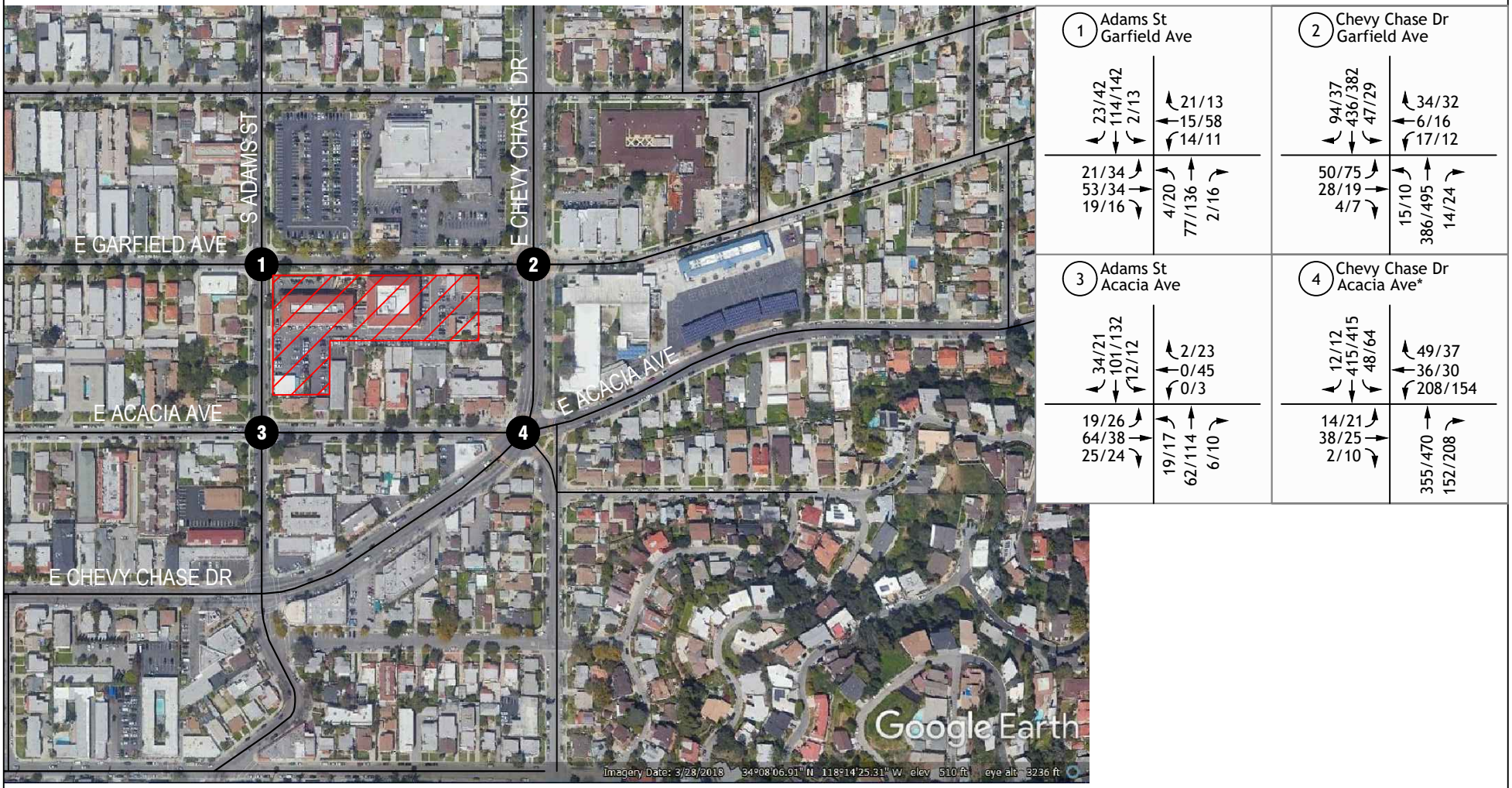
GENERAL TECHNOLOGIES & SOLUTIONS

Source: Google Earth, 12/2019.

# Garfield Campus - Construction Trip Assignments (Trucks)

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 22*




Legend

XX/YY Weekday AM/PM Peak Hour Trip Assignment

*Volumes from Tyler St were combined for ICU analysis

(X) Study Intersection

Project Site

N

NOT TO SCALE

GENERAL TECHNOLOGIES & SOLUTIONS

Source: Google Earth, 12/2019.

# Existing With Project Traffic - Peak Hour Volumes

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 23*

### 3.4.3 Horizon Year Conditions

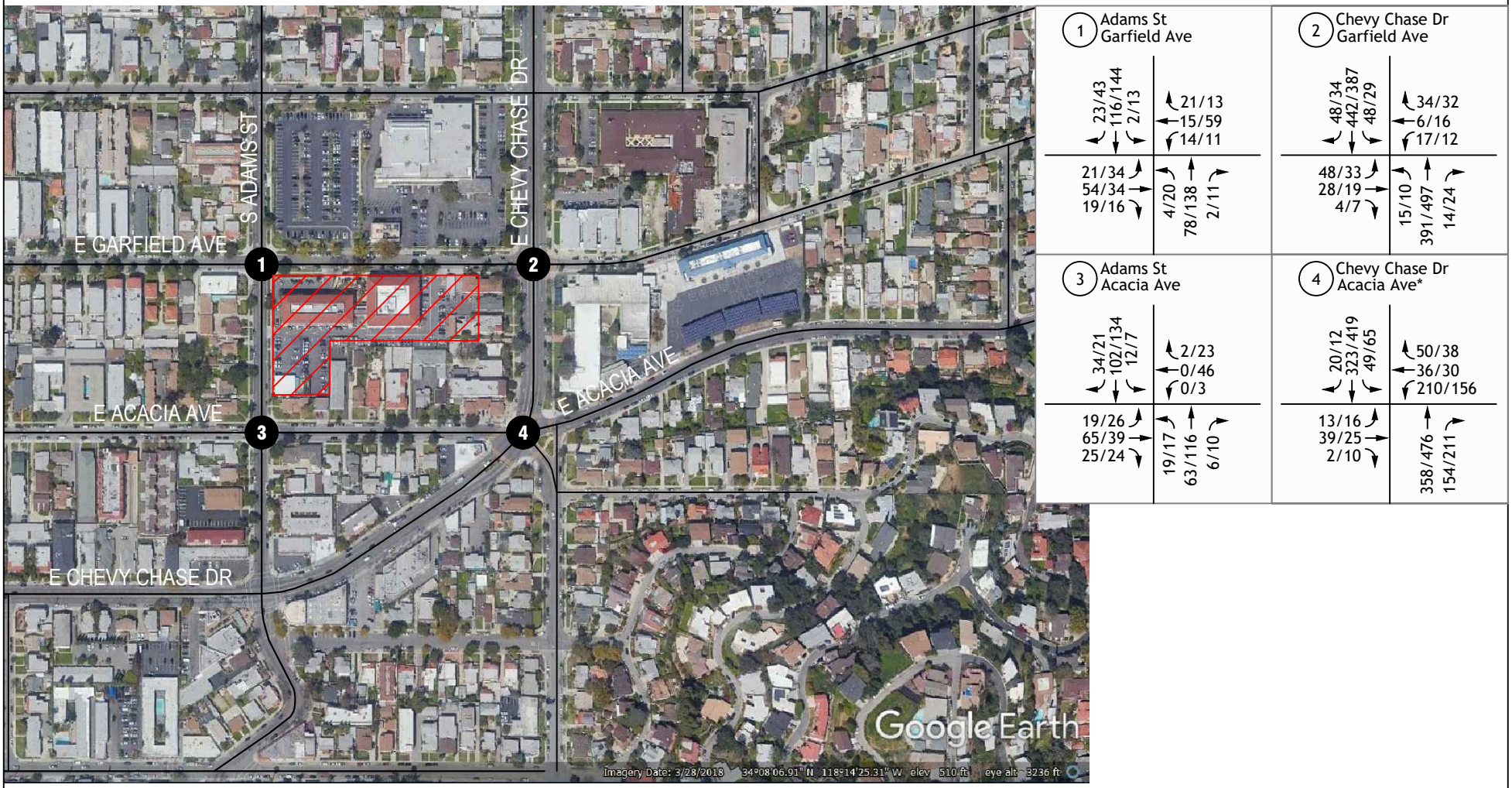
This section describes Year 2023 Baseline Conditions within the project study area. As mentioned earlier the construction activities will be in full-swing and peak in 2023; and hence 2023 conditions are assessed to represent the more conservative scenario for the construction traffic impacts on the transportation system.

**Traffic Volumes**

As noted in the methodology section, the 2023 baseline traffic volumes were determined by adding the existing traffic volumes, the background growth derived from the Los Angeles CMP, as well as traffic from approved but not yet constructed projects (cumulative projects) in the vicinity of the project.

The location of each cumulative project is shown in Figure 13 and the projects were listed in Table 8.

Figure 24 illustrates the 2023 Baseline traffic volumes for the AM and PM peak conditions.




Legend

XX/YY Weekday AM/PM Peak Hour Trip Assignment

*Volumes from Tyler St were combined for ICU analysis

(X) Study Intersection

Project Site

N

NOT TO SCALE

GENERAL TECHNOLOGIES & SOLUTIONS

Source: Google Earth, 12/2019.

# Year 2023 Baseline - Peak Hour Traffic Volumes

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 24*

**LOS Analysis**

An intersection operations analysis was conducted for the study area to evaluate the Year 2023 baseline weekday AM and PM peak hour conditions. Intersection operations were calculated using the LOS methodology described previously. The LOS analyses were prepared per the City requirements and are shown in Table 16. Detailed LOS worksheets are provided in Appendix C.

Table 16. **Year 2023 Baseline Peak Hour Intersection LOS**

| | AM Peak | | PM Peak | |
|---|---|---|---|---|
| **Intersection** | **LOS[1]** | **Delay or V/C[2]** | **LOS[1]** | **Delay or V/C[2]** |
| Chevy Chase Dr and Garfield Ave | A | 0.322 | A | 0.340 |
| Chevy Chase Dr and Acacia Ave[5] | B | 0.642 | C | 0.721 |
| Adams St and Garfield Ave (Unsignalized)[3,4] | A | 8.3 | A | 9.2 |
| Adams Dr and Acacia Ave (Unsignalized) | A | 8.2 | A | 8.7 |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported
5. Volumes from Tyler Street were combined to allow for ICU analysis

As shown in the table, all of the study intersections continue to operate at LOS A during the weekday AM and PM peak hours under Year 2023 baseline conditions.

## 3.4.4 Horizon Year With Project Conditions

This section describes Year 2023 With Project (construction traffic) conditions. As mentioned earlier the construction activities are in full-swing and peak in 2023; and hence 2023 conditions are assessed to represent the more conservative scenario for the construction traffic impacts on the transportation system.

**Traffic Volumes**

Year 2023 With Project traffic volumes were determined by adding the project trips to the Year 2023 Baseline traffic volumes. Figure 25 shows the Year 2023 With Project weekday AM and PM peak hour traffic volumes.

**Intersection Operations**

An intersection operations analysis was conducted to evaluate the Year 2023 With Project weekday AM and PM peak hour traffic conditions. Intersection operations were calculated using the LOS methodology described previously. Table 17 provides a comparison between the Year 2023 Baseline and Year 2023 With Project traffic conditions for the weekday AM and PM peak hours. Detailed LOS worksheets are included in Appendix C.

Table 17. **Year 2023 With Project Traffic – Peak Hour Intersection LOS**

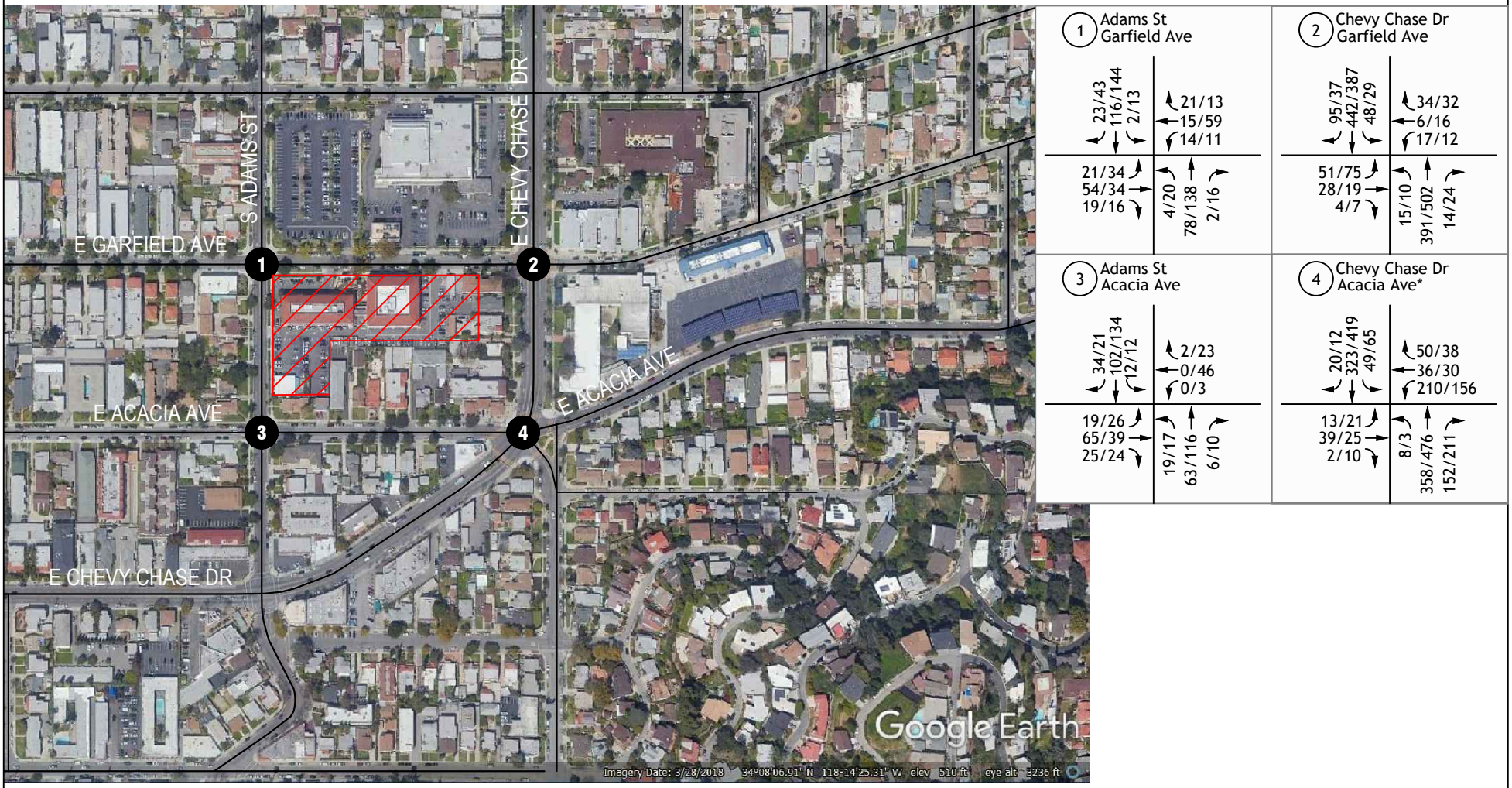
| Intersection | 2023 Baseline | | | | 2023 + Project | | | | Change in Delay or V/C | | Impact? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | AM Peak | | PM Peak | | AM | PM | AM | PM |
| | LOS[1] | Delay or V/C[2] | LOS | Delay or V/C | LOS | Delay or V/C | LOS | Delay or V/C | | | | |
| Chevy Chase Dr and Garfield Ave | A | 0.322 | A | 0.340 | A | 0.345 | A | 0.368 | 0.023 | 0.028 | No | No |
| Chevy Chase Dr and Acacia Ave[5] | B | 0.642 | C | 0.721 | B | 0.642 | C | 0.724 | 0.000 | 0.003 | No | No |
| Adams St and Garfield Ave (Unsignalized)[3,4] | A | 8.3 | A | 9.2 | A | 8.3 | A | 9.2 | 0 | 0 | No | No |
| Adams Dr and Acacia Ave (Unsignalized) | A | 8.2 | A | 8.7 | A | 8..2 | A | 8.8 | 0 | 0.1 | No | No |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported
5. Volumes from Tyler Street were combined to allow for ICU analysis

As shown in the table, all of the study intersections are forecast to continue to operate at LOS A during the AM and PM peak hours in the Year 2023 With Project (construction traffic) conditions. The project does not increase the delays per the City's significance impact criteria. Therefore, there would be no significant traffic impacts at the study area intersections with the addition of the project construction traffic.

### 3.4.5 Mitigation Measures

As noted previously, the project construction phase is not expected to impact any study area intersections. Therefore, no mitigation measures would be required for the construction phase of the Garfield campus.




Legend

XX/YY Weekday AM/PM Peak Hour Trip Assignment

*Volumes from Tyler St were combined for ICU analysis

(X) Study Intersection

Project Site

N

NOT TO SCALE

GENERAL TECHNOLOGIES & SOLUTIONS

Source: Google Earth, 12/2019.

# Year 2023 With Project Traffic - Peak Hour Volumes

*Glendale Community College District Master Plan - Garfield Campus*

*Figure 25*

# 4. Montrose Campus

## *4.1 – Project Description*

The Montrose Campus referred to sometimes as Professional Development Center (PDC) located at 2340 Honolulu Ave in Montrose, CA is an integral and visible part of Glendale Community College District and serves many functions within the District. The existing Building is approximately 10,405 SF with a portion of the lower level unexcavated. As an older, repurposed commercial facility, this building represents a potential for significant improvements that will reduce its operating costs and make it a healthier and more welcoming learning and working environment. Overall, the renovation of the Montrose building will include 10,112 SF.

Recently, GCC has acquired the Citibank property ((at located at 2350 Honolulu Avenue) adjacent to the existing building described above and is considering the feasibility of developing both properties to create a satellite campus for GCC with additional classroom space, an enhanced curriculum, as well as additional parking accommodations. GCC will be renovating the 11,437 SF ex-Citibank building and constructing approximately 7,324 SF of additional classroom space to create, in total, 18,761 SF of classroom space with supporting Administrative services. The existing building will need to be upgraded structurally to meet the Division of the State Architect (DSA) standards to house accredited student occupancy.

The expanded Montrose campus is expected to generate approximately 1,000 FTES. Currently, the Montrose Campus (PDC) does not include college employees, as it is currently operating as an independent enterprise. At buildout, the GCC is expecting to have approximately 15 staff members to support Montrose Campus operations. For the purposes of this document, the Proposed Project will include projects that incorporate the space and building needs identified to the year 2025.

The GCCD 2019 Facilities Master Plan Update for the Montrose Campus (illustrated in Figure 26) would result in 21,559 square feet of renovation and 17,611 square feet of new construction. In addition, the proposed projects at the Montrose Campus would add up to approximately 100 parking spaces to the campus as a parking structure is proposed on Broadview Drive which will have two levels of parking consisting of approximately 33,646 SF of building area. The lower level will have access on Broadview Drive and the upper level will have access from the Alley.

## *4.2 – Existing Conditions*

This section describes the existing conditions of the multi-modal transportation systems serving the Montrose campus.

### Roadway Network

**Honolulu Ave.** is classified as an urban collector between Verdugo Blvd and La Crescents Ave. With one lane per direction, a designated bike route (sharrows), diagonal parking, and a remarkable pedestrian realm, Honolulu provides direct access to the campus.

**Broadview Dr.** is classified as a neighborhood collector in the project Vicinity. It features 1 lane per direction, parallel parking and sidewalks on both sides, and a posted speed of 15mph due to the presence of speed bumps. Broadview Dr. provides access to the campus from the south.

**Ocean View Blvd.** is a minor arterial per the City's circulation element. It provides connectivity to the I-210 freeway to the north. In the project vicinity and south of Honolulu, Ocean View features 1 lane per direction, parallel parking, sidewalks, and a Class II bicycle facility (bike lane). North of Honolulu, Ocean View is 2 lanes per direction with no bike lanes. It has a 35mph posted speed limit.

**Montrose Ave.** is known as N Verdugo Rd within the City limits and Montrose Ave in unincorporated Los Angeles County. Montrose features 2 lanes per direction with a two-way left turn lane with parallel parking and sidewalks. It has a 35mph posted speed limit.

**I-210.** The I-210 freeway in the project vicinity connects between the destinations east of Glendale to the I-5 freeway in Sylmar. At Ocean View Blvd, I-210 is 6 lanes in the southbound direction (3 lanes continuing to I-210 and 3 lanes to SR-2) and 6 lanes in the northbound direction (4 lanes continuing to I-210 and 2 lanes from the SR-2 directional ramp).

### Transit

The Montrose campus is served by the following bus lines:

**Glendale Beeline Routes 3/31/33:** Route 3 operates Monday to Friday from Downtown Glendale to the Jet Propulsion Laboratory (JPL) Via Glendale Ave, Verdugo Rd, Honolulu Ave, and Foothill Blvd. Route 31 operates Saturday from Downtown to La Crescenta only. Route 33 operates Monday to Friday from Montrose to the JPL. The weekday bus frequencies at the campus stops vary from 10 to 40 minutes between 5.30 AM and 9 PM. Saturday frequencies vary from 20 to 30 minutes between 9.30 AM and 5.30 PM. Stops exist at the intersection of Ocean View Blvd with Honolulu Ave.

**Metro Line 90/91:** runs from downtown Los Angeles to Sylmar with stops along the way including Glendale Station which provides connection to Metro 183, Glendale Beeline Routes 1, 2, 11, 12, Metrolink Antelope Valley Line, Ventura County Line, and Amtrak.
It is operated on weekdays only between 5.30AM and midnight with 30 -40 minutes frequencies. The 90/91-bus stops are at the intersection of Ocean View Blvd with Honolulu Ave.

### Bicycle Facilities

A bike route (sharrow) exists on Honolulu Ave in the project area and connect east to the bike lane of Verdugo Blvd and west to the City limits. Bike racks also exist on Honolulu.
A Class II facility (bike lane) runs on Ocean view Blvd south of Honolulu. With a posted speed of 15mph, Broadview Dr also provides a slow route that can be utilized by bicyclists. The City's Bicycle Transportation Plan proposes the extension of the bike lanes on Ocean View Blvd to the northern City limits.

## *4.3 – VMT Analysis*

As noted earlier, Glendale Community College is planning on expanding its Montrose Campus (known as the Glendale Community College Professional Development Center) located at 2340 Honolulu Avenue. The expanded campus is expected to generate 1,000 full-time equivalent students (FTEs), supported by 15 staff members. In addition, 100 parking spaces will be added to the campus.

As the City is still in the process of finalizing the VMT guidelines and calculator at the time of this study, the VMT analysis relied on model runs performed by the City of Glendale for both existing and cumulative scenarios. The model runs and VMT analysis treated the campus expansion as retail land use for SB 743 VMT evaluation. Thereby, the VMT comparison was being conducted as absolute change in VMT within the City of Glendale between "Without project" and "With project" conditions. Evaluation of the campus as retail land use may be one of the approaches. However, GTS offers three considerations in the SB743 evaluation of the campus expansion illustrated below.

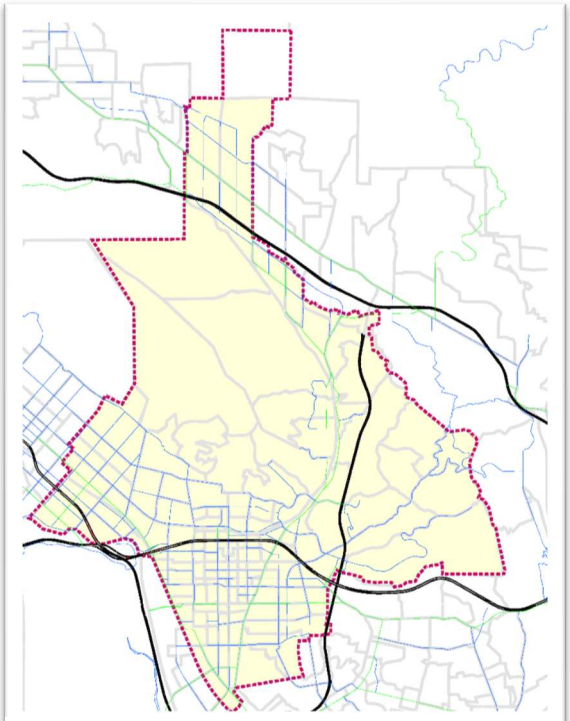
### 4.3.1. Consideration of the Campus Expansion under Public Facilities

As a community college, the Montrose campus expansion will primarily serve the Glendale community and produce very low VMT or divert existing trips from established local or regional facilities. This is especially true since as the City grows, the other two campuses (Verdugo and Montrose) are not growing in terms of their student population and as such Montrose expansion can absorb for this population growth. Thus, similar to local serving retail, trips are generally shortened as longer trips from/to regional facilities are redistributed to the local serving public facility. As a locally serving public facility the Montrose campus expansion can be presumed to have less than significant impact.

### 4.3.2. Consideration of Efficiency Metric as the Threshold in Evaluation

As indicated before, currently the campus expansion is being assessed as retail land use by the use of absolute VMT change within the City of Glendale. OPR Technical Advisory (TA) provides guidance on residential, office, and retail uses. The TA provides discretion to the lead agencies on other land uses as OPR cannot address guidance on all types of different land uses. As such, GTS recognizes the lead agencies have discretion on the adoption of project evaluation, thresholds and guidance for various land use categories.

Since campus expansion is a special land use, use of a VMT efficiency metric threshold may be a consideration in the VMT evaluation instead of absolute change in VMT. In addition to VMT per capita for residential projects, VMT per employee for office projects, and absolute change in VMT for retail projects, some jurisdictions across the state have adopted VMT per service population as a metric to evaluate multiple land uses that don't adhere to the three land uses provided in the TA.



***2016 SCAG RTP/SCS Traffic Analysis Zones – City of Glendale***

Service population is defined as a sum of population, employment, and any group quarter population within the region. In general, VMT per service population calculations are conducted using Origin – Destination (OD) matrices of the travel model similar to VMT per capita, and VMT per employee metrics which are estimated using mode choice and skim matrices. GTS currently does not have all the required model files to conduct the analysis using OD VMT. However, to demonstrate the comparison (without

project vs. with project) roadway VMT provided by the City was used as a surrogate which show that the project reduces the VMT per service population as presented in Table 18.

Table 18. **VMT per Service Population - Existing and Cumulative Scenarios**

| | Without Project | With Project | Difference | Percent Difference |
|---|---|---|---|---|
| **Existing Scenario** | | | | |
| Roadway VMT (Existing) * | 6,753,222 | 6,763,011 | 9,789 | 0.14% |
| Service Population (2020) ** | 333,359 | 334,359 | 1,000 | |
| VMT per service population | 20.26 | 20.23 | -0.03 | -0.15% |
| **Cumulative Scenario** | | | | |
| Roadway VMT (Cumulative) * | 7,533,993 | 7,543,637 | 9,644 | 0.13% |
| Service Population (2040) ** | 355,486 | 356,486 | | |
| VMT per service population | 21.19 | 21.16 | -0.03 | -0.15% |

*Source: 2020 and 2040 socioeconomic data from 2016 SCAG RTP/SCS travel demand model*
*Note:*
** Roadway VMT was obtained from the City's model runs (data provided by the City)*
*** Service Population = Total population + Total employment + College enrollment*
*** Service Population for the City of Glendale (highlighted area in the above SCAG model map)*

## 4.3.3. Consideration as Absolute Change in VMT

Whereby the campus expansion is treated like a retail project and the absolute change in VMT is assessed. The threshold is existing total citywide VMT and a significant impact will occur if the project would result in a net increase in existing total citywide VMT.

To estimate the net change in existing citywide resulting from the project, the City's model was utilized. The results of this model run are shown in Table 19. As shown in the table, total daily VMT in the City is estimated to increase. Therefore, the project would have a significant VMT impact.

Table 19. **Net VMT Change for Montrose Campus (Existing and Cumulative Scenarios)**

| | Existing | Project Net Change | Percent Change |
|---|---|---|---|
| **Existing Scenario Total Citywide VMT** | 6,753,222 | + 9,789 | + 0.14% |
| | **Year 2040** | **Project Net Change** | **Percent Change** |
| **Cumulative Scenario Total Citywide VMT** | 7,533,993 | + 9,644 | + 0.13% |

*Source: City of Glendale*

Per the City's Guidelines, the project will require a cumulative impact analysis. The project site's northern parcels are designated as Commercial-Regional and the southern parcels are designated as Residential-Low Density in the City's General Plan Land Use Map. Due to the inconsistency with the residential designation, a cumulative impact analysis was carried out to determine if the project would result in a net increase in citywide VMT. The results of this model run are also shown in Table 19. As shown in the table, total daily VMT in the City is estimated to increase. Therefore, the project would have a significant cumulative VMT impact.
A menu of options that will reduce significant impacts to a less than significant level are discussed in the following sections of this chapter.

Figure 26. Montrose Campus - 2019 Facilities Master Plan

*Source: Glendale CCD 2015 Facilities Master Plan – 2019 Update*

## *4.4 – Level of Service Analysis*

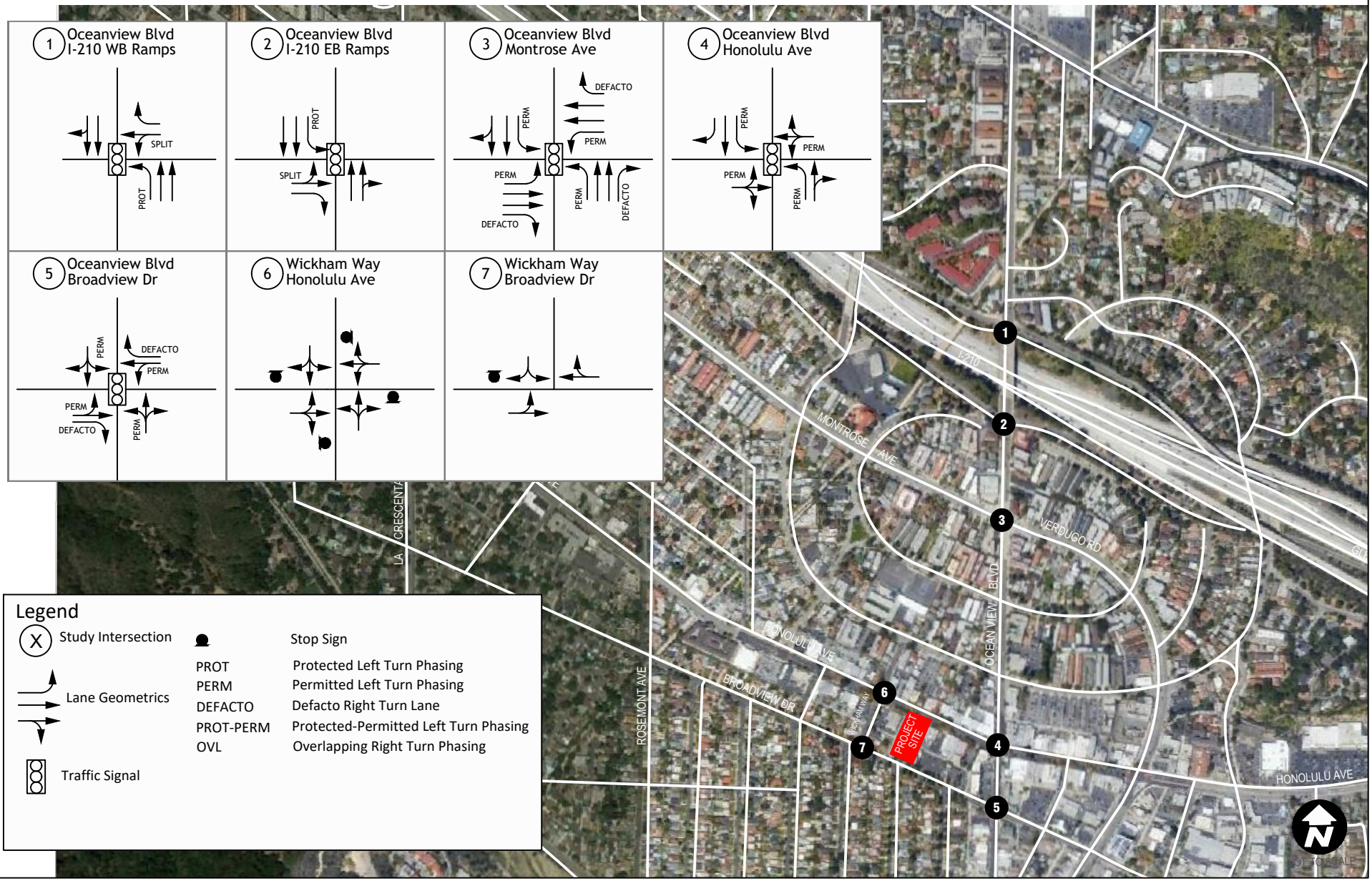
The Montrose campus is assumed to add 1000 FTES between existing 2020 and future 2025 conditions. As such, the purpose of the LOS analysis is to identify potential transportation-related impacts associated with the proposed project build-out conditions. The proposed project includes new construction and renovation of facilities, and it should be noted that construction trips are less than the build-out trips (refer to Appendix D) and hence the focus of this analysis on build-out traffic conditions. If needed, mitigation measures will be identified that would offset or reduce the project-related impacts.

Per discussion with the City's Traffic engineer, the project access points were assessed as part of this analysis. Other intersections were added to address Caltrans ramps. The study intersections include the following:

- Oceanview Blvd and I-210 Westbound ramps
- Oceanview Blvd and I-210 Eastbound ramps
- Oceanview Blvd and Montrose Ave
- Oceanview Blvd and Honolulu Ave
- Oceanview Blvd and Broadview Dr
- Wickham Way and Honolulu Ave (all-way stop controlled)
- Wickham Way and Broadview Dr (one-way stop controlled for Wickham Way)

Apart from the Wickham Way intersections which are stop controlled, all other intersections are signalized. The signalized intersections LOS was carried out using the ICU methodology whereas the unsignalized intersection was assessed using the HCM methodology as noted earlier. The intersection geometries are illustrated in Figure 27.

A residential street segment analysis for Broadview Dr adjacent to the project site is also provided as part of this analysis.

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# Montrose Intersection Geometries

*Glendale Community College District Master Plan*

*Figure 27*

### 4.4.1 Existing Conditions

Traffic counts for 2020 conditions were obtained from various sources and adjusted to 2020 pre-COVID-19 conditions as such:

- Data was collected at the study intersection in August 2020
- Historic Data for Ocean View Blvd and Honolulu from 11/2019 was used to adjust the collected volumes to pre-COVID-19 conditions but factoring up the AM and PM peak hour volumes.

The raw count data is provided in Appendix B and the adjusted 2020 volumes are shown in Figure 28.

The LOS analyses were prepared for the Existing conditions per the City's requirements and are shown in Table 20. Detailed LOS worksheets are provided in Appendix C.

Table 20. **Existing Peak Hour Intersection LOS (Montrose)**

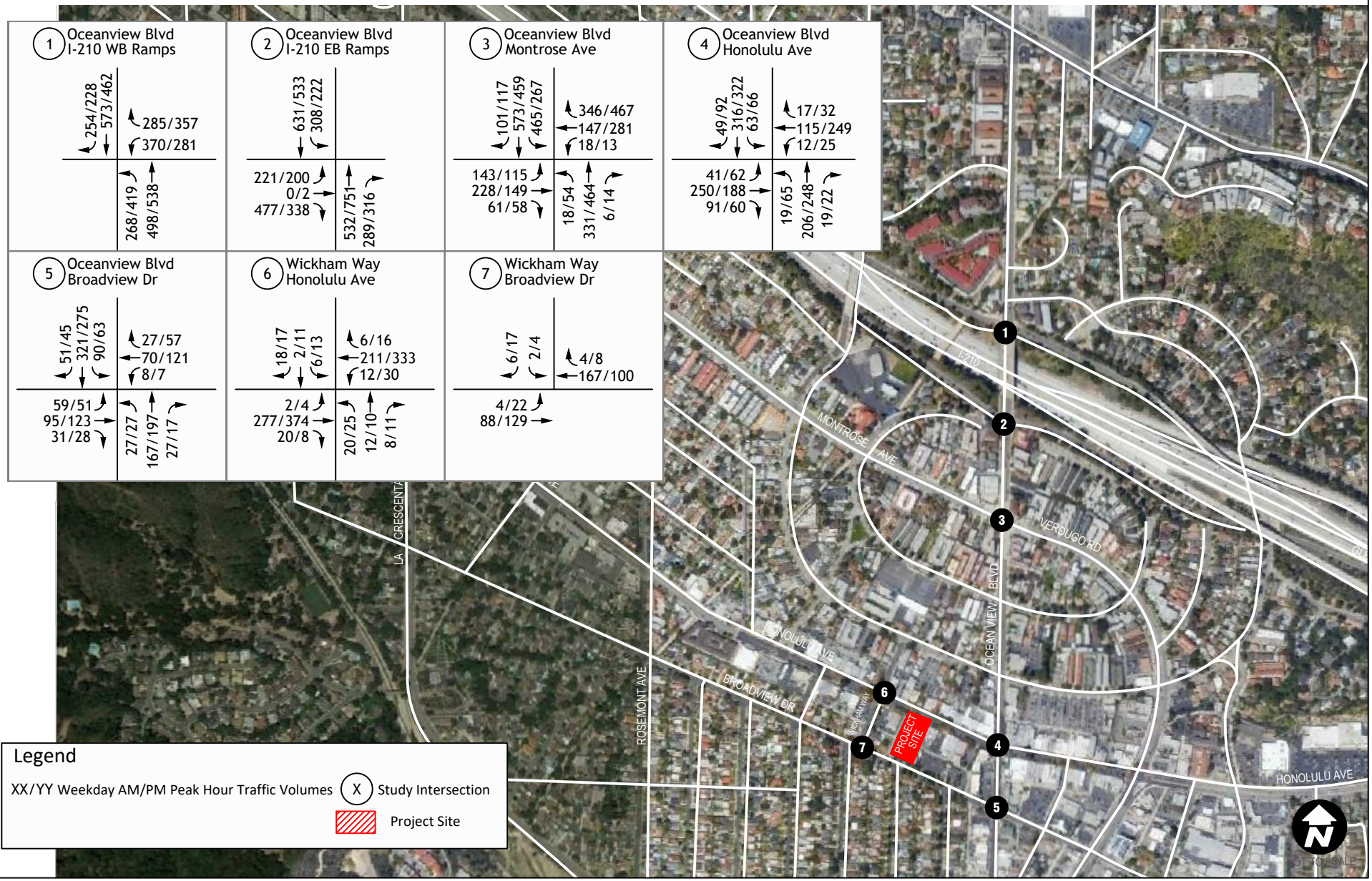
| | AM Peak | | PM Peak | |
|---|---|---|---|---|
| **Intersection** | **LOS[1]** | **V/C or Delay[2]** | **LOS[1]** | **V/C or Delay[2]** |
| Oceanview Blvd and I-210 Westbound ramps | C | 0.756 | D | 0.800 |
| Oceanview Blvd and I-210 Eastbound ramps | D | 0.847 | C | 0.784 |
| Oceanview Blvd and Montrose Ave | D | 0.800 | C | 0.775 |
| Oceanview Blvd and Honolulu Ave | A | 0.556 | A | 0.572 |
| Oceanview Blvd and Broadview Dr | A | 0.507 | A | 0.468 |
| Wickham Way and Honolulu Ave (Unsignalized)[3,4] | B | 10.1 | B | 13 |
| Wickham Way and Broadview Dr (Unsignalized) [3,4] | A | 9.3 | A | 9.6 |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported

As shown in the table, all of the study intersections currently operate at satisfactory LOS D or better during the weekday AM and PM peak hours under Existing conditions.

The existing volumes along Broadview Dr were estimated based on Average Daily Traffic (ADT) volume counts conducted in November 2020. This count data was verified by comparing to pre-COVID prevailing AM and PM traffic percentages of the ADT volumes and the conservative scenario was selected for this analysis which puts the ADT volumes at about 2,743 vehicles.

The City of Glendale Circulation Element of the general plan classifies Broadview Dr. (between Roselawn Ave and Verdugo Rd) as a Neighborhood Collector. The City's TIA Guidelines assign a 5,000 ADT environmental capacity to a Neighborhood Collector and as such under existing conditions Broadview Dr. operates below its environmental capacity.




GENERAL TECHNOLOGIES & SOLUTIONS

# Existing AM and PM Peak Hour Volumes (Montrose)

*Glendale Community College District Master Plan*

*Figure 28*

### 4.4.2 Existing With Project Conditions

This section documents project-generated traffic impacts on the surrounding transportation system and at the study intersections under existing conditions.

**Trip Generation**

Weekday AM and PM peak hour trip generation estimates for the proposed project were developed using trip rates provided in the *Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition, 2017*. Summaries of the trip generation rates and resulting vehicle trips for the proposed project are presented in Table 17.

Table 21. **Proposed Project Trip Generation**

| | | | | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | **LU** | **Variable** | **Daily** | **IN** | **OUT** | **TOTAL** | **IN** | **OUT** | **TOTAL** |
| ***Trip Rates*** | | | | | | | | | |
| Junior/Community College | LU 540 | Students | 1.15 | 81% | 19% | 0.11 | 56% | 44% | 0.11 |
| ***Trip Generation*** | | | | | | | | | |
| Montrose Campus | | 1,000 | 1,150 | 90 | 21 | 111 | 62 | 49 | 111 |

4. Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 540

As shown in the table, the project would generate approximately 1,150 daily trips, 111 AM peak hour trips (90 inbound and 21 outbound), and 111 PM peak hour trips (62 inbound and 49 outbound).

**Trip Distribution and Assignment**

Project construction phase trips were distributed to the study area intersections using logical travel paths between the project and other land uses, as well as the location of the project in relation to local and regional transportation facilities. The distributions utilized are shown in Figure 29 and the trip assignments are shown in Figures 30. Project trips were assigned to the study area intersections by multiplying the project trip generation by the trip distribution percent at each location.

**LOS Analysis**

Existing With Project traffic volumes were determined by adding the project trips to the Existing traffic volumes. Figure 31 shows the Existing With Project AM and PM peak hour traffic volumes.

Intersection operations were calculated using the LOS methodology described previously. Table 18 provides a comparison between the Existing and Existing With Project traffic operations for the weekday AM and PM peak hours. Detailed LOS worksheets are included in Appendix C.

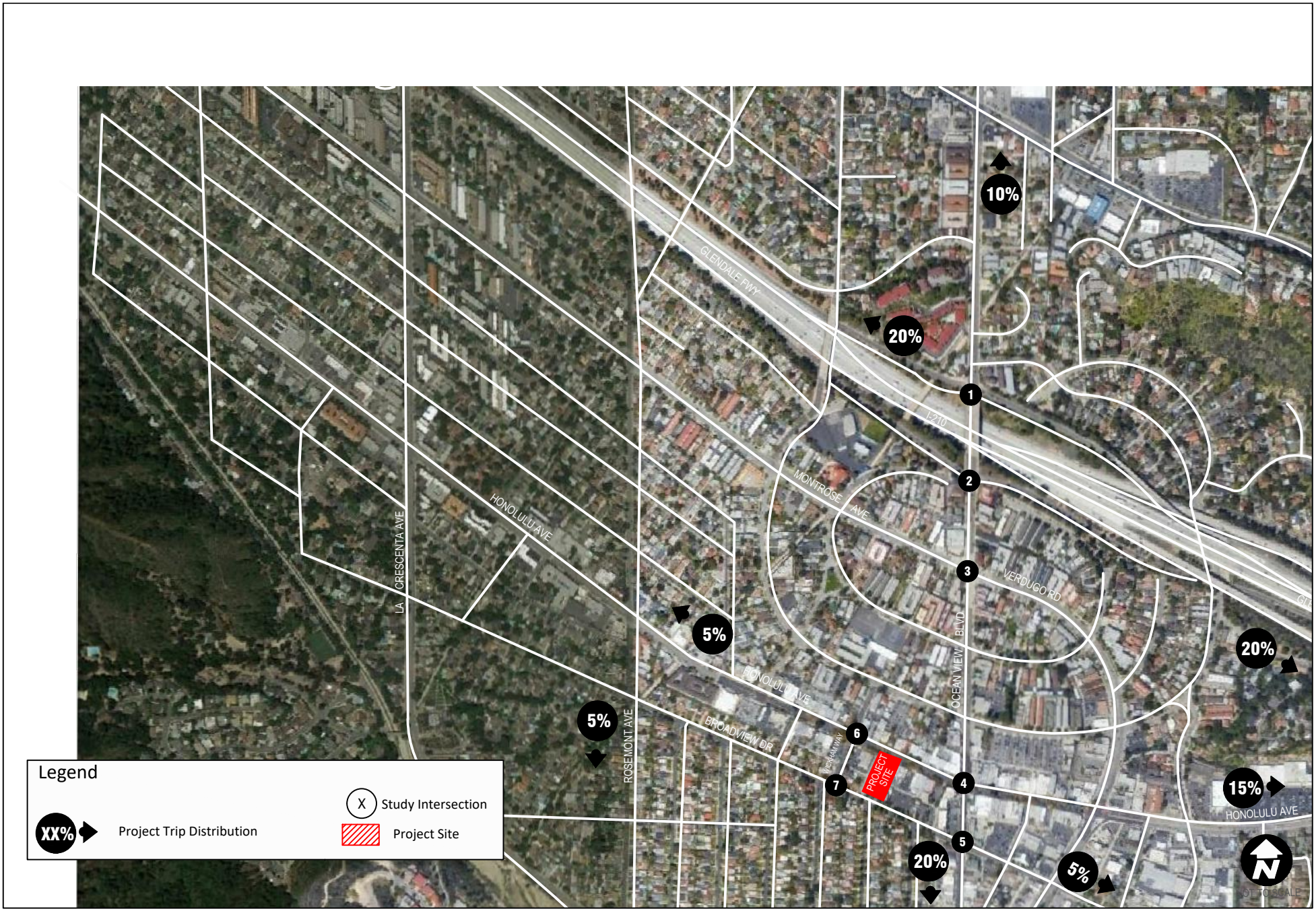
As shown in the table, all of the study intersections are forecast to continue to operate at LOS D or better during the AM and PM peak hours under the Existing With Project conditions. The project does not increase the delays per the City's significance impact criteria. Therefore, there would be no significant traffic impacts at the study area intersections with the addition of project traffic.

Table 22. **Existing With Project Conditions Peak Hour Intersection LOS**

| Intersection | Existing | | | | Existing + Project | | | | Change in V/C or Delay | | Impact? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | AM Peak | | PM Peak | | AM | PM | AM | PM |
| | LOS[1] | V/C or Delay[2] | LOS | V/C or Delay | LOS | V/C or Delay | LOS | V/C or Delay | | | | |
| Oceanview Blvd and I-210 Westbound ramps | C | 0.756 | D | 0.800 | C | 0.773 | D | 0.808 | 0.017 | 0.008 | No | No |
| Oceanview Blvd and I-210 Eastbound ramps | D | 0.847 | C | 0.784 | C | 0.861 | C | 0.799 | 0.014 | 0.015 | No | No |
| Oceanview Blvd and Montrose Ave | D | 0.800 | C | 0.775 | D | 0.803 | C | 0.783 | 0.003 | 0.008 | No | No |
| Oceanview Blvd and Honolulu Ave | A | 0.556 | A | 0.572 | A | 0.580 | A | 0.595 | 0.024 | 0.023 | No | No |
| Oceanview Blvd and Broadview Dr | A | 0.507 | A | 0.468 | A | 0.533 | A | 0.497 | 0.026 | 0.029 | No | No |
| Wickham Way and Honolulu Ave (Unsignalized)[3,4] | B | 10.1 | B | 13 | B | 10.3 | B | 13.4 | 0.2 | 0.4 | No | No |
| Wickham Way and Broadview Dr (Unsignalized)[3,4] | A | 9.3 | A | 9.6 | B | 10.0 | B | 10.8 | 0.7 | 1.2 | No | No |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported

The existing with-project volumes along Broadview Dr were estimated by adding the daily traffic generated by the project to existing traffic volumes. Conservatively assuming that 90% of the project traffic uses Broadview Dr., the total ADT on Broadview will be 3,778 which is still below the environmental capacity.

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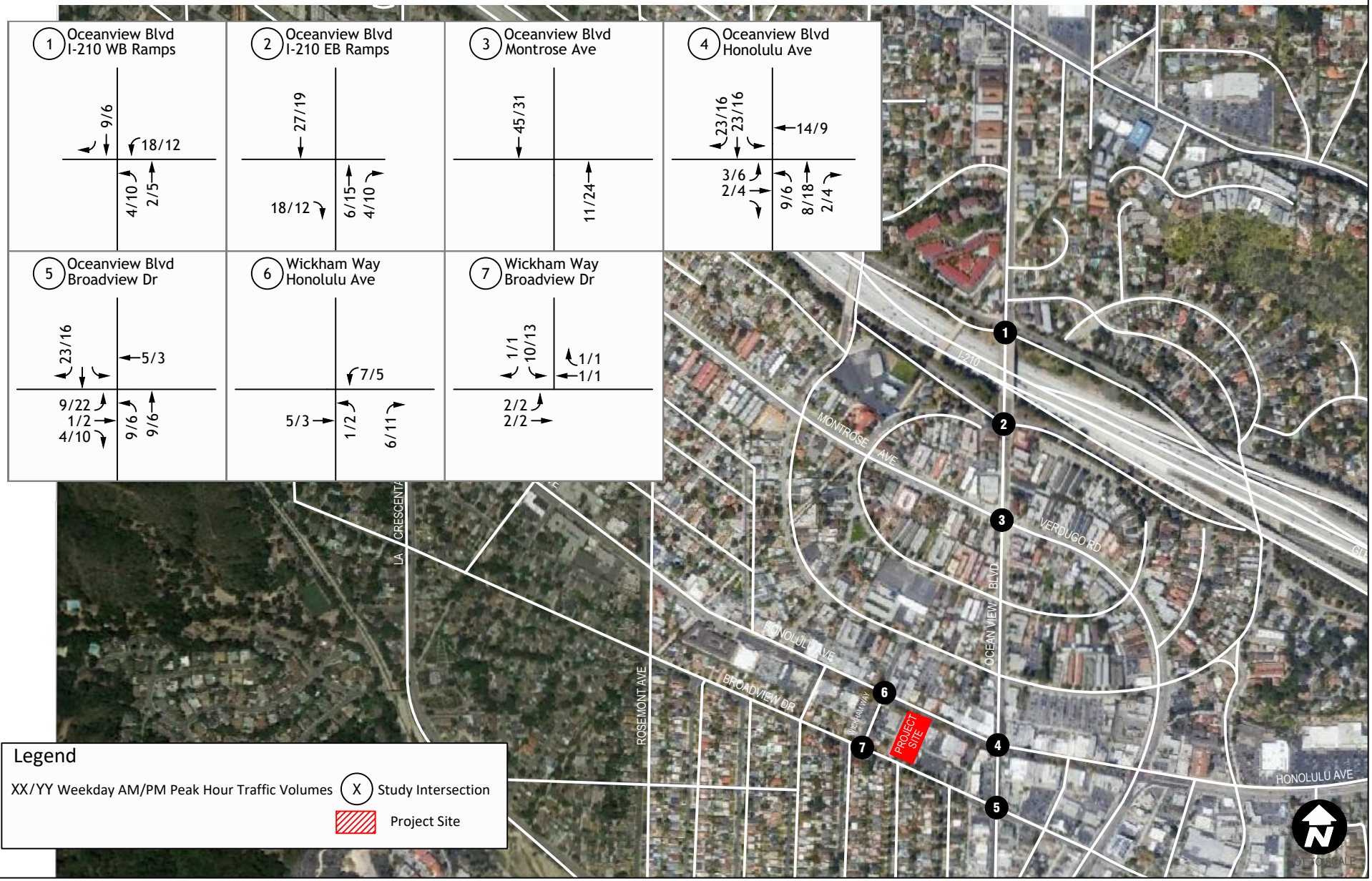
# Montrose - Project Trip Distributions

*Glendale Community College District Master Plan*

*Figure 29*

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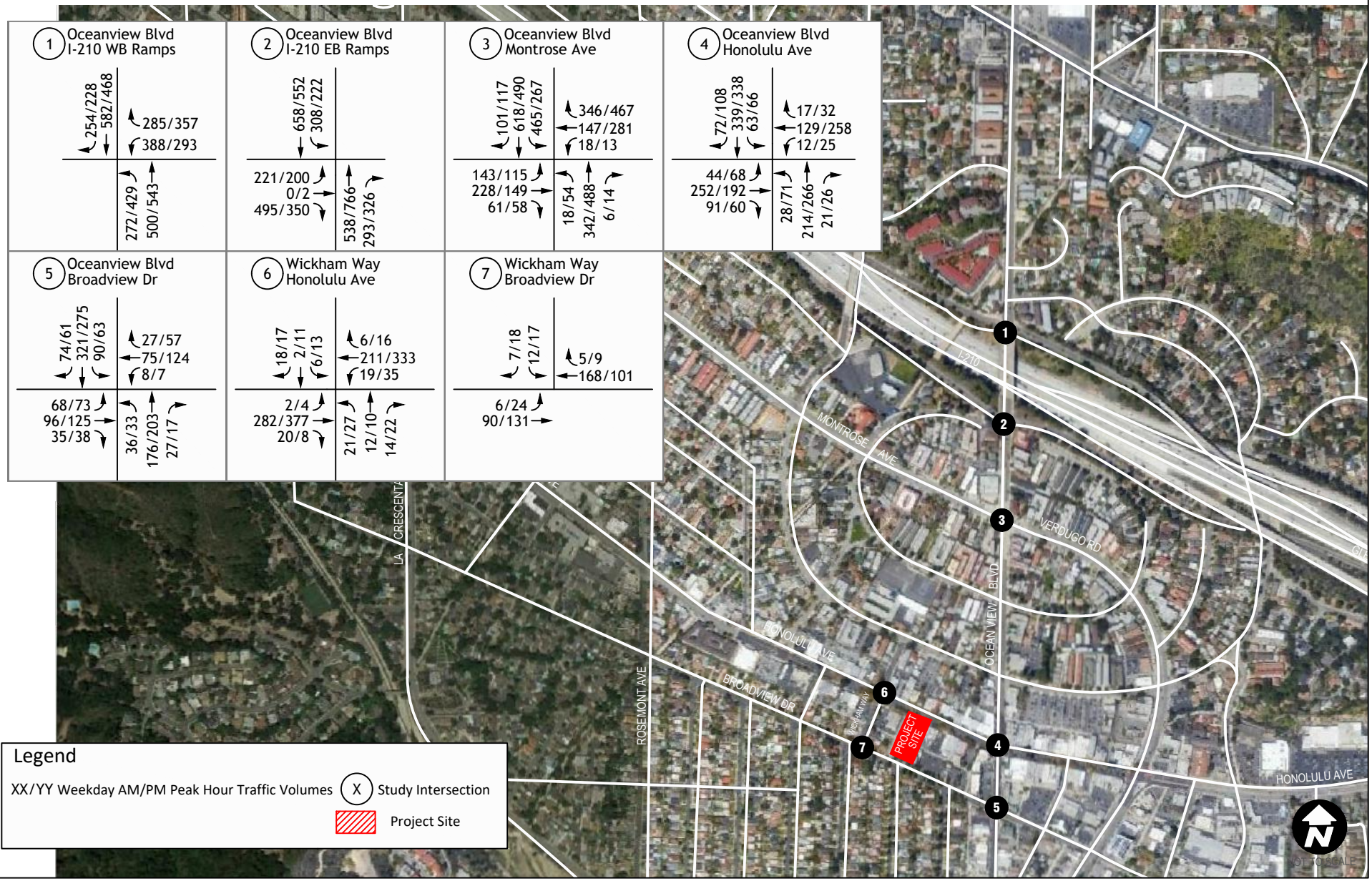
# Montrose - Project Trip Assignments

*Glendale Community College District Master Plan*

*Figure 30*

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# Existing With Project Traffic - Peak Hour Volumes (Montrose)

*Glendale Community College District Master Plan*

*Figure 31*

### 4.4.3 Horizon Year Conditions

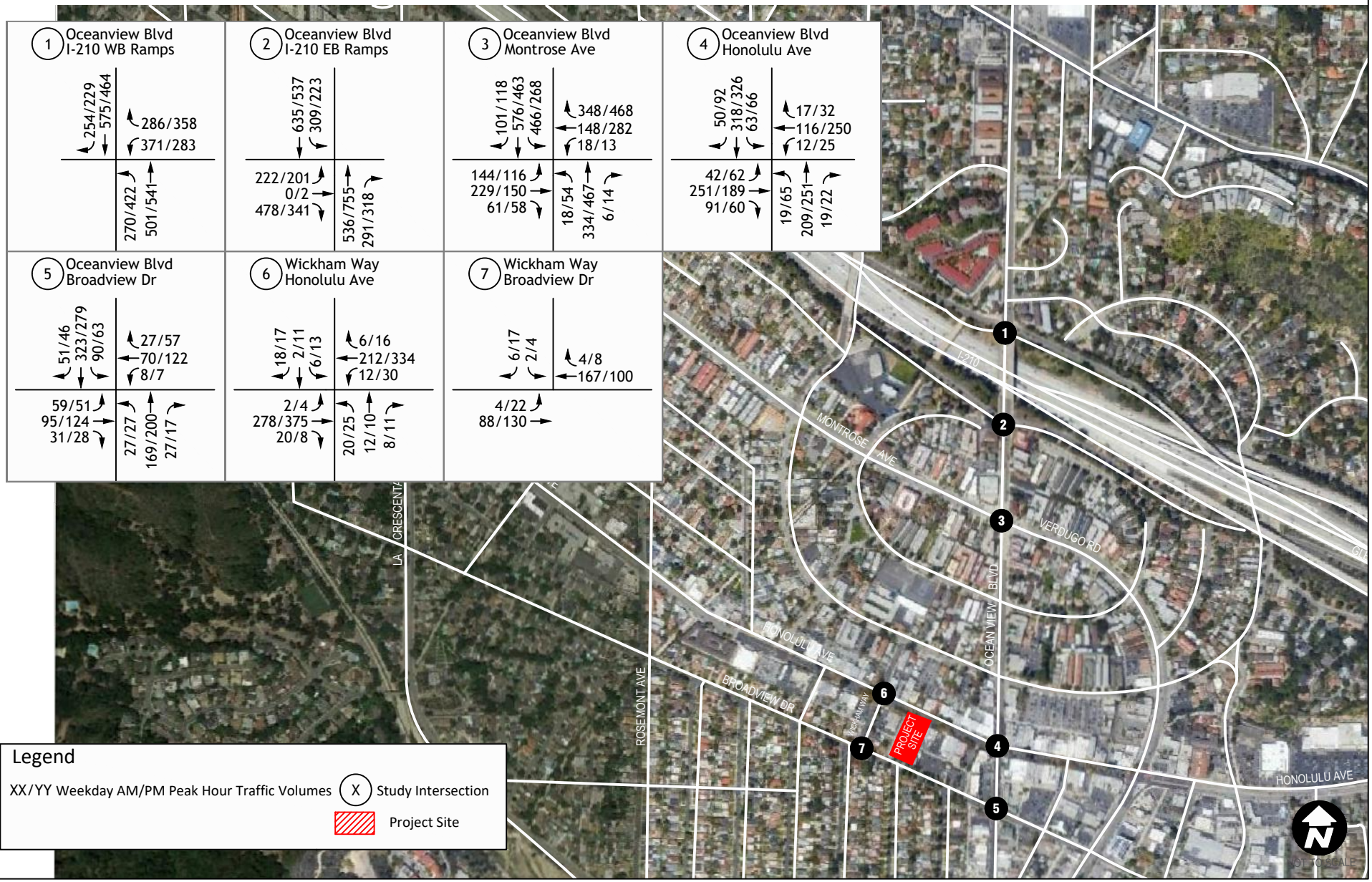
This section describes Year 2025 Baseline Conditions within the project study area. As mentioned earlier the opening year is assumed to be 2025, and hence 2025 conditions are assessed to assess the traffic impacts on the transportation system.

**Traffic Volumes**

As noted in the methodology section, the 2025 baseline traffic volumes were determined by adding the existing traffic volumes, the background growth derived from the Los Angeles CMP, as well as traffic from approved but not yet constructed projects (cumulative projects) in the vicinity of the project.

The location of each cumulative project is shown in Figure 13, while the list of cumulative projects is shown in Table 8 previously.

Figure 32 illustrated the 2025 Baseline traffic volumes for the AM and PM peak hour conditions.

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# Year 2025 Baseline - Peak Hour Volumes (Montrose)

*Glendale Community College District Master Plan*

*Figure 32*

**LOS Analysis**
An intersection operations analysis was conducted for the study area to evaluate the Year 2025 baseline weekday AM and PM peak hour conditions. Intersection operations were calculated using the LOS methodology described previously. The LOS analyses were prepared per the City requirements and are shown in Table 19. Detailed LOS worksheets are provided in Appendix C.

Table 23. **Year 2025 Baseline Peak Hour Intersection LOS**

| | AM Peak | | PM Peak | |
|---|---|---|---|---|
| **Intersection** | **LOS[1]** | **V/C or Delay[2]** | **LOS[1]** | **V/C or Delay[2]** |
| Oceanview Blvd and I-210 Westbound ramps | C | 0.759 | D | 0.804 |
| Oceanview Blvd and I-210 Eastbound ramps | D | 0.851 | C | 0.788 |
| Oceanview Blvd and Montrose Ave | D | 0.803 | C | 0.778 |
| Oceanview Blvd and Honolulu Ave | A | 0.559 | A | 0.576 |
| Oceanview Blvd and Broadview Dr | A | 0.509 | A | 0.471 |
| Wickham Way and Honolulu Ave (Unsignalized)[3,4] | B | 10.2 | B | 13.2 |
| Wickham Way and Broadview Dr (Unsignalized) | A | 9.5 | A | 9.6 |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported

As shown in the table, all of the study intersections continue to operate at LOS D or better during the weekday AM and PM peak hours under Year 2025 baseline conditions.

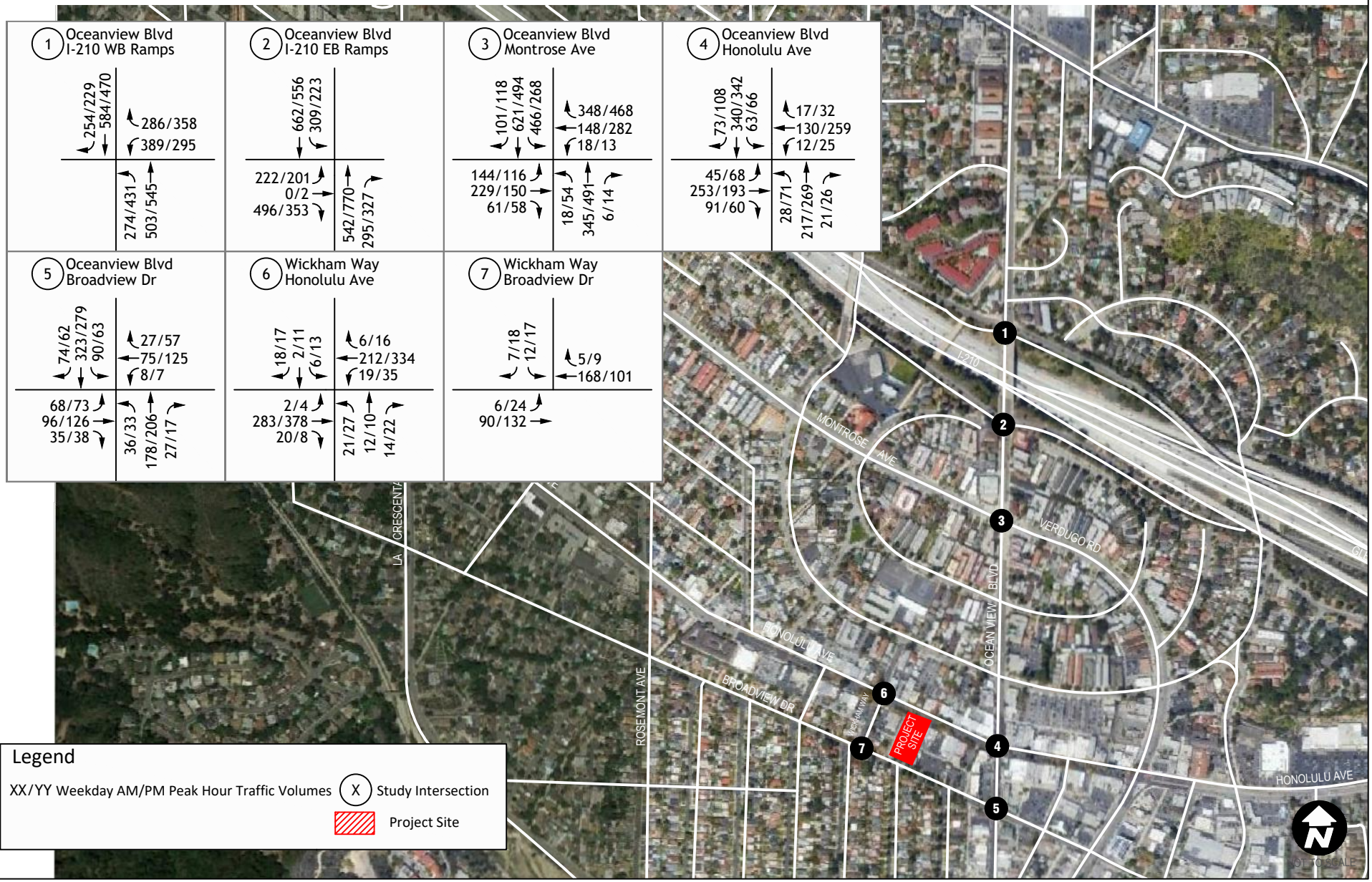
The 2025 Baseline volumes along Broadview Dr were estimated using the growth rate from 2020 to 2025. As such the ADT volumes are estimated at about 2,781 vehicles in 2025 under baseline conditions.
The City of Glendale Circulation Element of the general plan classifies Broadview Dr. (between Roselawn Ave and Verdugo Rd) as a Neighborhood Collector. The City's TIA Guidelines assign a 5,000 ADT environmental capacity to a Neighborhood Collector and as such under 2025 baseline conditions Broadview Dr. operates below its environmental capacity.

## 4.4.4 Horizon Year With Project Conditions

This section describes Year 2025 With Project traffic conditions. As mentioned earlier the project includes 1,000 FTES.

**Traffic Volumes**
Year 2025 With Project traffic volumes were determined by adding the project trips to the Year 2025 Baseline traffic volumes. Figure 33 shows the Year 2025 With Project weekday AM and PM peak hour traffic volumes.

**Intersection Operations**
An intersection operations analysis was conducted to evaluate the Year 2025 With Project weekday AM and PM peak hour traffic conditions. Intersection operations were calculated using the LOS methodology described previously. Table 20 provides a comparison between the Year 2025 Baseline and Year 2025 with Project Traffic conditions for the weekday AM and PM peak hours. Detailed LOS worksheets are included in Appendix C.

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# Year 2025 With Project Traffic - Peak Hour Volumes

*Glendale Community College District Master Plan*

*Figure 33*

Table 24. **Year 2025 With Project Traffic – Peak Hour Intersection LOS**

| | 2023 Baseline | | | | 2023 + Project | | | | Change in V/C or Delay | | Impact? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AM Peak | | PM Peak | | AM Peak | | PM Peak | | | | AM | PM |
| **Intersection** | **LOS[1]** | **V/C or Delay[2]** | **LOS** | **V/C or Delay** | **LOS** | **V/C or Delay** | **LOS** | **V/C or Delay** | **AM** | **PM** | | |
| Oceanview Blvd and I-210 Westbound ramps | C | 0.759 | D | 0.804 | C | 0.776 | D | 0.811 | 0.017 | 0.007 | No | No |
| Oceanview Blvd and I-210 Eastbound ramps | D | 0.851 | C | 0.788 | D | 0.865 | D | 0.803 | 0.014 | 0.015 | No | No |
| Oceanview Blvd and Montrose Ave | D | 0.803 | C | 0.778 | D | 0.807 | C | 0.786 | 0.004 | 0.008 | No | No |
| Oceanview Blvd and Honolulu Ave | A | 0.559 | A | 0.576 | A | 0.581 | A | 0.599 | 0.022 | 0.023 | No | No |
| Oceanview Blvd and Broadview Dr | A | 0.509 | A | 0.471 | A | 0.535 | A | 0.501 | 0.026 | 0.030 | No | No |
| Wickham Way and Honolulu Ave (Unsignalized)[3,4] | B | 10.2 | B | 13.2 | C | 22.7 | B | 13.5 | 12.5 | 0.3 | No | No |
| Wickham Way and Broadview Dr (Unsignalized) | A | 9.5 | A | 9.6 | B | 10 | B | 10.6 | 0.5 | 1.0 | No | No |

1. Level of Service
2. Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections. Delay is measured in seconds/vehicle
3. Delay and LOS are based on ICU for Signalized intersections and HCM for unsignalized intersections
4. For unsignalized intersections the worst movement LOS and Delay are reported

As shown in the table, all of the study intersections are forecast to continue to operate at LOS D or better during the AM and PM peak hours in the Year 2025 With Project conditions. The project does not increase the delays per the City's significance impact criteria. Therefore, there would be no significant traffic impacts at the study area intersections with the addition of the project construction traffic.

As shown in the table, all of the study intersections continue to operate at LOS D or better during the weekday AM and PM peak hours under Year 2025 baseline conditions.

The 2025 with-project volumes along Broadview Dr were estimated by adding the daily traffic generated by the project to existing traffic volumes. Conservatively assuming that 90% of the project traffic uses Broadview Dr., the total ADT on Broadview will be 3,816 which is still below the environmental capacity.

### 4.4.5 Mitigation Measures

As noted previously, the project is not expected to impact any study area intersections. Therefore, no LOS mitigation measures would be required.

However, the project may require VMT mitigations to help offset the significant increases in VMT per the City of Glendale's guidelines.

Table 25 illustrates the potential Travel Demand Measures (TDM) that when adopted will reduce the vehicle miles traveled to the Montrose Campus. The effectiveness of each of the TDM strategies is based primarily on research documented in the 2010 California Air Pollution Control Officers Association (CAPCOA) publication, *Quantifying Greenhouse Gas Mitigation Measures (CAPCOA, 2010).*

Table 25. **Potential Travel Demand Measures**

| TDM Measures | Descriptions[1] |
|---|---|
| **Parking** | |
| • Reduce Parking Supply | This strategy changes the on-site parking supply to provide less than the amount of vehicle parking required by direct application of the City's municipal code. |
| • Parking Cash-Out For Employees | This strategy requires GCCD to offer employees the opportunity to "cash-out" the monthly value of their free or subsidized parking space. |
| • Price Parking | This strategy implements parking pricing for employees and students to disincentivize the use of personal vehicles. |
| **Transit** | |
| • Transit Subsidies | This strategy involves the subsidization of transit fare for students and employees to campus. This is in-line with the u-pass program the district is implementing for the other campuses. |
| **Education & Encouragement** | |
| • Voluntary Travel Behavior Change Program | This strategy involves educating students and staff on the impacts of their travel choices and the opportunities to alter their habits; it often includes two-way communication campaigns and travel feedback programs. This program also relies on a coordinator to manage the program and tools. |
| • Promotions & Marketing | This strategy involves the use of marketing and promotional tools to educate and inform travelers about site specific transportation options and the effects of their travel choices. This strategy includes passive educational and promotional materials (posters, info boards, or a website). |
| **Commute Trip Reductions** | |
| • Required Commute Trip Reduction Program | This strategy typically includes elements such as a coordinated ride-sharing or carpooling program, vanpool program, alternative work schedule program, preferential carpool parking, guaranteed ride home service, and a program coordinator. The program requires the development of metrics to evaluate success, program monitoring, and regular reporting and is similar to what the district is implementing on other campuses with Go-Glendale. |
| • Ride Share Program | This strategy provides ride-share matching services, designating preferred parking for ride-share participants, designing adequate passenger loading/unloading and waiting areas for ride-share vehicles, and providing a website or message board to connect riders and coordinate rides. |
| **Shared Mobility** | |
| • Car Share | This strategy involves implementation of car-sharing to allow people to have on-demand access to a vehicle, as-needed. This may include providing membership to an existing program located within ¼ mile, contracting with a third-party vendor to extend membership-based service to an area, or implementing a project-specific fleet that supports the employees on-site. |
| **Bicycle** | |
| • Include Bike Parking and Facilities | This strategy involves implementation of short and long-term bicycle parking and additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel by providing amenities at destinations. |
| **Neighborhood Infrastructure** | |
| • Traffic Calming | This strategy involves encouraging people to walk, bike, or take transit within the project area. Traffic calming along a street may include elements such as speed tables, raised median islands, chicanes, or correcting a substandard sidewalk widths. |
| • Pedestrian Network Improvements | This strategy involves implementation of pedestrian network improvements that encourage people to walk. This includes internally linking all uses within the project site with pedestrian facilities such as sidewalks, connecting the project site to the surrounding pedestrian network, and elimination of barriers that impede pedestrian circulation. |

1. Reference is made to the TDM strategies descriptions in the City of Los Angeles VMT Calculator

An aggregate estimate of the maximum VMT benefit/reduction that can occur due to the implementation and monitoring of the recommended TDM measures is presented below. GTS recognizes and acknowledges that the benefits of TDM measures can vary significantly and can be strategy and location specific. In order to estimate the maximum benefit of TDM measures the following assumptions are used:

- Based on CAPCOA documentation, suburban center locations can experience up to a maximum of 20% VMT reduction with multiple TDM measures.
- As the region can be considered as suburban center location, a maximum benefit of 20% suggested by CAPCOA was used to estimate TDM benefits. Location and Strategy specific aspects impact the overall effectiveness.
- TDM measures are assumed to be implemented in all three campuses and the benefits are aggregated as the University is assumed as a single project entity.
- TDM measures implementation and student/staff participation rates are assumed to be same in all the three campuses.
- It is assumed that the daily VMT per student is same across all three campuses.
- The University has resources and is committed to establish, maintain, and monitor the recommended TDM measures in the same manner at all three campuses.

Table 26 provides an estimate of the maximum benefits due to recommended TDM measures. As can be seen in the table, the estimated maximum benefit across all campuses is around 31,000 daily VMT which is much higher than the project impact of 9,789 daily VMT under existing conditions and 9,644 daily VMT under cumulative conditions. This indicates that if the TDM measures achieve the maximum benefit suggested by CAPCOA, the project would not have an impact. Additionally, even if the University achieves a much lower percentage of benefits due to TDM, lower than CAPCOA suggested 20%, the project impact can be mitigated. In other words, if the TDM measures lead to a reduction in just 6.5% then the project impacts would be mitigated.

Table 26. **VMT Benefits Estimate From TDM Measures**

| Description | Existing Scenario |
|---|---|
| **A:** Additional roadway VMT (With project - Without project) | 9,789 |
| **B:** Total full-time equivalent students (FTES) - Montrose | 1,000 |
| **C:** VMT per student (C = B/A) | 9.79 |
| **D:** Verdugo Campus FTES | 11,800 |
| **E:** Garfield Campus FTES | 2,900 |
| **F:** Montrose Campus FTES | 1,000 |
| **G:** Total Students (all three campuses) (G = D+ E + F) | 15,700 |
| **H:** Total VMT for all students (H = G x C) | 153,687 |
| **I:** % Maximum VMT benefit due to TDM measures | 20% |
| **J:** Maximum VMT reduction due to TDM measures across all three campuses (J= I x H) | 30,737 |

Table 27 provides a planning level analysis for the quantification of several TDM benefits that the university would apply to achieve the reduction in VMT. Even achieving the bare minimums would lead to a 9.8% VMT reduction (exceeding the above mentioned 7%) thereby mitigating the VMT impact.

Table 27. **Minimum TDM VMT Reductions Per CAPCOA**

| VMT Reduction Strategy Per CAPCOA (Category #) | CAPCOA Strategy | CAPCOA VMT Reduction Range | Minimum Reduction |
|---|---|---|---|
| **Parking Pricing (3.3.3)** | PDT-3 Implement Market Price Public Parking | 2.8%-5.5% | 2.80% |
| **Commute Trip Reduction (3.4.2)** | TRT-2 Implement CTR Program - Required Implementation/Monitoring | 4.2%-21.0% c | 4.20% |
| **Commute Trip Reduction (3.4.15)** | TRT-15 Employee Parking Cash-Out | 0.6%-7.7% | 0.60% |
| **Commute Trip Reduction (3.4.6)** | TRT-6 Encourage Telecommuting and Alternative Work Schedules | 0.07%-5.5% | 0.07% |
| **Commute Trip Reduction (3.4.7)** | 1] TRT-7 Implement CTR Marketing 2] Launch Targeted Behavioral Interventions | 0.8%-4.0% | 0.80% |
| **Commute Trip Reduction (3.4.11)** | TRT-11 Provide Employer-Sponsored Vanpool/Shuttle | 0.3%-13.4% | 0.30% |
| **Commute Trip Reduction (3.4.3)** | TRT-3 Provide Ride-Sharing Programs | 1%-15% | 1% |
| **TOTAL IF ONLY MINIMUM REDUCTIONS ARE ACHIEVED** | | | **9.8 %** |

*Reference: Quantifying Greenhouse Gas Mitigation Measures A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures August, 2010 California Air Pollution Control Officers Association*

# 5. Summary and Conclusions

This report analyzed the potential traffic-related impacts associated with the Glendale Community College District's (GCCD) 2019 Facilities Master Plan Update to the 2015 Facilities Master Plan within the City of Glendale (City).

The traffic analysis included the Verdugo campus, the Garfield campus and the Professional Development Center in Montrose.

This report documented the vehicle miles traveled (VMT) and level of service (LOS) analysis required by the City for the purposes of compliance with the General Plan and other planning documents.

This LOS analysis found out the following:

- For Verdugo Campus, the project will require signalizing the intersection of Chaparro Drive and Mountain Street when the Parking Structure if constructed. This will enhance the site accessibility and reduce the demand on Verdugo Blvd and Mountain Street intersection.

- For Garfield Campus and the Montrose Campus, the project is not expected to impact any study area intersections. Therefore, no mitigation measures would be required.

This VMT analysis found out the following:

- For Verdugo Campus and Garfield Campus, the project is not expected to add additional significant trips and as such it is screened out per the City's guidelines. Therefore, no mitigation measures would be required.
- For Montrose Campus, the project is expected to produce a significant impact if the VMT threshold is based on citywide VMT thresholds. As such, travel demand measures (TDM) are suggested to reduce the project impacts. These measures include parking interventions, promoting transit and active modes, education and encouragement, and commuter trip reduction programs. Consistent with CAPCOA, the maximum VMT reduction that can be achieved by combining TDM strategies is 20% for suburban center locations. However, even the district achieves the minimum reductions per CAPCOA, these are likely to be sufficient to offset the adverse impacts of the expansion project.

# Appendix A: Project Description

## 2.3 PROJECT DESCRIPTION

The 2019 Facilities Master Plan Update to the 2015 Facilities Master Plan is a long-range plan for the development of facilities to support GCCD's vision, mission, and goals. It recommends site and facilities improvements for three GCCD sites: the historic Verdugo Campus, the Garfield Campus, and the Professional Development Center. It addresses the growth in enrollment anticipated over the next decade. It describes college development strategies to support the Strategic Goals of the GCCD Educational Master Plan and the 2013 Garfield Campus Master Plan and positions GCCD to maximize funding and partnership opportunities. The Facilities Master Plan is part of an integrated planning process that supports accreditation and demonstrates compliance with accreditation standards with regard to facilities planning.

A general obligation bond election (Measure "G" and "GC"/ Proposition 39) was approved in March 2002 and November 2016 respectively for both general and specific improvements at GCCD for all three campuses. The District is undertaking an extensive improvement and building program at the three campuses to meet increasing enrollment needs, evolving demands for post-secondary educational institutions, and the needs of the greater-Glendale community. The funds are authorized for the repair and rehabilitation for deteriorated educational facilities, to add classrooms and instructional support space to the three campuses. Additionally, the District will be using capital improvement funds from the State of California for renovation and new construction projects. For the PDC, funding is provided separately from the rest of GCCD. PDC applies for a grant through the California Employment Training Panel (ETP). PDC works with and markets its courses to California employers.

In 2015, the District prepared the GCCD 2015 Facilities Master Plan to reflect GCCD's projected instructional and programmatic needs. The 2015 GCCD Master Plan outlines capital improvements through 2025 and proposes construction of new buildings, renovation, modernization and additions to existing facilities, demolition of existing buildings, and landscaping enhancements. Improvements are intended to update existing technological and program services to meet increasing needs of students and faculty. The 2019 Facilities Master Plan Update plans for expansion of instructional space, acquiring land to expand the Garfield Campus, expansion of the Montrose Campus, and various other campus upgrades in addition to what was included in the 2015 GCCD Master Plan. The Proposed Project includes projects listed in both the 2015 Facilities Master Plan and the 2019 Facilities Master Plan Update that are not currently underway or have not already been completed.

### 2.3.1 <u>Verdugo Campus</u>

The 2015 GCCD Master Plan presents an overall picture of development that supports the strategic goals and priorities of the GCCD Educational Master Plan 2020. Through recommended new facilities and renovations of existing facilities, the Verdugo Campus will be updated to better focus on students. GCCD is actively engaged in piloting new models of instruction, such as collaborative research-based instruction, distance education, and hybrid courses that engage students on many levels. Classrooms and labs will be shaped, configured, and equipped for the use of instructional technologies and flexible furniture that can be rapidly reconfigured for traditional lectures or breakout sessions of small teams of students. Buildings and outdoor spaces will be equipped with power outlets and wireless internet to support the use of mobile devices to teach and learn. Learning resources and tutoring space and clustered with faculty offices to allow faculty to be visible to and easily accessed by students. Learning will be put on display near entrances and lobbies where it will inform and inspire interdisciplinary collaboration among both students and faculty.

As part of the 2019 GCCD Facilities Master Plan, the Verdugo Campus was evaluated through a space utilization and inventory analysis. The master plan space program formed the basis for developing recommendations for facilities. The Verdugo Campus had a headcount of 20,598 and a Full-time Equivalency Students (FTES) of 11,853 from 2017-2018. The space inventory analysis combined with the space needs forecast indicates the total amount of additional assignable space needed to accommodate a master plan horizon student enrollment of 230,928 weekly student contact hours (WSCH), which equates to 11,800 FTES and a 20,200 unduplicated student headcount. The Verdugo Campus currently consists of 1,113 employees, 754 total faculty, and 359 total staff and administrators. For the purposes of this document, the Proposed Project will include projects that incorporate the space and building needs identified to the year 2025. Figure 2-11 presents the GCCD 2019 Facilities Master Plan Update Verdugo Campus improvements. Table 2-2 presents the project details for each building.

**Table 2-2 : 2019 Facilities Master Plan Update Verdugo Campus Improvements**

| Building | Project | Scope |
|---|---|---|
| Aviation Art (AA) | Repurpose the former Fire Academy space in AA building to expand the welding program; create new machine technology laboratory; upgrade restrooms | Renovation – 5,757 GSF |
| Arroyo Seco (AS) | Existing building will be demolished and removed | Remove – 17,977 GSF |
| Advanced Technology Center (ATC) | Renovate spaces within the ATC building to expand the Computer-Assisted Manufacturing laboratory | Renovation (TBD) |
| Auditorium (AU) | Renovation will include new instructional labs; performance, audience, and backstage spaces will be upgraded | Renovation - 46,465 GSF |
| Camino Real (CR) | Reorganize science and math instructional and support space | Renovation – 21,890 GSF |
| EOPS Annex (EA) | Existing temporary facility will be demolished and removed | Demolition – 1,953 GSF |
| Art Gallery (G)/Library (LB) | Update library with learning resources and media center, update interior to provide collaborative studying environment | Renovation – 71,866 GSF |
| Instructional Building and Conference Center (IBCC) | New multi-story building to be a collaborative and cross-disciplinary environment for classrooms, laboratories, and studio space | New construction - 73,613 ASF/82,446 GSF |
| Santa Anita (SA) | Existing temporary facility will be demolished and removed | Demolition - 4,000 GSF |
| Santa Barbara (SB) | Existing building will be demolished and removed | Demolition - 5,200 GSF |
| Science Building (SCI) | New multi-story science building to replace outdated space in San Gabriel, Arroyo Seco, and Camino Real buildings | New construction - 95,941 ASF |

| | | |
|---|---|---|
| San Fernando Complex (SF) | Temporary facilities will be demolished and removed | Demolition - 19,440 GSF |
| San Gabriel (SG) | Renovations to provide instructional lab space, instructional media space, and exhibition space | Renovation – 65,509 GSF |
| Sierra Madre (SM) | Building will be renovated with a student visitor welcome and information center and will also provide additional indoor and outdoor dining space. | Renovation – 17,366 GSF |
| Sierra Nevada Gym (SN) | Existing building will be demolished and removed | Demolition – 17,620 GSF |
| District Storage Facility (ST) | New construction to provide space for district-wide long-term document, furniture, and equipment storage. | New construction - 12,000 GSF |
| College-wide Energy Projects | Improving HVAC systems, provide solar shade structures in Parking Lot B, install water efficient plumbing | New construction/renovation |
| Parking and Circulation Upgrades | Consolidate and improve parking areas, upgrade pedestrian circulation paths, evaluate vertical stair climbs, maintain agreement for joint-use of City parking lots | Renovation |
| Security and Safety Upgrades | Installing security cameras and monitoring system, expand intrusion alarm system, upgrade phone system, and installing manual locking door hardware | Renovation |
| South Parking Structure | Provide approximately 175 stalls per level for about 650 parking stalls total. The six tennis courts will be placed on the upper decks. | New construction - (TBD) |
| Verdugo Gym Trailers | Existing temporary facilities will be demolished and removed | Demolition – 4,230 GSF |
| Signage, Wayfinding, & Visual Display Upgrades | Upgrades to campus signage, visual displays, and room identification; providing campus directories; include parking signage | New Construction |

The GCCD 2019 Facilities Master Plan Verdugo Campus improvements would result in 228,853 square feet of renovation, 52,443 square feet of new construction, and 170,387 square feet of demolition. In addition, the Proposed Projects at the Verdugo Campus would add 650 parking spaces to the campus.

**Figure 2-11 : 2019 Master Plan Update – Verdugo Campus Site Plan**

**Figure 2-11**
Master Plan Update - Site Plan
Verdugo Campus

Name: 21146 PLAN Fig 2-11 Site Plan.Mxd
Print Date: 11/15/2019, Author: pcarlos

### 2.3.2 Garfield Campus

The 2019 Facilities Master Plan Update for the Garfield Campus presents an overall picture of development that supports the strategic goals and priorities of the GCCD Educational Master Plan 2020 and the 2013 Garfield Master Plan. The recommended projects provide building space and site improvements to address the needs of the student enrollment projected for 2025.

Land acquisition of properties surrounding the Garfield Campus has taken place, and much of the area will be developed into a surface parking lot until a new building approximately 15,000 square feet in size is built onsite.

As part of the 2019 Facilities Master Plan Update, the Garfield campus was evaluated through a space utilization and inventory analysis. The master plan space program formed the basis for developing recommendations for facilities. The Garfield Campus had a headcount of 7,428 and a FTES of 2,929 from 2017-2018. The space inventory analysis combined with the space needs forecast indicates the total amount of additional assignable space needed to accommodate a master plan horizon student enrollment of 77,627 WSCH, which equates to 7,500 unduplicated student headcounts. Current employees at the school include 59 employees, which include 10 faculty and 49 staff. For the purposes of this document, the Proposed Project will include projects that incorporate the space and building needs identified to the year 2025.

The planned updates to the campus include renovating the Tropico and Mariposa buildings, which results in 43,090 GSF of renovations. These renovations include campus-wide repurposing to address current needs and projected growth. In addition, a new elevator will be provided at the Garfield campus to provide additional access. Land acquisition of the areas surrounding the current Garfield campus are in progress, and these areas will be used temporarily for utility connection points, parking, and a loading zone/bus stop. Further discussion of development that would occur due to the land acquisition would need to take place to recommend long-range land uses.

The GCCD 2019 Facilities Master Plan Update Garfield Campus improvements would result in 43,090 square feet of renovation.

### 2.3.3 Montrose Campus

The PDC at the Montrose Campus is an integral and visible part of Glendale Community College District and serves many functions within the District. In order to align the PDC with the GCCD brand, the exterior and interior signage will be upgraded to display the District's design for brand collateral. As maintenance and upgrades to the exterior facades of the building are needed, finish colors and materials will be selected to align with the GCCD design guidelines. The main focus for these improvements would be the Honolulu Avenue storefront, which, through modest design changes, has the potential to make an instant visual connection with the Verdugo Campus and Garfield Campus architectural style.

**Figure 2-12 : 2019 Master Plan Update – Garfield Campus Site Plan**

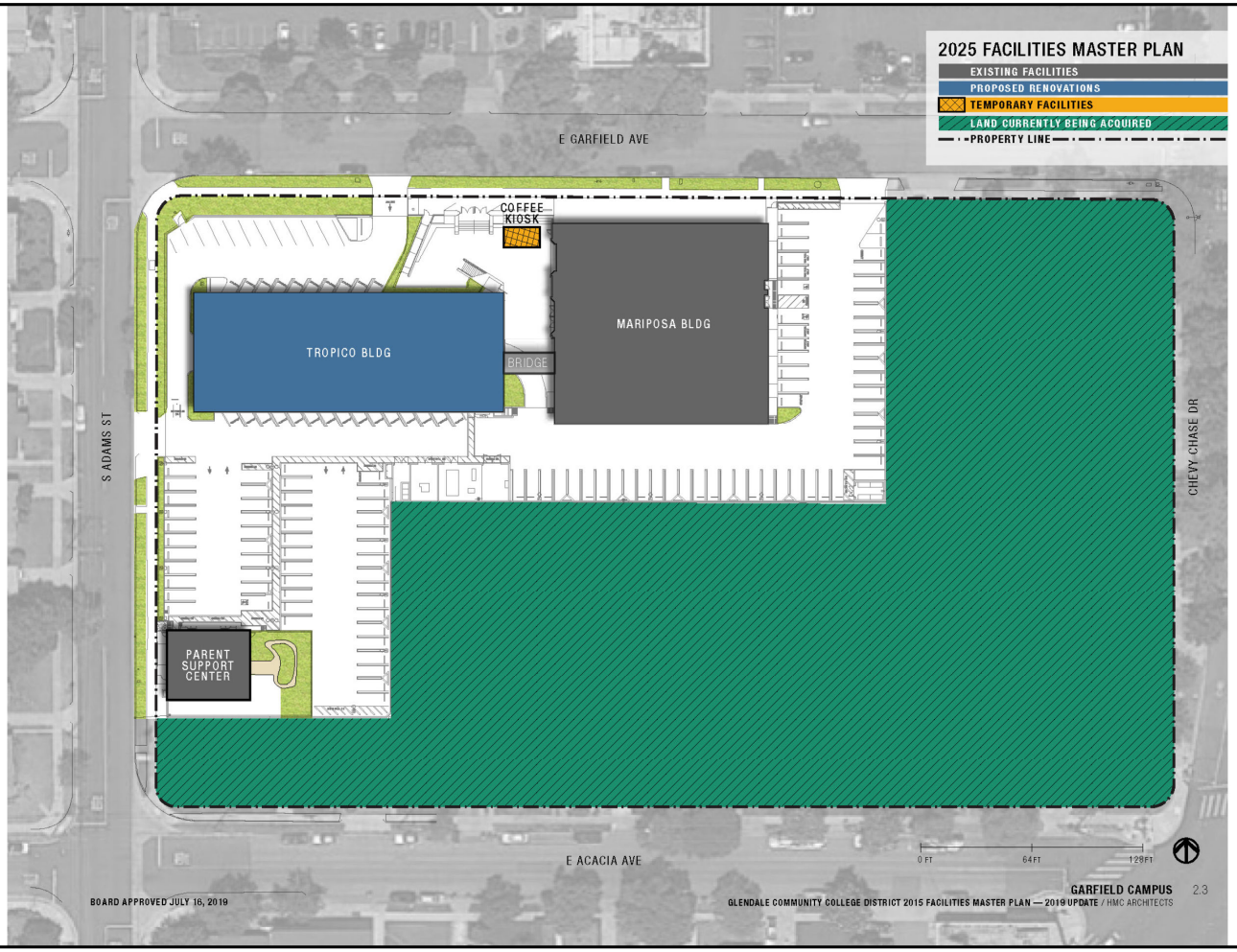



**Figure 2-12**
Master Plan Update - Site Plan
Garfield Campus

Name: 21146 PLAN Fig 2-12 Site Plan.Mxd
Print Date: 11/15/2019, Author: pcarlos

**Figure 2-13 : 2019 Master Plan Update – Montrose Campus Site Plan**

**Figure 2-13**
Master Plan Update - Site Plan
Montrose Campus

Name: 21146 PLAN Fig 2-13 Site Plan.Mxd
Print Date: 11/15/2019, Author: pcarlos

The Montrose Campus PDC requires minor changes to the building. The existing PDC building is approximately 10,405 SF with a portion of the lower level unexcavated. As an older, repurposed commercial facility, the PDC represents a potential for significant improvements that will reduce its operating costs and make it a healthier and more welcoming learning and working environment. The interior space of the PDC has the potential to be reorganized for increased efficiency, with regard to both intuitive internal wayfinding and increased efficiency, and increased ratio of assignable space to overall building area. The renovation will repartition the existing interior space to better align with programmatic needs that will be determined when the project moves toward implementation. Making better use of the PDC's prominent storefront location on Honolulu Avenue in Montrose is a key objective of the renovation. The glass-walled lobby will be reprogrammed and designed to support community outreach functions, which may include offices and gathering space. The building will require ADA upgrades to all doors, and toilet rooms. Access to all levels will be required from the alley parking area. The access will require an elevator. Seismic requirements will be required for the construction of the elevator to the existing building and provide additional shear to meet current code requirements. In addition, seismic upgrades will be completed at the PDC. Overall, the renovation of the PDC building will include 10,112 SF of renovated space.

GCC is expanding the Montrose Campus to join the PDC as part of the Montrose Campus complex to expand available classroom space, provide enhanced curriculum, and provide additional parking accommodations. GCC has purchased the Citibank building located at 2350 Honolulu Avenue in Glendale and will be renovating the existing 11,437 SF building and constructing approximately 7,324 SF of additional classroom space to create, in total, 18,761 SF of classroom space with supporting Administrative services. The curriculum will accommodate Math, ESL, Sociology and Psychology classes. The existing building will need to be upgraded structurally to meet the Division of the State Architect (DSA) standards to house accredited student occupancy. The expanded Montrose Campus is expected to generate approximately 1,000 FTES. The PDC does not include college employees, as it is currently operating as an independent enterprise. At buildout, the GCC is expecting to have approximately 15 staff members to support Montrose Campus operations. For the purposes of this document, the Proposed Project will include projects that incorporate the space and building needs identified to the year 2025.

The location for the proposed parking structure will be on Broadview Drive, Lots #12, A, 1. The aforementioned utility easement needs to be relocated to the southeast edge of the Lot #1. The proposed parking structure shall have two levels of parking consisting of approximately 33,646 SF of building area. The lower level will have access on Broadview Drive and the upper level will have access from the alley. There shall be no less than a total of 94 parking stalls – including the required accessible parking stalls. Ample lighting shall be provided for all parking levels.

The GCCD 2019 Facilities Master Plan Update Montrose Campus improvements would result in 21,559 square feet of renovation and 17,611 square feet of new construction. In addition, the Proposed Projects at the Montrose Campus would add up to approximately 100 parking spaces to the campus.

## 2.4 MASTER PLAN SCHEDULE

The 2019 Facilities Master Plan Update provides an approximate schedule sequence that identifies timelines for construction and project scope. Table 2-3 summarizes the scope of the 2019 Facilities Master Plan Update Improvements including building renovation, expansion, and/or new construction. To determine the projects and sequencing in the 2019 Facilities Master Plan Update (to the 2015 Facilities Master Plan), the Board of Trustees of the Glendale Community College District evaluated the GCCD's urgent and critical capital needs, including school and student safety issues, enrollment trends, class size reduction, overcrowding, energy efficiency and computer technology, seismic safety requirements, and aging, outdated or deteriorating school buildings in developing the scope of projects to be funded. In developing the scope of projects, the GCCD has prioritized the key health and safety and sustainability needs so that the most critical school site needs are addressed.

The timing of certain projects will be dependent on the completion of other projects and will ultimately occur over the different phases. For example, the Science building will occur once the PE structure construction is completed. However, these improvements will be completed in portions following building construction or renovation. Other projects like this include the security systems installation, technology replacement, energy and water conservation projects, and surface parking improvements.

The Master Plan projects called out the projects identified with the 2019 Facilities Master Plan Update and the timeframe that is most likely to occur during these time periods. However, the timeframe in which a project is planned may change if the priority characteristics change for an individual project due to program needs or state funding allocation. The 2019 Facilities Master Plan Update individual projects are shown below in Table 2-3.

**Table 2-3: 2019 Facilities Master Plan Construction by Planned Construction Years**

| Construction Start Year | Projects Planned |
|---|---|
| Ongoing | PE Increment I and II, Classroom/Lab Renovation Projects, Safety and Security, Energy Conservation |
| 2020/2021 | Instructional Building and Campus Center |
| 2021/2022 | Instructional Building and Campus Center, New Science Building |
| 2022/2023 | San Gabriel First Floor, Welding LAB Alterations, Admin building Human Resources, San Rafael renovations, Minor Capital Projects, Garfield Campus Mariposa Renovation, Cafeteria/Dining renovations, Minor Capital Projects, Montrose Campus Expansion Civic Auditorium, 2nd floor San Gabriel renovations, Centralized Storage Building, and Advanced Technology Center, New Science Building |
| 2023/2024 | Auditorium Renovations |
| 2024/25 | Garfield New Building |

## 2.5 STATEMENT OF PROJECT GOALS AND OBJECTIVES

Glendale Community College is a public community college granting certificates and associate degrees. The college serves people from a variety of geographical areas but primarily serves a diverse population of the Greater Los Angeles region that is capable of benefiting from instruction in credit, noncredit, and community education programs. Glendale Community College serves a diverse population of students by

providing the opportunities and support to achieve their educational and career goals. The college is dedicated to the importance of higher education in the evolving urban environment of Glendale.

The GCCD's goal as part of the California Community College system is to offer academic and vocational education to students at the lower college division level. In addition, the District's goal is to advance California's economic growth and global competitiveness through education, training, and services that contribute to continuous workforce improvement.

The Glendale Community College District 2019 Facilities Master Plan Update (to the 2015 Facilities Master Plan) represents an integrated planning approach and includes recommendations for facilities. The objective of the 2019 Facilities Master Plan Update is to provide plans to implement proposed necessary construction, renovation, and general capital improvements at the campus in order to meet the District's goals. The improvements are intended to update and improve existing technological and program services in order to meet the increasing needs of students and faculty.

## 2.6 BEST MANAGEMENT PRACTICES

During construction of the projects associated with the 2019 Facilities Master Plan Update, the following Best Management Practices (BMPs) will be implemented:

- If tree removal is to occur between March 1 through July 30, a survey to identify active bird nests shall be conducted by a qualified biologist no more than two weeks before the start of construction. Removal of any mature trees with active bird nests will be delayed until a qualified biologist determines that the subject bird(s) are no longer nesting or until juveniles have fledged.

## 2.7 REQUIRED PERMITS AND APPROVALS

As required by the *CEQA Guidelines*, this section provides, to the extent the information is known to GCCD, the CEQA Lead Agency, a list of the agencies that are expected to use this IS/NOP in their decision making and a list of permits and other approvals required to implement the project.

### 2.7.1 Lead Agency Approval

The Final EIR must be certified by the GCCD Board of Trustees (Board) as to its adequacy in complying with the requirements of CEQA before taking any action on the Proposed Project. The Board will consider the information contained in the EIR in making a decision to approve or deny the 2019 Facilities Master Plan Update to the 2015 Facilities Master Plan (Proposed Project). The analysis in the EIR is intended to provide environmental review for the whole of the Proposed Project, including the project planning, site acquisition, demolition of existing structures, site clearance, site excavation, and construction of school buildings and appurtenant facilities in accordance with CEQA requirements.

### 2.7.2 Responsible Agencies

A Responsible Agency is a public agency, other than the lead agency, that has discretionary approval power over a project. The Responsible Agencies, and their corresponding approvals, for this Project include the following:

**California Department of General Services**

- Division of the State Architect (Approval of architectural plans)

**City of Glendale**

- Department of Public Works (Approval of on- and off-site drainage infrastructure and roadway improvements)

### 2.7.3 Reviewing Agencies

Reviewing Agencies include those agencies that do not have discretionary powers, but that may review the EIR for adequacy and accuracy. Potential Reviewing Agencies include the following:

**State Agencies**

- Department of Transportation (Caltrans)
- Environmental Protection Agency (Cal EPA)
- Department of Fish and Wildlife (CDFW)
- Department of Toxic Substances Control (DTSC)
- Integrated Waste Management Board (IWMB)
- Regional Water Quality Control Board (RWQCB)

**Regional Agencies**

- Southern California Association of Governments
- South Coast Air Quality Management District
- City of Glendale Planning/Transportation Department
- City of Glendale Fire Department

## 2.8 CUMULATIVE SCENARIO

Cumulative impacts refer to the combined effect of Proposed Project impacts with the impacts of other past, present, and reasonably foreseeable future projects. Both CEQA and the CEQA Guidelines require that cumulative impacts be analyzed in an EIR. As set forth in the CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA, "a project may have a significant effect on the environment if the possible effects of a project are individually limited but cumulatively considerable."

According to the CEQA Guidelines:

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable and which compound or increase other environmental impacts.

- The individual effects may be changes resulting from a single project or a number of separate projects.

- The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the Proposed Project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

In addition, as stated in the CEQA Guidelines, it should be noted that:

> "The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the Proposed Project's incremental effects are cumulatively considerable."

Cumulative impact discussions for each issue area are provided in the technical analyses contained within Section 4.0 – Environmental Impacts.

As previously stated, and as set forth in the CEQA Guidelines, related projects consist of, "closely related, past, present, and reasonably foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area." An area of influence, defined by an approximate 1.5-mile radius from the Proposed Project site, was utilized in order to capture specific locations of other approved and pending projects. Based on coordination with the City of Glendale, an area projects list was created. Responses that were received from the city were incorporated in the analysis. A majority of the study area is located in a highly urbanized area. A total of 26 pending/approved developments were identified within the study area, which are separated by campus areas below:

**Verdugo Campus Vicinity**

- 7 unit-condominium at 1735 Holly Drive
- Hotel with 857 hotel rooms and approximately 7,500 square feet of restaurant/retail at 611 N Brand Blvd
- Multifamily residential building (20-story) with 240 residential units at 610 N Brand Blvd
- Multifamily residential complex with 604 units at 601 N Brand Blvd
- Installation of additional panel antennas and ancillary equipment boxes at existing Wireless Telecommunication Facility at 425 E Colorado Street
- 28-unit density bonus housing project with an affordable housing component 400 N Maryland Ave
- 5-story Office/Retail building with on-site parking 517 E Broadway
- Construction of 23 vertical parking lifts in an existing medical office parking garage at 221 E Glenoaks Blvd
- Future mixed-use building project 'The Campus' at 401 N Brand Blvd

**Garfield Campus Vicinity**

- Construction of 23 vertical parking lifts in an existing medical office parking garage at 221 E Glenoaks Blvd
- 7 unit-condominium at 1735 Holly Drive
- Hotel with 857 hotel rooms and approximately 7,500 square feet of restaurant/retail at 611 N Brand Blvd
- Multifamily residential building (20-story) with 240 residential units at 610 N Brand Blvd

- Multifamily residential complex with 604 units at 601 N Brand Blvd
- Future mixed-use building project 'The Campus' at 401 N Brand Blvd
- 5-story Office/Retail building with on-site parking 517 E Broadway
- 28-unit density bonus housing project with an affordable housing component 400 N Maryland Ave
- 7-story hotel with 140 rooms at 523 N Central Ave
- 2,000 SF expansion of existing full-service restaurant at 343 N Central Ave
- 3 unit - townhouse style residential project at 421 Salem Street
- 15-unit (very low) affordable housing project at 452 W Milford Street
- New 3-story 14,229 SF office building with street-level and subterranean parking at 340 N Central Ave
- 2,000 SF 2nd-story addition to existing outdoor dining area at 343 N Central Ave
- 13-unit affordable residential development with density bonus at 238 Concord Street
- 28 unit commercial condominium at 610 W Broadway
- 25-unit Multi Family Housing at 401 Hawthorne Street
- Construction of two new buildings for existing high school at 400 E Lomita Ave
- 5-story (34,228 SF) parking structure for car dealership at 901 S Brand Blvd
- 9,950 SF addition to existing car dealership at 1260 S Brand Blvd
- Detached four-car garage (871 SF) for an existing multi-family dwelling at 804 E Palmer Ave

**Montrose Campus Vicinity**

- 3-story 79-bed residential congregate living and medical facility (33,334 SF) at 1809 Verdugo Blvd
- 3-story 18-unit affordable residential housing project (18,493 SF) at 2941 Honolulu Ave
- 38-unit multifamily affordable housing project at 2817 Montrose Ave
- 34-unit density bonus housing project with an affordable housing component at 3950 Foothill Blvd

# Appendix B: Traffic Counts

# VERDUGO CAMPUS INTERSECTION VOLUM AJUSTMENTS

Adjusted Volumes used in the analysis

### NB Off/On-ramp (2/2016)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1061 | 1040 | 286 | 286 | | | 64 | 42 | Mountain |
| | | 174 | 75 | | | 245 | 198 | |
| 460 | 361 | 0 | | | | | 0 | |
| | | | 795 | 1 | 68 | | | |
| | | | 863 | 2 | 213 | | | |

### NB Off/On-ramp (Adjusted for 2020)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 286 | 305 | | | | | 69 | 42 |
| 174 | 80 | | | | | 261 | 198 |
| 0 | | | | | | | 0 |
| | | | 846 | 2 | 73 | | |
| | | | 863 | 2 | 213 | | |

### SB Off/On-ramp (2/2016)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PM | 337 | 3 | 66 | | | | | | |
| | | AM | 705 | 0 | 59 | | | | | | |
| Mountain | 1278 | 1590 | 0 | | | | | 0 | 1040 | 1050 | |
| | | | 391 | 302 | | | | 885 | 941 | | |
| | 862 | 766 | 471 | 464 | | | | 155 | 109 | 361 | 457 |

### SB Off/On-ramp (Adjusted)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PM | 337 | 3 | 66 | | | | |
| AM | 751 | 0 | 63 | | | | |
| 0 | | | | | | | 0 |
| 391 | 322 | | | | | 942 | 941 |
| 471 | 494 | | | | | 165 | 109 |

| | |
|---|---|
| AM Factor | 1.1 |
| PM Factor | 1.0 |

### Parking Garage Entrance (2/2020)

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PM | 141 | | 183 | | | | | |
| | | AM | 151 | | 105 | | | | | |
| Mountain | 1145 | 1421 | 336 | 375 | | | 440 | 342 | 1710 | 1346 |
| | | | 574 | 692 | | | 1270 | 1004 | | |
| | 910 | 1067 | | | | | | | 797 | 757 |

### Chaparro (2/2020)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PM | 10 | | 6 | | | | | | Factor |
| | | AM | 7 | | 1 | | | | | | |
| Mountain | 996 | 1367 | 9 | 19 | | | 31 | 6 | 1391 | 992 | 1.15 |
| | | | 838 | 1140 | | | 1360 | 986 | | | |
| | 847 | 1159 | | | | | | | 1141 | 844 | 1.08 |

### Chaparro (2/2020) - PM Adjusted for Peak Conditions

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | PM | 10 | | 6 | | | | |
| | | AM | 7 | | 1 | | | | |
| 1149 | 1367 | 10 | 19 | | | 31 | 7 | 1391 | 1146 |
| | | 904 | 1140 | | | 1360 | 1139 | | |
| 914 | 1159 | | | | | | | 1141 | 910 |

### Verdugo (9/2019)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PM | 184 | 931 | 303 | | | | | | Factor |
| | | AM | 360 | 1725 | 450 | | | | | | |
| 538 | 719 | 281 | 200 | | | 418 | 539 | 1164 | 1039 | 1.12 | |
| | | 232 | 265 | | | 283 | 240 | | | | |
| 602 | 557 | 89 | 92 | | | 463 | 260 | 1089 | 927 | 1.05 | |
| | | | 76 | 940 | 374 | | | | | | |
| | | | 114 | 1414 | 392 | | | | | | |

### Verdugo and Mountain (2/2016)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PM | 143 | 1049 | 368 | | | | |
| AM | 247 | 1888 | 367 | | | | |
| 277 | 294 | | | | | 502 | 681 |
| 245 | 239 | | | | | 332 | 247 |
| 88 | 102 | | | | | 795 | 291 |
| | | 132 | 1281 | 300 | | | |
| | | 105 | 1381 | 438 | | | |

The above is just for reference
Note 2016 AM volumes are higher than 2019 volumes

| | 2016 | 2019 |
|---|---|---|
| AM | 6479 | 4256 |
| PM | 4703 | 4979 |

### Verdugo (Adjusted for Mountain)

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PM | 194 | 977 | 318 | | | | | |
| | | AM | 360 | 1725 | 450 | | | | | |
| 566 | 754 | 295 | 225 | | | 469 | 566 | 1307 | 1091 | Mountain |
| | | 244 | 298 | | | 318 | 252 | | | |
| 633 | 627 | 94 | 104 | | | 520 | 273 | 1122 | 974 | |
| | | | 76 | 940 | 374 | | | | | |
| | | | 120 | 1484 | 412 | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PM | 5 | 571 | 5 | | | | | | |
| AM | 5 | 874 | 5 | | | | | | |
| 5 | 5 | | | | 4 | 4 | 41 | 37 | |
| 10 | 10 | | | | 4 | 3 | | | |
| 5 | 5 | | | | 32 | 30 | 65 | 47 | |
| | | 5 | 500 | 50 | | | | | |
| | | 5 | 781 | 35 | | | | | |

Based on Fire Access Road Volumes
of 2/2020

### Verdugo /Circle Dr (2/2020)

| | | | | | |
|---|---|---|---|---|---|
| PM | 0 | 571 | 0 | | |
| AM | | 874 | | | |
| | | | | 0 | 10 |
| | | | | | 0 |
| | | | | 1 | 12 |
| | 0 | 500 | 0 | | |
| | 0 | 781 | 0 | | |

### Verdugo / Canada (2/2020)

| | | | |
|---|---|---|---|
| PM | 0 | 0 | 0 |
| AM | 0 | 571 | 0 |
| | 840 | 500 | 0 |
| | 1171 | 781 | 0 |
| | **2403** | | 1340 |
| | **1258** | | 1952 |

Note above include Canada Free Movement

# CITY TRAFFIC COUNTERS

www.ctcounters.com

File Name : SR-2NBOn-OffRamps_Mountain
Site Code : 00000000
Start Date : 2/18/2016
Page No : 1

**Groups Printed- Unshifted**

| | SR-2 Northbound On-Ramp Southbound | | | Mountain St Westbound | | | SR-2 Northbound Off-Ramp Northbound | | | Mountain St Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 06:30 AM | 0 | 0 | 0 | 0 | 25 | 3 | 47 | 0 | 6 | 14 | 6 | 0 | 101 |
| 06:45 AM | 0 | 0 | 0 | 0 | 42 | 9 | 74 | 0 | 9 | 22 | 2 | 0 | 158 |
| Total | 0 | 0 | 0 | 0 | 67 | 12 | 121 | 0 | 15 | 36 | 8 | 0 | 259 |
| 07:00 AM | 0 | 0 | 0 | 0 | 35 | 7 | 120 | 1 | 7 | 27 | 5 | 0 | 202 |
| 07:15 AM | 0 | 0 | 0 | 0 | 47 | 27 | 211 | 0 | 12 | 55 | 11 | 0 | 363 |
| 07:30 AM | 0 | 0 | 0 | 0 | 122 | 45 | 166 | 0 | 10 | 90 | 9 | 0 | 442 |
| 07:45 AM | 0 | 0 | 0 | 0 | 92 | 39 | 143 | 1 | 13 | 103 | 15 | 0 | 406 |
| Total | 0 | 0 | 0 | 0 | 296 | 118 | 640 | 2 | 42 | 275 | 40 | 0 | 1413 |
| 08:00 AM | 0 | 0 | 0 | 0 | 50 | 21 | 125 | 0 | 11 | 54 | 16 | 0 | 277 |
| 08:15 AM | 0 | 0 | 0 | 0 | 67 | 19 | 173 | 1 | 18 | 80 | 19 | 0 | 377 |
| 08:30 AM | 0 | 0 | 0 | 0 | 65 | 17 | 196 | 0 | 16 | 61 | 17 | 0 | 372 |
| 08:45 AM | 0 | 0 | 0 | 0 | 76 | 15 | 242 | 0 | 14 | 62 | 17 | 0 | 426 |
| Total | 0 | 0 | 0 | 0 | 258 | 72 | 736 | 1 | 59 | 257 | 69 | 0 | 1452 |
| 09:00 AM | 0 | 0 | 0 | 0 | 37 | 13 | 184 | 0 | 20 | 83 | 22 | 0 | 359 |
| 09:15 AM | 0 | 0 | 0 | 0 | 55 | 7 | 92 | 0 | 18 | 45 | 26 | 0 | 243 |
| Total | 0 | 0 | 0 | 0 | 92 | 20 | 276 | 0 | 38 | 128 | 48 | 0 | 602 |
| 04:00 PM | 0 | 0 | 0 | 0 | 39 | 12 | 141 | 0 | 32 | 88 | 37 | 0 | 349 |
| 04:15 PM | 0 | 0 | 0 | 0 | 22 | 8 | 133 | 1 | 35 | 66 | 52 | 0 | 317 |
| 04:30 PM | 0 | 0 | 0 | 0 | 26 | 14 | 174 | 5 | 34 | 73 | 31 | 0 | 357 |
| 04:45 PM | 0 | 0 | 0 | 0 | 28 | 9 | 210 | 0 | 35 | 79 | 57 | 0 | 418 |
| Total | 0 | 0 | 0 | 0 | 115 | 43 | 658 | 6 | 136 | 306 | 177 | 0 | 1441 |
| 05:00 PM | 0 | 0 | 0 | 0 | 34 | 14 | 178 | 0 | 39 | 94 | 69 | 0 | 428 |
| 05:15 PM | 0 | 0 | 0 | 0 | 32 | 9 | 168 | 0 | 44 | 86 | 52 | 0 | 391 |
| 05:30 PM | 0 | 0 | 0 | 0 | 31 | 10 | 147 | 0 | 59 | 84 | 40 | 0 | 371 |
| 05:45 PM | 0 | 0 | 0 | 0 | 49 | 10 | 187 | 2 | 57 | 94 | 36 | 0 | 435 |
| Total | 0 | 0 | 0 | 0 | 146 | 43 | 680 | 2 | 199 | 358 | 197 | 0 | 1625 |
| 06:00 PM | 0 | 0 | 0 | 0 | 63 | 9 | 205 | 0 | 60 | 65 | 49 | 0 | 451 |
| 06:15 PM | 0 | 0 | 0 | 0 | 32 | 15 | 235 | 0 | 39 | 72 | 49 | 0 | 442 |
| 06:30 PM | 0 | 0 | 0 | 0 | 54 | 8 | 236 | 0 | 57 | 55 | 40 | 0 | 450 |
| 06:45 PM | 0 | 0 | 0 | 0 | 37 | 12 | 190 | 1 | 45 | 73 | 54 | 0 | 412 |
| Total | 0 | 0 | 0 | 0 | 186 | 44 | 866 | 1 | 201 | 265 | 192 | 0 | 1755 |
| Grand Total | 0 | 0 | 0 | 0 | 1160 | 352 | 3977 | 12 | 690 | 1625 | 731 | 0 | 8547 |
| Apprch % | 0 | 0 | 0 | 0 | 76.7 | 23.3 | 85 | 0.3 | 14.7 | 69 | 31 | 0 | |
| Total % | 0 | 0 | 0 | 0 | 13.6 | 4.1 | 46.5 | 0.1 | 8.1 | 19 | 8.6 | 0 | |

# CITY TRAFFIC COUNTERS

www.ctcounters.com

File Name : SR-2SBOn-OffRamps_Mountain
Site Code : 00000000
Start Date : 2/18/2016
Page No : 1

**Groups Printed- Unshifted**

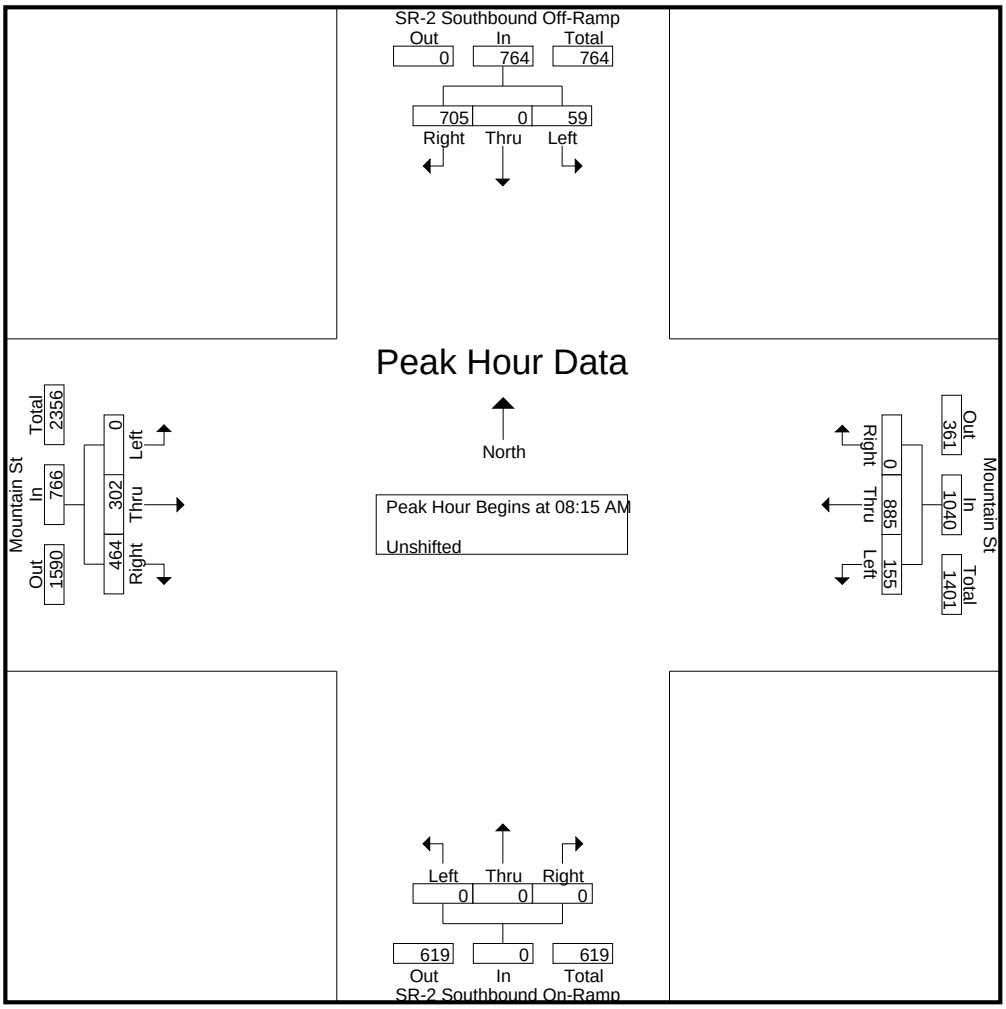
| | SR-2 Southbound Off-Ramp Southbound | | | Mountain St Westbound | | | SR-2 Southbound On-Ramp Northbound | | | Mountain St Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 06:30 AM | 1 | 1 | 19 | 30 | 42 | 0 | 0 | 0 | 0 | 0 | 19 | 106 | 218 |
| 06:45 AM | 2 | 2 | 36 | 54 | 62 | 0 | 0 | 0 | 0 | 0 | 23 | 106 | 285 |
| Total | 3 | 3 | 55 | 84 | 104 | 0 | 0 | 0 | 0 | 0 | 42 | 212 | 503 |
| 07:00 AM | 2 | 1 | 43 | 39 | 116 | 0 | 0 | 0 | 0 | 0 | 31 | 103 | 335 |
| 07:15 AM | 6 | 3 | 94 | 62 | 196 | 0 | 0 | 0 | 0 | 0 | 61 | 96 | 518 |
| 07:30 AM | 2 | 0 | 123 | 64 | 224 | 0 | 0 | 0 | 0 | 0 | 95 | 172 | 680 |
| 07:45 AM | 9 | 1 | 151 | 52 | 183 | 0 | 0 | 0 | 0 | 0 | 109 | 124 | 629 |
| Total | 19 | 5 | 411 | 217 | 719 | 0 | 0 | 0 | 0 | 0 | 296 | 495 | 2162 |
| 08:00 AM | 9 | 0 | 155 | 36 | 139 | 0 | 0 | 0 | 0 | 0 | 61 | 108 | 508 |
| 08:15 AM | 24 | 0 | 182 | 36 | 204 | 0 | 0 | 0 | 0 | 0 | 75 | 89 | 610 |
| 08:30 AM | 18 | 0 | 197 | 40 | 221 | 0 | 0 | 0 | 0 | 0 | 60 | 98 | 634 |
| 08:45 AM | 6 | 0 | 179 | 39 | 279 | 0 | 0 | 0 | 0 | 0 | 73 | 132 | 708 |
| Total | 57 | 0 | 713 | 151 | 843 | 0 | 0 | 0 | 0 | 0 | 269 | 427 | 2460 |
| 09:00 AM | 11 | 0 | 147 | 40 | 181 | 0 | 0 | 0 | 0 | 0 | 94 | 145 | 618 |
| 09:15 AM | 8 | 1 | 56 | 37 | 110 | 0 | 0 | 0 | 0 | 0 | 63 | 141 | 416 |
| Total | 19 | 1 | 203 | 77 | 291 | 0 | 0 | 0 | 0 | 0 | 157 | 286 | 1034 |
| 04:00 PM | 15 | 2 | 70 | 34 | 146 | 0 | 0 | 0 | 0 | 0 | 110 | 150 | 527 |
| 04:15 PM | 18 | 0 | 84 | 17 | 138 | 0 | 0 | 0 | 0 | 0 | 99 | 111 | 467 |
| 04:30 PM | 17 | 1 | 64 | 23 | 178 | 0 | 0 | 0 | 0 | 0 | 85 | 115 | 483 |
| 04:45 PM | 19 | 0 | 93 | 22 | 216 | 0 | 0 | 0 | 0 | 0 | 117 | 150 | 617 |
| Total | 69 | 3 | 311 | 96 | 678 | 0 | 0 | 0 | 0 | 0 | 411 | 526 | 2094 |
| 05:00 PM | 20 | 0 | 87 | 24 | 188 | 0 | 0 | 0 | 0 | 0 | 143 | 142 | 604 |
| 05:15 PM | 24 | 0 | 75 | 21 | 179 | 0 | 0 | 0 | 0 | 0 | 114 | 107 | 520 |
| 05:30 PM | 9 | 0 | 81 | 18 | 160 | 0 | 0 | 0 | 0 | 0 | 115 | 92 | 475 |
| 05:45 PM | 9 | 1 | 68 | 37 | 199 | 0 | 0 | 0 | 0 | 0 | 121 | 113 | 548 |
| Total | 62 | 1 | 311 | 100 | 726 | 0 | 0 | 0 | 0 | 0 | 493 | 454 | 2147 |
| 06:00 PM | 17 | 0 | 69 | 31 | 236 | 0 | 0 | 0 | 0 | 0 | 97 | 102 | 552 |
| 06:15 PM | 22 | 2 | 111 | 20 | 246 | 0 | 0 | 0 | 0 | 0 | 99 | 100 | 600 |
| 06:30 PM | 13 | 1 | 92 | 28 | 263 | 0 | 0 | 0 | 0 | 0 | 82 | 110 | 589 |
| 06:45 PM | 14 | 0 | 65 | 30 | 196 | 0 | 0 | 0 | 0 | 0 | 113 | 159 | 577 |
| Total | 66 | 3 | 337 | 109 | 941 | 0 | 0 | 0 | 0 | 0 | 391 | 471 | 2318 |
| Grand Total | 295 | 16 | 2341 | 834 | 4302 | 0 | 0 | 0 | 0 | 0 | 2059 | 2871 | 12718 |
| Apprch % | 11.1 | 0.6 | 88.3 | 16.2 | 83.8 | 0 | 0 | 0 | 0 | 0 | 41.8 | 58.2 | |
| Total % | 2.3 | 0.1 | 18.4 | 6.6 | 33.8 | 0 | 0 | 0 | 0 | 0 | 16.2 | 22.6 | |

# CITY TRAFFIC COUNTERS

www.ctcounters.com

File Name : SR-2SBOn-OffRamps_Mountain
Site Code : 00000000
Start Date : 2/18/2016
Page No : 2

| | SR-2 Southbound Off-Ramp Southbound | | | | Mountain St Westbound | | | | SR-2 Southbound On-Ramp Northbound | | | | Mountain St Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 06:30 AM to 11:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:15 AM | | | | | | | | | | | | | | | | | |
| 08:15 AM | **24** | 0 | 182 | 206 | 36 | 204 | 0 | 240 | 0 | 0 | 0 | 0 | 0 | 75 | 89 | 164 | 610 |
| 08:30 AM | 18 | 0 | **197** | **215** | **40** | 221 | 0 | 261 | 0 | 0 | 0 | 0 | 0 | 60 | 98 | 158 | 634 |
| 08:45 AM | 6 | 0 | 179 | 185 | 39 | **279** | 0 | **318** | 0 | 0 | 0 | 0 | 0 | 73 | 132 | 205 | **708** |
| 09:00 AM | 11 | 0 | 147 | 158 | 40 | 181 | 0 | 221 | 0 | 0 | 0 | 0 | 0 | **94** | **145** | **239** | 618 |
| Total Volume | 59 | 0 | 705 | 764 | 155 | 885 | 0 | 1040 | 0 | 0 | 0 | 0 | 0 | 302 | 464 | 766 | 2570 |
| % App. Total | 7.7 | 0 | 92.3 | | 14.9 | 85.1 | 0 | | 0 | 0 | 0 | | 0 | 39.4 | 60.6 | | |
| PHF | .615 | .000 | .895 | .888 | .969 | .793 | .000 | .818 | .000 | .000 | .000 | .000 | .000 | .803 | .800 | .801 | .907 |



# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | | | | |
|---|---|---|---|---|
| Wed, Feb 19, 20 | LOCATION: | Glendale | PROJECT #: | SC2467 |
| | NORTH & SOUTH: | Parking Entrance | LOCATION #: | 3 |
| | EAST & WEST: | Mountain | CONTROL: | SIGNAL |

NOTES:

Queue AM NB

AM
PM
MD
OTHER
OTHER

N ▲ ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Parking Entrance | | | SOUTHBOUND Parking Entrance | | | EASTBOUND Mountain | | | WESTBOUND Mountain | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT X | NR X | SL 1 | ST X | SR 1 | EL 1 | ET 2 | ER X | WL X | WT 3 | WR 1 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| AM | 7:00 AM | 0 | 0 | 0 | 8 | 0 | 1 | 56 | 142 | 0 | 0 | 118 | 107 | 432 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 11 | 0 | 7 | 117 | 171 | 0 | 0 | 163 | 146 | 615 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 0 | 8 | 0 | 4 | 66 | 233 | 0 | 0 | 210 | 119 | 640 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 0 | 12 | 0 | 7 | 57 | 229 | 0 | 0 | 228 | 84 | 617 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 0 | 0 | 7 | 0 | 13 | 67 | 233 | 0 | 0 | 243 | 72 | 635 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 0 | 15 | 0 | 11 | 92 | 206 | 0 | 0 | 362 | 118 | 804 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 0 | 0 | 14 | 0 | 12 | 105 | 162 | 0 | 0 | 389 | 112 | 794 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 0 | 0 | 27 | 0 | 46 | 105 | 172 | 0 | 0 | 316 | 127 | 793 | 0 | 0 | 0 | 0 | 0 |
| | 9:00 AM | 0 | 0 | 0 | 49 | 0 | 82 | 73 | 152 | 0 | 0 | 203 | 83 | 642 | 0 | 0 | 0 | 0 | 0 |
| | 9:15 AM | 0 | 0 | 0 | 40 | 0 | 79 | 38 | 159 | 0 | 0 | 161 | 52 | 529 | 0 | 0 | 0 | 0 | 0 |
| | 9:30 AM | 0 | 0 | 0 | 21 | 0 | 46 | 34 | 102 | 0 | 0 | 139 | 40 | 382 | 0 | 0 | 0 | 0 | 0 |
| | 9:45 AM | 0 | 0 | 0 | 18 | 0 | 59 | 40 | 114 | 0 | 0 | 145 | 49 | 425 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 0 | 0 | 230 | 0 | 367 | 850 | 2,075 | 0 | 0 | 2,677 | 1,109 | 7,308 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 0% | 0% | 39% | 0% | 61% | 29% | 71% | 0% | 0% | 71% | 29% | | | | | | |
| | APP/DEPART | 0 | / | 1,959 | 597 | / | 0 | 2,925 | / | 2,305 | 3,786 | / | 3,044 | 0 | | | | | |
| | BEGIN PEAK HR | | 8:15 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 0 | 0 | 105 | 0 | 151 | 375 | 692 | 0 | 0 | 1,270 | 440 | 3,033 | | | | | |
| | APPROACH % | 0% | 0% | 0% | 41% | 0% | 59% | 35% | 65% | 0% | 0% | 74% | 26% | | | | | | |
| | PEAK HR FACTOR | | 0.000 | | | 0.489 | | | 0.895 | | | 0.853 | | 0.943 | | | | | |
| | APP/DEPART | 0 | / | 815 | 256 | / | 0 | 1,067 | / | 797 | 1,710 | / | 1,421 | 0 | | | | | |
| AM2 | 10:00 AM | 0 | 0 | 0 | 26 | 0 | 65 | 58 | 110 | 0 | 0 | 148 | 79 | 486 | 0 | 0 | 0 | 0 | 0 |
| | 10:15 AM | 0 | 0 | 0 | 30 | 0 | 73 | 77 | 126 | 0 | 0 | 159 | 79 | 544 | 0 | 0 | 0 | 0 | 0 |
| | 10:30 AM | 0 | 0 | 0 | 72 | 0 | 91 | 65 | 134 | 0 | 0 | 142 | 75 | 579 | 0 | 0 | 0 | 0 | 0 |
| | 10:45 AM | 0 | 0 | 0 | 79 | 0 | 92 | 28 | 166 | 0 | 0 | 105 | 26 | 496 | 0 | 0 | 0 | 0 | 0 |
| | 11:00 AM | 0 | 0 | 0 | 34 | 0 | 26 | 23 | 116 | 0 | 0 | 90 | 18 | 307 | 0 | 0 | 0 | 0 | 0 |
| | 11:15 AM | 0 | 0 | 0 | 18 | 0 | 33 | 20 | 100 | 0 | 0 | 103 | 21 | 295 | 0 | 0 | 0 | 0 | 0 |
| | 11:30 AM | 0 | 0 | 0 | 29 | 0 | 23 | 30 | 110 | 0 | 0 | 104 | 36 | 332 | 0 | 0 | 0 | 0 | 0 |
| | 11:45 AM | 0 | 0 | 0 | 55 | 0 | 48 | 36 | 117 | 0 | 0 | 131 | 38 | 425 | 0 | 0 | 0 | 0 | 0 |
| | 12:00 PM | 0 | 0 | 0 | 91 | 0 | 68 | 37 | 144 | 0 | 0 | 141 | 50 | 531 | 0 | 0 | 0 | 0 | 0 |
| | 12:15 PM | 0 | 0 | 0 | 157 | 0 | 114 | 35 | 167 | 0 | 0 | 138 | 34 | 645 | 0 | 0 | 0 | 0 | 0 |
| | 12:30 PM | 0 | 0 | 0 | 65 | 0 | 35 | 36 | 129 | 0 | 0 | 120 | 35 | 420 | 0 | 0 | 0 | 0 | 0 |
| | 12:45 PM | 0 | 0 | 0 | 28 | 0 | 35 | 41 | 163 | 0 | 0 | 123 | 38 | 428 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 0 | 0 | 684 | 0 | 703 | 486 | 1,582 | 0 | 0 | 1,504 | 529 | 5,488 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 0% | 0% | 49% | 0% | 51% | 24% | 76% | 0% | 0% | 74% | 26% | | | | | | |
| | APP/DEPART | 0 | / | 1,015 | 1,387 | / | 0 | 2,068 | / | 2,266 | 2,033 | / | 2,207 | 0 | | | | | |
| | BEGIN PEAK HR | | 10:00 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 0 | 0 | 207 | 0 | 321 | 228 | 536 | 0 | 0 | 554 | 259 | 2,105 | | | | | |
| | APPROACH % | 0% | 0% | 0% | 39% | 0% | 61% | 30% | 70% | 0% | 0% | 68% | 32% | | | | | | |
| | PEAK HR FACTOR | | 0.000 | | | 0.772 | | | 0.941 | | | 0.854 | | 0.909 | | | | | |
| | APP/DEPART | 0 | / | 487 | 528 | / | 0 | 764 | / | 743 | 813 | / | 875 | 0 | | | | | |

**Parking Entrance**

NORTH SIDE

**Mountain** WEST SIDE EAST SIDE **Mountain**

SOUTH SIDE

**Parking Entrance**

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | | | | |
|---|---|---|---|---|
| Wed, Feb 19, 20 | LOCATION: | Glendale | PROJECT #: | SC2467 |
| | NORTH & SOUTH: | Parking Entrance | LOCATION #: | 3 |
| | EAST & WEST: | Mountain | CONTROL: | SIGNAL |

NOTES:

Queue PM2 NB

AM
PM
MD
OTHER
OTHER

N ▲ ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Parking Entrance | | | SOUTHBOUND Parking Entrance | | | EASTBOUND Mountain | | | WESTBOUND Mountain | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT X | NR X | SL 1 | ST X | SR 1 | EL 1 | ET 2 | ER X | WL X | WT 3 | WR 1 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| PM | 1:00 PM | 0 | 0 | 0 | 29 | 0 | 22 | 55 | 120 | 0 | 0 | 121 | 39 | 386 | 0 | 0 | 0 | 0 | 0 |
| | 1:15 PM | 0 | 0 | 0 | 37 | 0 | 35 | 67 | 113 | 0 | 0 | 154 | 70 | 476 | 0 | 0 | 0 | 0 | 0 |
| | 1:30 PM | 0 | 0 | 0 | 54 | 0 | 53 | 93 | 150 | 0 | 0 | 136 | 75 | 561 | 0 | 0 | 0 | 0 | 0 |
| | 1:45 PM | 0 | 0 | 0 | 76 | 0 | 60 | 49 | 117 | 0 | 0 | 132 | 44 | 478 | 0 | 0 | 0 | 0 | 0 |
| | 2:00 PM | 0 | 0 | 0 | 46 | 0 | 44 | 14 | 132 | 0 | 0 | 121 | 25 | 382 | 0 | 2 | 0 | 0 | 2 |
| | 2:15 PM | 0 | 0 | 0 | 36 | 0 | 37 | 19 | 151 | 0 | 0 | 159 | 16 | 418 | 0 | 0 | 0 | 0 | 0 |
| | 2:30 PM | 0 | 0 | 0 | 35 | 0 | 33 | 17 | 150 | 0 | 0 | 156 | 21 | 412 | 0 | 0 | 0 | 0 | 0 |
| | 2:45 PM | 0 | 0 | 0 | 58 | 0 | 42 | 20 | 174 | 0 | 0 | 182 | 31 | 507 | 0 | 0 | 0 | 0 | 0 |
| | 3:00 PM | 0 | 0 | 0 | 93 | 0 | 59 | 20 | 195 | 0 | 0 | 158 | 42 | 567 | 0 | 0 | 0 | 0 | 0 |
| | 3:15 PM | 0 | 0 | 0 | 84 | 0 | 76 | 29 | 184 | 0 | 0 | 214 | 30 | 617 | 0 | 0 | 0 | 0 | 0 |
| | 3:30 PM | 0 | 0 | 0 | 117 | 0 | 77 | 17 | 210 | 0 | 0 | 184 | 26 | 631 | 0 | 0 | 0 | 0 | 0 |
| | 3:45 PM | 0 | 0 | 0 | 34 | 0 | 30 | 24 | 166 | 0 | 0 | 195 | 26 | 475 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 0 | 0 | 699 | 0 | 568 | 424 | 1,862 | 0 | 0 | 1,912 | 445 | 5,912 | 0 | 2 | 0 | 0 | 2 |
| | APPROACH % | 0% | 0% | 0% | 55% | 0% | 45% | 19% | 81% | 0% | 0% | 81% | 19% | | | | | | |
| | APP/DEPART | 0 | / | 871 | 1,269 | / | 0 | 2,286 | / | 2,561 | 2,357 | / | 2,480 | 0 | | | | | |
| | BEGIN PEAK HR | | 2:45 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 0 | 0 | 352 | 0 | 254 | 86 | 763 | 0 | 0 | 738 | 129 | 2,322 | | | | | |
| | APPROACH % | 0% | 0% | 0% | 58% | 0% | 42% | 10% | 90% | 0% | 0% | 85% | 15% | | | | | | |
| | PEAK HR FACTOR | | 0.000 | | | 0.781 | | | 0.935 | | | 0.888 | | 0.920 | | | | | |
| | APP/DEPART | 0 | / | 215 | 606 | / | 0 | 849 | / | 1,115 | 867 | / | 992 | 0 | | | | | |
| PM2 | 04:00 PM | 0 | 0 | 0 | 51 | 0 | 38 | 32 | 144 | 0 | 0 | 183 | 23 | 471 | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 0 | 0 | 36 | 0 | 36 | 28 | 162 | 0 | 0 | 188 | 47 | 497 | 0 | 0 | 0 | 0 | 0 |
| | 4:30 PM | 0 | 0 | 0 | 73 | 0 | 40 | 35 | 141 | 0 | 0 | 192 | 49 | 530 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 0 | 0 | 38 | 0 | 39 | 40 | 146 | 0 | 0 | 220 | 57 | 540 | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 0 | 0 | 56 | 0 | 29 | 37 | 136 | 0 | 0 | 289 | 47 | 594 | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 0 | 0 | 48 | 0 | 39 | 42 | 172 | 0 | 0 | 242 | 40 | 583 | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 0 | 0 | 37 | 0 | 26 | 36 | 188 | 0 | 0 | 210 | 61 | 558 | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 0 | 0 | 44 | 0 | 26 | 42 | 122 | 0 | 0 | 259 | 65 | 558 | 0 | 0 | 0 | 0 | 0 |
| | 6:00 PM | 0 | 0 | 0 | 54 | 0 | 25 | 76 | 159 | 0 | 0 | 246 | 84 | 644 | 0 | 0 | 0 | 0 | 0 |
| | 6:15 PM | 0 | 0 | 0 | 36 | 0 | 50 | 129 | 139 | 0 | 0 | 246 | 115 | 715 | 0 | 0 | 0 | 0 | 0 |
| | 6:30 PM | 0 | 0 | 0 | 49 | 0 | 40 | 89 | 154 | 0 | 0 | 253 | 78 | 663 | 0 | 0 | 0 | 0 | 0 |
| | 6:45 PM | 0 | 0 | 0 | 38 | 0 | 47 | 27 | 134 | 0 | 0 | 207 | 32 | 485 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 0 | 0 | 560 | 0 | 435 | 613 | 1,797 | 0 | 0 | 2,735 | 698 | 6,838 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 0% | 0% | 56% | 0% | 44% | 25% | 75% | 0% | 0% | 80% | 20% | | | | | | |
| | APP/DEPART | 0 | / | 1,311 | 995 | / | 0 | 2,410 | / | 2,357 | 3,433 | / | 3,170 | 0 | | | | | |
| | BEGIN PEAK HR | | 5:45 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 0 | 0 | 183 | 0 | 141 | 336 | 574 | 0 | 0 | 1,004 | 342 | 2,580 | | | | | |
| | APPROACH % | 0% | 0% | 0% | 56% | 0% | 44% | 37% | 63% | 0% | 0% | 75% | 25% | | | | | | |
| | PEAK HR FACTOR | | 0.000 | | | 0.910 | | | 0.849 | | | 0.932 | | 0.902 | | | | | |
| | APP/DEPART | 0 | / | 678 | 324 | / | 0 | 910 | / | 757 | 1,346 | / | 1,145 | 0 | | | | | |

**Parking Entrance**

NORTH SIDE

**Mountain** WEST SIDE EAST SIDE **Mountain**

SOUTH SIDE

**Parking Entrance**

# INTERSECTION TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Feb 19, 20

LOCATION: Glendale
NORTH & SOUTH: Chaparro
EAST & WEST: Mountain

PROJECT #: SC2467
LOCATION #: 4
CONTROL: NO CONTROL

NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ / ◄ W / E ► / S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Chaparro | | | SOUTHBOUND Chaparro | | | EASTBOUND Mountain | | | WESTBOUND Mountain | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT X | NR X | SL 1 | ST X | SR 1 | EL 1 | ET 2 | ER X | WL X | WT 3 | WR 0 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 200 | 0 | 0 | 117 | 5 | 324 | 0 | 0 | 0 | 0 | 0 |
| AM | 7:15 AM | 0 | 0 | 0 | 2 | 0 | 2 | 3 | 286 | 0 | 0 | 167 | 3 | 463 | 0 | 0 | 0 | 0 | 0 |
| AM | 7:30 AM | 0 | 0 | 0 | 3 | 0 | 2 | 3 | 296 | 0 | 0 | 205 | 9 | 518 | 0 | 0 | 1 | 0 | 1 |
| AM | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 286 | 0 | 0 | 230 | 5 | 530 | 0 | 0 | 1 | 0 | 1 |
| AM | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 299 | 0 | 0 | 249 | 6 | 565 | 0 | 0 | 0 | 1 | 1 |
| AM | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 298 | 0 | 0 | 368 | 5 | 675 | 0 | 0 | 1 | 0 | 1 |
| AM | 8:30 AM | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 266 | 0 | 0 | 391 | 10 | 672 | 0 | 0 | 0 | 0 | 0 |
| AM | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 277 | 0 | 0 | 352 | 10 | 646 | 0 | 0 | 2 | 0 | 2 |
| AM | VOLUMES | 0 | 0 | 0 | 6 | 0 | 14 | 33 | 2,208 | 0 | 0 | 2,079 | 53 | 4,399 | 0 | 0 | 5 | 1 | 6 |
| AM | APPROACH % | 0% | 0% | 0% | 30% | 0% | 70% | 1% | 98% | 0% | 0% | 97% | 2% | | | | | | |
| AM | APP/DEPART | 0 | / | 86 | 20 | / | 0 | 2,246 | / | 2,215 | 2,133 | / | 2,098 | 0 | | | | | |
| AM | BEGIN PEAK HR | | 8:00 AM | | | | | | | | | | | | | | | | |
| AM | VOLUMES | 0 | 0 | 0 | 1 | 0 | 7 | 19 | 1,140 | 0 | 0 | 1,360 | 31 | 2,562 | | | | | |
| AM | APPROACH % | 0% | 0% | 0% | 13% | 0% | 88% | 2% | 98% | 0% | 0% | 98% | 2% | | | | | | |
| AM | PEAK HR FACTOR | | 0.000 | | | 0.667 | | | 0.943 | | | 0.868 | | 0.947 | | | | | |
| AM | APP/DEPART | 0 | / | 50 | 8 | / | 0 | 1,162 | / | 1,142 | 1,392 | / | 1,370 | 0 | | | | | |
| AM | 09:00 AM | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 220 | 0 | 0 | 284 | 1 | 517 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:15 AM | 0 | 0 | 0 | 2 | 0 | 3 | 8 | 195 | 0 | 0 | 238 | 2 | 448 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:30 AM | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 135 | 0 | 0 | 182 | 4 | 325 | 0 | 0 | 1 | 0 | 1 |
| AM | 9:45 AM | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 151 | 0 | 0 | 200 | 3 | 359 | 0 | 0 | 1 | 1 | 2 |
| AM | 10:00 AM | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 167 | 0 | 0 | 207 | 5 | 384 | 0 | 0 | 1 | 1 | 2 |
| AM | 10:15 AM | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 201 | 0 | 0 | 228 | 4 | 439 | 0 | 0 | 0 | 0 | 0 |
| AM | 10:30 AM | 0 | 0 | 0 | 1 | 0 | 5 | 3 | 198 | 0 | 0 | 229 | 4 | 440 | 0 | 0 | 0 | 0 | 0 |
| AM | 10:45 AM | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 193 | 0 | 0 | 196 | 1 | 396 | 0 | 0 | 0 | 0 | 0 |
| AM | VOLUMES | 0 | 0 | 0 | 10 | 0 | 15 | 35 | 1,460 | 0 | 0 | 1,764 | 24 | 3,313 | 0 | 0 | 3 | 2 | 5 |
| AM | APPROACH % | 0% | 0% | 0% | 40% | 0% | 60% | 2% | 97% | 0% | 0% | 99% | 1% | | | | | | |
| AM | APP/DEPART | 0 | / | 59 | 25 | / | 0 | 1,498 | / | 1,472 | 1,790 | / | 1,782 | 0 | | | | | |
| AM | BEGIN PEAK HR | | 10:00 AM | | | | | | | | | | | | | | | | |
| AM | VOLUMES | 0 | 0 | 0 | 4 | 0 | 9 | 13 | 759 | 0 | 0 | 860 | 14 | 1,661 | | | | | |
| AM | APPROACH % | 0% | 0% | 0% | 31% | 0% | 69% | 2% | 98% | 0% | 0% | 98% | 2% | | | | | | |
| AM | PEAK HR FACTOR | | 0.000 | | | 0.542 | | | 0.947 | | | 0.939 | | 0.944 | | | | | |
| AM | APP/DEPART | 0 | / | 27 | 13 | / | 0 | 773 | / | 764 | 875 | / | 870 | 0 | | | | | |

**Chaparro**

NORTH SIDE

**Mountain** WEST SIDE

EAST SIDE **Mountain**

SOUTH SIDE

**Chaparro**

| | | ALL PED AND BIKE | | | | | PEDESTRIAN CROSSINGS | | | | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | NS | SS | ES | WS | TOTAL |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# INTERSECTION TURNING MOVEMENT COUNTS

T219

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | LOCATION: | Glendale | PROJECT #: | SC2467 |
|---|---|---|---|---|
| Wed, Feb 19, 20 | NORTH & SOUTH: | Chaparro | LOCATION #: | 4 |
| | EAST & WEST: | Mountain | CONTROL: | NO CONTROL |

NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Chaparro | | | SOUTHBOUND Chaparro | | | EASTBOUND Mountain | | | WESTBOUND Mountain | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT X | NR X | SL 1 | ST X | SR 1 | EL 1 | ET 2 | ER X | WL X | WT 3 | WR 0 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| PM | 1:00 PM | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 174 | 0 | 0 | 142 | 2 | 322 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:15 PM | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 179 | 0 | 0 | 185 | 4 | 371 | 0 | 0 | 1 | 0 | 1 |
| PM | 1:30 PM | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 240 | 0 | 0 | 186 | 3 | 439 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:45 PM | 0 | 0 | 0 | 3 | 0 | 1 | 2 | 163 | 0 | 0 | 191 | 1 | 361 | 0 | 0 | 1 | 0 | 1 |
| PM | 2:00 PM | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 144 | 0 | 0 | 160 | 5 | 312 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:15 PM | 0 | 0 | 0 | 2 | 0 | 1 | 4 | 168 | 0 | 0 | 194 | 2 | 371 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:30 PM | 0 | 0 | 0 | 3 | 0 | 2 | 1 | 164 | 0 | 0 | 185 | 4 | 359 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:45 PM | 0 | 0 | 0 | 1 | 0 | 3 | 2 | 193 | 0 | 0 | 222 | 2 | 423 | 0 | 0 | 0 | 0 | 0 |
| PM | VOLUMES | 0 | 0 | 0 | 13 | 0 | 19 | 13 | 1,425 | 0 | 0 | 1,465 | 23 | 2,960 | 0 | 0 | 2 | 0 | 2 |
| PM | APPROACH % | 0% | 0% | 0% | 41% | 0% | 59% | 1% | 99% | 0% | 0% | 98% | 2% | | | | | | |
| PM | APP/DEPART | 0 | / | 36 | 32 | / | 0 | 1,440 | / | 1,438 | 1,488 | / | 1,486 | 0 | | | | | |
| PM | BEGIN PEAK HR | | 1:00 PM | | | | | | | | | | | | | | | | |
| PM | VOLUMES | 0 | 0 | 0 | 5 | 0 | 12 | 6 | 756 | 0 | 0 | 704 | 10 | 1,495 | | | | | |
| PM | APPROACH % | 0% | 0% | 0% | 29% | 0% | 71% | 1% | 99% | 0% | 0% | 99% | 1% | | | | | | |
| PM | PEAK HR FACTOR | | 0.000 | | | 0.607 | | | 0.786 | | | 0.930 | | 0.851 | | | | | |
| PM | APP/DEPART | 0 | / | 16 | 17 | / | 0 | 764 | / | 761 | 714 | / | 718 | 0 | | | | | |
| PM | 03:00 PM | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 214 | 0 | 0 | 215 | 2 | 436 | 0 | 0 | 1 | 0 | 1 |
| PM | 3:15 PM | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 212 | 0 | 0 | 288 | 2 | 505 | 0 | 0 | 1 | 0 | 1 |
| PM | 3:30 PM | 0 | 0 | 0 | 2 | 0 | 2 | 5 | 225 | 0 | 0 | 259 | 2 | 495 | 0 | 0 | 1 | 0 | 1 |
| PM | 3:45 PM | 0 | 0 | 0 | 2 | 0 | 5 | 1 | 187 | 0 | 0 | 224 | 0 | 419 | 0 | 0 | 0 | 1 | 1 |
| PM | 4:00 PM | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 175 | 0 | 0 | 216 | 5 | 401 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:15 PM | 0 | 0 | 0 | 2 | 0 | 1 | 4 | 188 | 0 | 0 | 221 | 3 | 419 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 176 | 0 | 0 | 232 | 2 | 414 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:45 PM | 0 | 0 | 0 | 2 | 0 | 2 | 4 | 183 | 0 | 0 | 254 | 4 | 449 | 0 | 0 | 1 | 1 | 2 |
| PM | VOLUMES | 0 | 0 | 0 | 11 | 0 | 17 | 21 | 1,560 | 0 | 0 | 1,909 | 20 | 3,544 | 0 | 0 | 4 | 2 | 6 |
| PM | APPROACH % | 0% | 0% | 0% | 39% | 0% | 61% | 1% | 98% | 0% | 0% | 99% | 1% | | | | | | |
| PM | APP/DEPART | 0 | / | 41 | 28 | / | 0 | 1,585 | / | 1,573 | 1,931 | / | 1,930 | 0 | | | | | |
| PM | BEGIN PEAK HR | | 3:00 PM | | | | | | | | | | | | | | | | |
| PM | VOLUMES | 0 | 0 | 0 | 6 | 0 | 10 | 9 | 838 | 0 | 0 | 986 | 6 | 1,859 | | | | | |
| PM | APPROACH % | 0% | 0% | 0% | 38% | 0% | 63% | 1% | 99% | 0% | 0% | 99% | 1% | | | | | | |
| PM | PEAK HR FACTOR | | 0.000 | | | 0.571 | | | 0.920 | | | 0.856 | | 0.918 | | | | | |
| PM | APP/DEPART | 0 | / | 15 | 16 | / | 0 | 850 | / | 845 | 993 | / | 999 | 0 | | | | | |

**Chaparro**

NORTH SIDE

**Mountain** WEST SIDE

EAST SIDE **Mountain**

SOUTH SIDE

**Chaparro**

| | | ALL PED AND BIKE | | | | | PEDESTRIAN CROSSINGS | | | | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | NS | SS | ES | WS | TOTAL |
| PM | 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** Verdugo Rd & Mountain St
**City:** Glendale
**Control:** Signalized

**Project ID:** 19-05546-001
**Date:** 9/10/2019

**Total**

| **NS/EW Streets:** | Verdugo Rd | | | | Verdugo Rd | | | | Mountain St | | | | Mountain St | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 1 | 3 | 1 | 0 | 2 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 2 | 0.5 | 1.5 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 11 | 112 | 59 | 0 | 109 | 281 | 18 | 0 | 18 | 26 | 25 | 0 | 36 | 20 | 45 | 0 | 760 |
| 7:15 AM | 9 | 144 | 98 | 0 | 88 | 316 | 25 | 0 | 27 | 51 | 31 | 0 | 40 | 23 | 83 | 0 | 935 |
| 7:30 AM | 7 | 207 | 99 | 0 | 115 | 457 | 52 | 0 | 44 | 107 | 30 | 0 | 84 | 28 | 68 | 0 | 1298 |
| 7:45 AM | 21 | 261 | 100 | 0 | 116 | 454 | 82 | 0 | 42 | 98 | 35 | 0 | 114 | 52 | 70 | 0 | 1445 |
| 8:00 AM | 23 | 309 | 89 | 0 | 121 | 455 | 96 | 0 | 42 | 68 | 15 | 0 | 82 | 66 | 97 | 0 | 1463 |
| 8:15 AM | 22 | 181 | 106 | 0 | 124 | 434 | 100 | 0 | 26 | 77 | 22 | 0 | 119 | 65 | 73 | 0 | 1349 |
| 8:30 AM | 17 | 200 | 100 | 0 | 113 | 439 | 82 | 0 | 57 | 66 | 31 | 0 | 111 | 71 | 77 | 0 | 1364 |
| 8:45 AM | 14 | 250 | 79 | 0 | 92 | 397 | 82 | 0 | 75 | 54 | 24 | 0 | 151 | 81 | 171 | 0 | 1470 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 124 | 1664 | 730 | 0 | 878 | 3233 | 537 | 0 | 331 | 547 | 213 | 0 | 737 | 406 | 684 | 0 | 10084 |
| **APPROACH %'s :** | 4.92% | 66.08% | 28.99% | 0.00% | 18.89% | 69.56% | 11.55% | 0.00% | 30.34% | 50.14% | 19.52% | 0.00% | 40.34% | 22.22% | 37.44% | 0.00% | |
| **PEAK HR :** | 08:00 AM - 09:00 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 76 | 940 | 374 | 0 | 450 | 1725 | 360 | 0 | 200 | 265 | 92 | 0 | 463 | 283 | 418 | 0 | 5646 |
| **PEAK HR FACTOR :** | 0.826 | 0.761 | 0.882 | 0.000 | 0.907 | 0.948 | 0.900 | 0.000 | 0.667 | 0.860 | 0.742 | 0.000 | 0.767 | 0.873 | 0.611 | 0.000 | 0.960 |
| | 0.825 | | | | 0.943 | | | | 0.904 | | | | 0.722 | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | 1 | 0 | 2 | 3 | 1 | 0 | 2 | 1 | 1 | 0 | 2 | 0.5 | 1.5 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 24 | 280 | 59 | 0 | 73 | 235 | 44 | 0 | 35 | 42 | 18 | 0 | 62 | 49 | 103 | 0 | 1024 |
| 4:15 PM | 23 | 261 | 73 | 0 | 70 | 204 | 37 | 0 | 50 | 35 | 30 | 0 | 76 | 42 | 101 | 0 | 1002 |
| 4:30 PM | 28 | 259 | 49 | 0 | 60 | 212 | 30 | 0 | 46 | 49 | 22 | 0 | 69 | 58 | 89 | 0 | 971 |
| 4:45 PM | 22 | 358 | 80 | 0 | 48 | 234 | 34 | 0 | 73 | 47 | 10 | 0 | 61 | 49 | 123 | 0 | 1139 |
| 5:00 PM | 23 | 377 | 69 | 0 | 65 | 268 | 36 | 0 | 62 | 41 | 19 | 0 | 79 | 63 | 120 | 0 | 1222 |
| 5:15 PM | 29 | 358 | 51 | 0 | 81 | 232 | 32 | 0 | 91 | 48 | 18 | 0 | 78 | 60 | 129 | 0 | 1207 |
| 5:30 PM | 17 | 404 | 76 | 0 | 52 | 224 | 51 | 0 | 76 | 56 | 17 | 0 | 85 | 59 | 116 | 0 | 1233 |
| 5:45 PM | 31 | 375 | 74 | 0 | 59 | 251 | 35 | 0 | 67 | 46 | 18 | 0 | 62 | 63 | 109 | 0 | 1190 |
| 6:00 PM | 29 | 363 | 74 | 0 | 62 | 214 | 53 | 0 | 69 | 43 | 29 | 0 | 63 | 50 | 127 | 0 | 1176 |
| 6:15 PM | 31 | 303 | 87 | 0 | 85 | 260 | 49 | 0 | 61 | 61 | 18 | 0 | 54 | 70 | 131 | 0 | 1210 |
| 6:30 PM | 22 | 407 | 137 | 0 | 75 | 200 | 40 | 0 | 88 | 59 | 15 | 0 | 63 | 62 | 138 | 0 | 1306 |
| 6:45 PM | 32 | 341 | 94 | 0 | 81 | 257 | 42 | 0 | 63 | 69 | 27 | 0 | 80 | 58 | 143 | 0 | 1287 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 311 | 4086 | 923 | 0 | 811 | 2791 | 483 | 0 | 781 | 596 | 241 | 0 | 832 | 683 | 1429 | 0 | 13967 |
| **APPROACH %'s :** | 5.85% | 76.80% | 17.35% | 0.00% | 19.85% | 68.32% | 11.82% | 0.00% | 48.27% | 36.84% | 14.89% | 0.00% | 28.26% | 23.20% | 48.54% | 0.00% | |
| **PEAK HR :** | 06:00 PM - 07:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 114 | 1414 | 392 | 0 | 303 | 931 | 184 | 0 | 281 | 232 | 89 | 0 | 260 | 240 | 539 | 0 | 4979 |
| **PEAK HR FACTOR :** | 0.891 | 0.869 | 0.715 | 0.000 | 0.891 | 0.895 | 0.868 | 0.000 | 0.798 | 0.841 | 0.767 | 0.000 | 0.813 | 0.857 | 0.942 | 0.000 | 0.953 |
| | 0.848 | | | | 0.900 | | | | 0.929 | | | | 0.924 | | | | |

# INTERSECTION TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Feb 19, 20

LOCATION: Glendale
NORTH & SOUTH: Verdugo Entrance
EAST & WEST: College Circle

PROJECT #: SC2467
LOCATION #: 6
CONTROL: NO CONTROL

NOTES:

AM / PM / MD / OTHER / OTHER

N / W / E / S

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Verdugo Entrance | | | SOUTHBOUND Verdugo Entrance | | | EASTBOUND College Circle | | | WESTBOUND College Circle | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT 4 | NR 0 | SL X | ST 4 | SR X | EL X | ET X | ER X | WL X | WT X | WR X | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| AM | 7:00 AM | 0 | 196 | 4 | 0 | 353 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 553 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 267 | 12 | 0 | 536 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 815 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 245 | 10 | 0 | 675 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 930 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 341 | 10 | 0 | 561 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 912 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 332 | 12 | 0 | 671 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,015 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 286 | 11 | 0 | 593 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 890 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 318 | 4 | 0 | 569 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 891 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 404 | 11 | 0 | 570 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 985 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 2,389 | 74 | 0 | 4,528 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,991 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 97% | 3% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | APP/DEPART | 2,463 | / | 2,389 | 4,528 | / | 4,528 | 0 | / | 74 | 0 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 8:00 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 1,340 | 38 | 0 | 2,403 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,781 | | | | | |
| | APPROACH % | 0% | 97% | 3% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.830 | | | 0.895 | | | 0.000 | | | 0.000 | | 0.931 | | | | | |
| | APP/DEPART | 1,378 | / | 1,340 | 2,403 | / | 2,403 | 0 | / | 38 | 0 | / | 0 | 0 | | | | | |
| AM | 09:00 AM | 0 | 363 | 6 | 0 | 542 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 911 | 0 | 0 | 0 | 0 | 0 |
| | 9:15 AM | 0 | 269 | 1 | 0 | 463 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 733 | 0 | 0 | 0 | 0 | 0 |
| | 9:30 AM | 0 | 231 | 4 | 0 | 379 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 614 | 0 | 0 | 0 | 0 | 0 |
| | 9:45 AM | 0 | 234 | 8 | 0 | 364 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 606 | 0 | 0 | 0 | 0 | 0 |
| | 10:00 AM | 0 | 281 | 5 | 0 | 348 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 634 | 0 | 0 | 0 | 0 | 0 |
| | 10:15 AM | 0 | 355 | 4 | 0 | 364 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 723 | 0 | 0 | 0 | 0 | 0 |
| | 10:30 AM | 0 | 362 | 3 | 0 | 456 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 821 | 0 | 0 | 0 | 0 | 0 |
| | 10:45 AM | 0 | 319 | 0 | 0 | 417 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 736 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 2,414 | 31 | 0 | 3,333 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,778 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 99% | 1% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | APP/DEPART | 2,445 | / | 2,414 | 3,333 | / | 3,333 | 0 | / | 31 | 0 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 10:00 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 1,317 | 12 | 0 | 1,585 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,914 | | | | | |
| | APPROACH % | 0% | 99% | 1% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.910 | | | 0.869 | | | 0.000 | | | 0.000 | | 0.887 | | | | | |
| | APP/DEPART | 1,329 | / | 1,317 | 1,585 | / | 1,585 | 0 | / | 12 | 0 | / | 0 | 0 | | | | | |

**Verdugo Entrance**

NORTH SIDE

**College Circle** WEST SIDE

EAST SIDE **College Circle**

SOUTH SIDE

**Verdugo Entrance**

| | | ALL PED AND BIKE | | | | | PEDESTRIAN CROSSINGS | | | | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | NS | SS | ES | WS | TOTAL |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# INTERSECTION TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | LOCATION: | Glendale | PROJECT #: | SC2467 |
|---|---|---|---|---|
| Wed, Feb 19, 20 | NORTH & SOUTH: | Verdugo Entrance | LOCATION #: | 6 |
| | EAST & WEST: | College Circle | CONTROL: | NO CONTROL |

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Verdugo Entrance | | | SOUTHBOUND Verdugo Entrance | | | EASTBOUND College Circle | | | WESTBOUND College Circle | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT 4 | NR 0 | SL X | ST 4 | SR X | EL X | ET X | ER X | WL X | WT X | WR X | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| PM | 1:00 PM | 0 | 349 | 5 | 0 | 320 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 674 | 0 | 0 | 0 | 0 | 0 |
| | 1:15 PM | 0 | 338 | 3 | 0 | 311 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 652 | 0 | 0 | 0 | 0 | 0 |
| | 1:30 PM | 0 | 423 | 4 | 0 | 385 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 812 | 0 | 0 | 0 | 0 | 0 |
| | 1:45 PM | 0 | 379 | 4 | 0 | 382 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 765 | 0 | 0 | 0 | 0 | 0 |
| | 2:00 PM | 0 | 279 | 1 | 0 | 346 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 626 | 0 | 0 | 0 | 0 | 0 |
| | 2:15 PM | 0 | 334 | 4 | 0 | 296 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 634 | 0 | 0 | 0 | 0 | 0 |
| | 2:30 PM | 0 | 319 | 2 | 0 | 322 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 643 | 0 | 0 | 0 | 0 | 0 |
| | 2:45 PM | 0 | 426 | 0 | 0 | 351 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 777 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 2,847 | 23 | 0 | 2,713 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,583 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 99% | 1% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | APP/DEPART | 2,870 | / | 2,847 | 2,713 | / | 2,713 | 0 | / | 23 | 0 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 1:00 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 1,489 | 16 | 0 | 1,398 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,903 | | | | | |
| | APPROACH % | 0% | 99% | 1% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.881 | | | 0.908 | | | 0.000 | | | 0.000 | | 0.894 | | | | | |
| | APP/DEPART | 1,505 | / | 1,489 | 1,398 | / | 1,398 | 0 | / | 16 | 0 | / | 0 | 0 | | | | | |
| PM | 03:00 PM | 0 | 405 | 2 | 0 | 434 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 841 | 0 | 0 | 0 | 0 | 0 |
| | 3:15 PM | 0 | 467 | 0 | 0 | 421 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 888 | 0 | 0 | 0 | 0 | 0 |
| | 3:30 PM | 0 | 396 | 2 | 0 | 381 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 779 | 0 | 0 | 0 | 0 | 0 |
| | 3:45 PM | 0 | 411 | 0 | 0 | 287 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 698 | 0 | 0 | 0 | 0 | 0 |
| | 4:00 PM | 0 | 421 | 1 | 0 | 336 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 758 | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 508 | 2 | 0 | 305 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 815 | 0 | 0 | 0 | 0 | 0 |
| | 4:30 PM | 0 | 469 | 2 | 0 | 344 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 815 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 554 | 0 | 0 | 273 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 827 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 3,631 | 9 | 0 | 2,781 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,421 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | APP/DEPART | 3,640 | / | 3,631 | 2,781 | / | 2,781 | 0 | / | 9 | 0 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 4:00 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 1,952 | 5 | 0 | 1,258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,215 | | | | | |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.883 | | | 0.914 | | | 0.000 | | | 0.000 | | 0.972 | | | | | |
| | APP/DEPART | 1,957 | / | 1,952 | 1,258 | / | 1,258 | 0 | / | 5 | 0 | / | 0 | 0 | | | | | |

**Verdugo Entrance**

NORTH SIDE

**College Circle** WEST SIDE EAST SIDE **College Circle**

SOUTH SIDE

**Verdugo Entrance**

| | | ALL PED AND BIKE | | | | | PEDESTRIAN CROSSINGS | | | | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | NS | SS | ES | WS | TOTAL |
| PM | 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# INTERSECTION TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Feb 19, 20

LOCATION: Glendale
NORTH & SOUTH: Verdugo Exit
EAST & WEST: College Circle

PROJECT #: SC2467
LOCATION #: 8
CONTROL: STOP W

NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Verdugo Exit | | | SOUTHBOUND Verdugo Exit | | | EASTBOUND College Circle | | | WESTBOUND College Circle | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT 2 | NR X | SL X | ST 2 | SR X | EL X | ET X | ER X | WL 1 | WT X | WR 1 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| AM | 7:00 AM | 0 | 77 | 0 | 0 | 131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 208 | 1 | 0 | 0 | 0 | 1 |
| | 7:15 AM | 0 | 101 | 0 | 0 | 194 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 295 | 0 | 1 | 0 | 0 | 1 |
| | 7:30 AM | 0 | 121 | 0 | 0 | 234 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 356 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 134 | 0 | 0 | 204 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 338 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 131 | 0 | 0 | 234 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 365 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 114 | 0 | 0 | 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 316 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 129 | 0 | 0 | 158 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 287 | 1 | 0 | 0 | 0 | 1 |
| | 8:45 AM | 0 | 186 | 0 | 0 | 184 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 370 | 4 | 0 | 0 | 0 | 4 |
| | VOLUMES | 0 | 993 | 0 | 0 | 1,541 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2,542 | 6 | 1 | 0 | 0 | 7 |
| | APPROACH % | 0% | 99% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | | | | | | |
| | APP/DEPART | 999 | / | 994 | 1,542 | / | 1,548 | 0 | / | 0 | 1 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 7:30 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 500 | 0 | 0 | 874 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1,375 | | | | | |
| | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.933 | | | 0.934 | | | 0.000 | | | 0.250 | | 0.942 | | | | | |
| | APP/DEPART | 500 | / | 500 | 874 | / | 875 | 0 | / | 0 | 1 | / | 0 | 0 | | | | | |
| AM | 09:00 AM | 0 | 196 | 0 | 0 | 192 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 392 | 1 | 0 | 0 | 0 | 1 |
| | 9:15 AM | 0 | 108 | 0 | 0 | 157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 265 | 0 | 0 | 0 | 0 | 0 |
| | 9:30 AM | 0 | 92 | 0 | 0 | 107 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 200 | 1 | 0 | 0 | 0 | 1 |
| | 9:45 AM | 0 | 92 | 0 | 0 | 105 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 198 | 1 | 0 | 0 | 0 | 1 |
| | 10:00 AM | 0 | 99 | 0 | 0 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 212 | 1 | 0 | 0 | 0 | 1 |
| | 10:15 AM | 0 | 150 | 0 | 0 | 119 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 271 | 1 | 0 | 0 | 0 | 1 |
| | 10:30 AM | 0 | 200 | 0 | 0 | 163 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 363 | 2 | 0 | 0 | 0 | 2 |
| | 10:45 AM | 0 | 153 | 0 | 0 | 159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 312 | 0 | 1 | 0 | 0 | 1 |
| | VOLUMES | 0 | 1,090 | 0 | 0 | 1,115 | 0 | 0 | 0 | 0 | 7 | 0 | 1 | 2,221 | 7 | 1 | 0 | 0 | 8 |
| | APPROACH % | 0% | 99% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 88% | 0% | 13% | | | | | | |
| | APP/DEPART | 1,097 | / | 1,092 | 1,116 | / | 1,129 | 0 | / | 0 | 8 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 10:00 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 602 | 0 | 0 | 554 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1,163 | | | | | |
| | APPROACH % | 0% | 99% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.750 | | | 0.851 | | | 0.000 | | | 0.250 | | 0.797 | | | | | |
| | APP/DEPART | 606 | / | 603 | 555 | / | 560 | 0 | / | 0 | 2 | / | 0 | 0 | | | | | |

**Verdugo Exit**

NORTH SIDE

**College Circle** WEST SIDE

EAST SIDE **College Circle**

SOUTH SIDE

**Verdugo Exit**

| | | ALL PED AND BIKE | | | | | PEDESTRIAN CROSSINGS | | | | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | NS | SS | ES | WS | TOTAL |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# INTERSECTION TURNING MOVEMENT COUNTS



PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Feb 19, 20

LOCATION: Glendale
NORTH & SOUTH: Verdugo Exit
EAST & WEST: College Circle

PROJECT #: SC2467
LOCATION #: 8
CONTROL: STOP W

NOTES:

AM
PM
MD
OTHER
OTHER

N
W
E
S

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Verdugo Exit | | | SOUTHBOUND Verdugo Exit | | | EASTBOUND College Circle | | | WESTBOUND College Circle | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT 2 | NR X | SL X | ST 2 | SR X | EL X | ET X | ER X | WL 1 | WT X | WR 1 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| PM | 1:00 PM | 0 | 135 | 0 | 0 | 104 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 240 | 1 | 0 | 0 | 0 | 1 |
| PM | 1:15 PM | 0 | 140 | 0 | 0 | 99 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 241 | 1 | 0 | 0 | 0 | 1 |
| PM | 1:30 PM | 0 | 178 | 0 | 0 | 115 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 297 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:45 PM | 0 | 185 | 0 | 0 | 135 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 322 | 2 | 0 | 0 | 0 | 2 |
| PM | 2:00 PM | 0 | 143 | 0 | 0 | 99 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 245 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:15 PM | 0 | 128 | 0 | 0 | 107 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 237 | 1 | 0 | 0 | 0 | 1 |
| PM | 2:30 PM | 0 | 140 | 0 | 0 | 122 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 263 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:45 PM | 0 | 176 | 0 | 0 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 295 | 0 | 0 | 0 | 0 | 0 |
| PM | VOLUMES | 0 | 1,225 | 0 | 0 | 898 | 0 | 0 | 0 | 0 | 10 | 0 | 7 | 2,145 | 5 | 0 | 0 | 0 | 5 |
| PM | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 59% | 0% | 41% | | | | | | |
| PM | APP/DEPART | 1,230 | / | 1,232 | 898 | / | 913 | 0 | / | 0 | 17 | / | 0 | 0 | | | | | |
| PM | BEGIN PEAK HR | | 1:15 PM | | | | | | | | | | | | | | | | |
| PM | VOLUMES | 0 | 646 | 0 | 0 | 448 | 0 | 0 | 0 | 0 | 6 | 0 | 5 | 1,108 | | | | | |
| PM | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 55% | 0% | 45% | | | | | | |
| PM | PEAK HR FACTOR | | 0.868 | | | 0.830 | | | 0.000 | | | 0.688 | | 0.855 | | | | | |
| PM | APP/DEPART | 649 | / | 651 | 448 | / | 457 | 0 | / | 0 | 11 | / | 0 | 0 | | | | | |
| PM | 03:00 PM | 0 | 204 | 0 | 0 | 179 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 392 | 1 | 0 | 0 | 0 | 1 |
| PM | 3:15 PM | 0 | 211 | 0 | 0 | 153 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 366 | 1 | 0 | 0 | 0 | 1 |
| PM | 3:30 PM | 0 | 199 | 0 | 0 | 125 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 330 | 1 | 0 | 0 | 0 | 1 |
| PM | 3:45 PM | 0 | 167 | 0 | 0 | 114 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 286 | 1 | 0 | 0 | 0 | 1 |
| PM | 4:00 PM | 0 | 191 | 0 | 0 | 117 | 0 | 0 | 0 | 0 | 4 | 0 | 8 | 320 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:15 PM | 0 | 207 | 0 | 0 | 97 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 306 | 1 | 0 | 0 | 0 | 1 |
| PM | 4:30 PM | 0 | 203 | 0 | 0 | 128 | 0 | 0 | 0 | 0 | 4 | 0 | 6 | 341 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:45 PM | 0 | 241 | 0 | 0 | 87 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 329 | 1 | 0 | 0 | 0 | 1 |
| PM | VOLUMES | 0 | 1,623 | 0 | 0 | 1,000 | 0 | 0 | 0 | 0 | 21 | 0 | 26 | 2,676 | 6 | 0 | 0 | 0 | 6 |
| PM | APPROACH % | 0% | 100% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 45% | 0% | 55% | | | | | | |
| PM | APP/DEPART | 1,629 | / | 1,649 | 1,000 | / | 1,027 | 0 | / | 0 | 47 | / | 0 | 0 | | | | | |
| PM | BEGIN PEAK HR | | 3:00 PM | | | | | | | | | | | | | | | | |
| PM | VOLUMES | 0 | 781 | 0 | 0 | 571 | 0 | 0 | 0 | 0 | 12 | 0 | 10 | 1,378 | | | | | |
| PM | APPROACH % | 0% | 99% | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 55% | 0% | 45% | | | | | | |
| PM | PEAK HR FACTOR | | 0.926 | | | 0.797 | | | 0.000 | | | 0.611 | | 0.877 | | | | | |
| PM | APP/DEPART | 785 | / | 791 | 571 | / | 587 | 0 | / | 0 | 22 | / | 0 | 0 | | | | | |

**Verdugo Exit**

NORTH SIDE

**College Circle** WEST SIDE

EAST SIDE **College Circle**

SOUTH SIDE

**Verdugo Exit**

| | | ALL PED AND BIKE | | | | | PEDESTRIAN CROSSINGS | | | | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | NS | SS | ES | WS | TOTAL |
| PM | 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# INTERSECTION TURNING MOVEMENT COUNTS

T219

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | LOCATION: | Glendale | PROJECT #: | SC2467 |
|---|---|---|---|---|
| Wed, Feb 19, 20 | NORTH & SOUTH: | Campus | LOCATION #: | 11 |
| | EAST & WEST: | Fire Access | CONTROL: | STOP ALL |

NOTES:

AM / PM / MD / OTHER / OTHER — ◄ W ▲ N S ▼ E ►

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Campus | | | SOUTHBOUND Campus | | | EASTBOUND Fire Access | | | WESTBOUND Fire Access | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT 1 | NR 0 | SL 0 | ST 1 | SR X | EL X | ET X | ER X | WL 0 | WT X | WR 0 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| AM | 7:00 AM | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 15 | 0 | 1 | 0 | 0 | 1 |
| | 7:15 AM | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 17 | 0 | 1 | 0 | 0 | 1 |
| | 7:30 AM | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 16 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 4 | 11 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 20 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 1 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 20 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 0 | 4 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 30 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 1 | 5 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 46 | 0 | 1 | 0 | 0 | 1 |
| | VOLUMES | 0 | 2 | 13 | 108 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 59 | 188 | 0 | 3 | 0 | 0 | 3 |
| | APPROACH % | 0% | 13% | 87% | 97% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 95% | | | | | | |
| | APP/DEPART | 15 | / | 64 | 111 | / | 3 | 0 | / | 121 | 62 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 8:00 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 2 | 9 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 118 | | | | | |
| | APPROACH % | 0% | 18% | 82% | 98% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | | | | | | |
| | PEAK HR FACTOR | | 0.458 | | | 0.688 | | | 0.000 | | | 0.603 | | 0.628 | | | | | |
| | APP/DEPART | 11 | / | 44 | 66 | / | 0 | 0 | / | 74 | 41 | / | 0 | 0 | | | | | |
| AM | 09:00 AM | 0 | 0 | 2 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 60 | 0 | 1 | 0 | 0 | 1 |
| | 9:15 AM | 0 | 0 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 31 | 0 | 0 | 0 | 0 | 0 |
| | 9:30 AM | 0 | 0 | 2 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 16 | 0 | 1 | 0 | 0 | 1 |
| | 9:45 AM | 0 | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 17 | 0 | 1 | 0 | 0 | 1 |
| | 10:00 AM | 0 | 1 | 2 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 32 | 0 | 0 | 0 | 0 | 0 |
| | 10:15 AM | 0 | 0 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 29 | 0 | 0 | 0 | 2 | 2 |
| | 10:30 AM | 0 | 0 | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 42 | 0 | 0 | 0 | 1 | 1 |
| | 10:45 AM | 0 | 0 | 3 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 32 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 1 | 16 | 110 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 131 | 265 | 0 | 3 | 0 | 3 | 6 |
| | APPROACH % | 0% | 6% | 94% | 97% | 0% | 0% | 0% | 0% | 0% | 1% | 0% | 97% | | | | | | |
| | APP/DEPART | 17 | / | 135 | 113 | / | 1 | 0 | / | 129 | 135 | / | 0 | 0 | | | | | |
| | BEGIN PEAK HR | | 10:00 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 1 | 10 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 138 | | | | | |
| | APPROACH % | 0% | 9% | 91% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 96% | | | | | | |
| | PEAK HR FACTOR | | 0.917 | | | 0.764 | | | 0.000 | | | 0.667 | | 0.802 | | | | | |
| | APP/DEPART | 11 | / | 70 | 55 | / | 0 | 0 | / | 68 | 72 | / | 0 | 0 | | | | | |

**Campus**

NORTH SIDE

**Fire Access** WEST SIDE EAST SIDE **Fire Access**

SOUTH SIDE

**Campus**

| | | ALL PED AND BIKE | | | | | PEDESTRIAN CROSSINGS | | | | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | NS | SS | ES | WS | TOTAL |
| AM | 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AM | 9:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 9:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 10:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# INTERSECTION TURNING MOVEMENT COUNTS

T219

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | LOCATION: | Glendale | PROJECT #: | SC2467 |
|---|---|---|---|---|
| Wed, Feb 19, 20 | NORTH & SOUTH: | Campus | LOCATION #: | 11 |
| | EAST & WEST: | Fire Access | CONTROL: | STOP ALL |

NOTES:

AM / PM / MD / OTHER / OTHER

N ▲ / ◄ W / E ► / S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Campus | | | SOUTHBOUND Campus | | | EASTBOUND Fire Access | | | WESTBOUND Fire Access | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT 1 | NR 0 | SL 0 | ST 1 | SR X | EL X | ET X | ER X | WL 0 | WT X | WR 0 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| PM | 1:00 PM | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 12 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:15 PM | 0 | 1 | 3 | 14 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 8 | 28 | 0 | 0 | 0 | 3 | 3 |
| PM | 1:30 PM | 0 | 0 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 15 | 33 | 0 | 0 | 0 | 1 | 1 |
| PM | 1:45 PM | 0 | 0 | 1 | 14 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 13 | 29 | 0 | 0 | 0 | 1 | 1 |
| PM | 2:00 PM | 0 | 2 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 19 | 0 | 1 | 0 | 0 | 1 |
| PM | 2:15 PM | 0 | 0 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 16 | 0 | 1 | 0 | 1 | 2 |
| PM | 2:30 PM | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 13 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:45 PM | 0 | 0 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 21 | 0 | 0 | 0 | 1 | 1 |
| PM | VOLUMES | 0 | 3 | 11 | 82 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 70 | 180 | 0 | 2 | 0 | 7 | 9 |
| PM | APPROACH % | 0% | 21% | 79% | 98% | 0% | 0% | 0% | 0% | 0% | 6% | 0% | 85% | | | | | | |
| PM | APP/DEPART | 14 | / | 75 | 84 | / | 5 | 0 | / | 100 | 82 | / | 0 | 0 | | | | | |
| PM | BEGIN PEAK HR | | 1:15 PM | | | | | | | | | | | | | | | | |
| PM | VOLUMES | 0 | 3 | 7 | 51 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 44 | 115 | | | | | |
| PM | APPROACH % | 0% | 30% | 70% | 98% | 0% | 0% | 0% | 0% | 0% | 8% | 0% | 83% | | | | | | |
| PM | PEAK HR FACTOR | | 0.625 | | | 0.813 | | | 0.000 | | | 0.779 | | 0.846 | | | | | |
| PM | APP/DEPART | 10 | / | 48 | 52 | / | 4 | 0 | / | 63 | 53 | / | 0 | 0 | | | | | |
| PM | 03:00 PM | 0 | 2 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 17 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:15 PM | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 25 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:30 PM | 0 | 0 | 5 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 26 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:45 PM | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 16 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:00 PM | 0 | 0 | 3 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 25 | 0 | 0 | 0 | 1 | 1 |
| PM | 4:15 PM | 0 | 0 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 15 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:30 PM | 0 | 3 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 23 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:45 PM | 0 | 0 | 2 | 10 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 11 | 25 | 0 | 0 | 0 | 0 | 0 |
| PM | VOLUMES | 0 | 5 | 21 | 80 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 64 | 173 | 0 | 0 | 0 | 1 | 1 |
| PM | APPROACH % | 0% | 19% | 81% | 99% | 1% | 0% | 0% | 0% | 0% | 2% | 0% | 97% | | | | | | |
| PM | APP/DEPART | 26 | / | 69 | 81 | / | 2 | 0 | / | 102 | 66 | / | 0 | 0 | | | | | |
| PM | BEGIN PEAK HR | | 3:15 PM | | | | | | | | | | | | | | | | |
| PM | VOLUMES | 0 | 0 | 8 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 93 | | | | | |
| PM | APPROACH % | 0% | 0% | 100% | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 97% | | | | | | |
| PM | PEAK HR FACTOR | | 0.400 | | | 0.734 | | | 0.000 | | | 0.731 | | 0.894 | | | | | |
| PM | APP/DEPART | 8 | / | 37 | 47 | / | 0 | 0 | / | 56 | 38 | / | 0 | 0 | | | | | |

**Campus**

NORTH SIDE

**Fire Access** WEST SIDE

EAST SIDE **Fire Access**

SOUTH SIDE

**Campus**

| | | ALL PED AND BIKE | | | | | PEDESTRIAN CROSSINGS | | | | | BICYCLE CROSSINGS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | N SIDE | S SIDE | E SIDE | W SIDE | TOTAL | NS | SS | ES | WS | TOTAL |
| PM | 1:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 1:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 2:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 3:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM | 4:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# Garfield Campus Volumes

## Data Collected in August 2020

PM 32 109 10 — 26 294 22
AM 12 61 1 — 25 234 25

26 11 — 11 10 — 25 25 — S — 18 24
26 28 — 8 44 — 14 15 — 3 12
12 10 — 7 8 — 5 2 — 9 9

2 41 1 — 8 207 7
15 104 8 — 7 377 18

Tyler Acacia

| Sum | |
|---|---|
| 1043 | PM |
| 709 | AM |

16 101 5 — 15 246 27 28
18 54 6 — 6 223 12 13

20 10 — 1 17 — 12 7 — S — 26 28
29 34 — 0 34 — 19 20 — 19 23
18 13 — 0 2 — Tyler 3 0 — 89 85 CC
RT 4 1 — 8 24 Tyler

10 33 3 — 0 164 54
13 87 7 — 0 344 137

CC Acacia CC Acacia
10 4 26 27
6 2 17 23

## Data based on Historic and Planning Studies

Chevy Chase / Tyler / Acacia
Based on the 2017 South Glendale Community Plan
Transportation Analysis Report
May 2014 Historic Counts

| | Sum | Factor |
|---|---|---|
| PM | 1355 | **1.30** |
| AM | 1260 | **1.78** |

PM 28 344 31
AM 18 523 24

25 22 — S — 84 17
40 37 — 21 52
0 1 — 188 97

0 259 83
0 537 184

2040 Forecasts (Proposed Project)

| | Sum | Growth | |
|---|---|---|---|
| PM | 1355 | 0% | 0% |
| AM | 1540 | 22% | 0.77% per year |

PM 28 344 31
AM 30 380 40

25 40 — S — 90 17 — 2020 to 2023 growth factor
40 40 — 140 52 — 1.0231
0 10 — 360 97

0 320 90
0 537 184

*Vehicle movements to and from Tyler Street have been moved to westbound Acacia Street to allow for ICU analysis

2020 Numbers are adjusted twice:
(Step 1) Adjust 2020 volumes based on the factor between 2014 and 2020
(Step 2) from 2014 to 2020 based on the growth rates for AM and PM per the South Glendale Community Plan

### Step 1 (AM Factor of 1.78 and PM Factor of 1.3)

PM 42 142 13 — 34 382 29
AM 21 108 2 — 44 416 44

34 20 — 20 13 — 32.5 44 — S — 32 31.2
34 50 — 14 57 — 18.2 27 — 5 15.6
16 18 — 12 10 — 6.5 4 — 16 11.7

4 73 2 — 14 368 12
19 135 10 — 9 490 23

Tyler Acacia
21 131 6 — 19 320 35 28 — 1347
32 96 11 — 11 396 21 23 — 1260

26 18 — 2 22 — 16 12 — S — 46 36
38 60 — 0 44 — 25 36 — 34 30
23 23 — 0 3 — Tyler 4 0 — 158 110 CC
RT 5 2 — 14 31 Tyler

18 59 5 — 0 291 96
17 113 9 — 0 447 178

CC Acacia CC Acacia
18 7 46 48
8 3 22 30

### Step 2 (AM factor of 0.77% per year and PM Factor of 0%)

INT 1
PM 42 142 13
AM 23 114 2

34 21 — 21 13
34 53 — 15 58
16 19 — 14 11

4 77 2
20 136 11

INT 2
34 382 29
47 436 47

33 47 — S — 34 32
19 28 — 6 16
7 4 — 17 12

15 386 14
10 490 24

INT 3
21 132 7
34 101 12

26 19 — 2 23
38 64 — 0 45
24 25 — 0 3

19 62 6
17 114 10

64 Combined LT Analysis
48

INT 4
Tyler Acacia
20 320 36 28 — 1354
12 415 23 25 — 1329

Combined RT Analysis
10 2 Tyler

16 14 — S — 49 37
25 38 — 36 30
4 0 — 166 111 CC — 208 154
RT 6 2 — 15 32 Tyler — Combined LT Analysis (ICU)

0 306 101
0 447 178

Combined NBT Analysis 355 152
Combined NBR Analysis 470 208

CC Acacia CC Acacia
19 8 49 51
8 3 23 30

# Intersection Turning Movement

**Prepared by:**

## National Data & Surveying Services

**Project ID:** Historical

**Day:** Wednesday

**City:** Glendale

**Date:** 2/5/2014

**AM**

| **NS/EW Streets:** | Chevy Chase Dr/Tyler St | | | Chevy Chase Dr/Tyler St | | | Acacia Ave | | | Acacia Ave | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | |
| 7:00 AM | | 42 | 7 | 1 | 80 | 2 | 4 | 5 | 1 | 33 | 6 | 4 | 185 |
| 7:15 AM | | 45 | 14 | 2 | 104 | 7 | 9 | 2 | 3 | 44 | 3 | 10 | 243 |
| 7:30 AM | | 69 | 25 | 3 | 133 | 8 | 15 | 6 | 0 | 37 | 10 | 10 | 316 |
| 7:45 AM | | 76 | 21 | 4 | 143 | 15 | 8 | 9 | 0 | 36 | 6 | 7 | 325 |
| 8:00 AM | | 75 | 21 | 9 | 149 | 4 | 6 | 11 | 1 | 31 | 7 | 6 | 320 |
| 8:15 AM | | 43 | 18 | 4 | 128 | 3 | 4 | 6 | 1 | 33 | 6 | 15 | 261 |
| 8:30 AM | | 60 | 17 | 2 | 133 | 1 | 5 | 7 | 0 | 49 | 3 | 8 | 285 |
| 8:45 AM | | 69 | 20 | 5 | 140 | 3 | 3 | 8 | 0 | 48 | 2 | 33 | 331 |
| 9:00 AM | | 69 | 25 | 9 | 132 | 7 | 6 | 14 | 1 | 53 | 10 | 34 | 360 |
| 9:15 AM | | 61 | 21 | 8 | 118 | 7 | 8 | 8 | 0 | 38 | 6 | 9 | 284 |
| 9:30 AM | | 45 | 22 | 2 | 104 | 4 | 5 | 0 | 1 | 26 | 4 | 4 | 217 |
| 9:45 AM | | 58 | 27 | 2 | 68 | 5 | 3 | 6 | 0 | 46 | 3 | 3 | 221 |
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| **TOTAL VOLUMES :** | 0 | 712 | 238 | 51 | 1432 | 66 | 76 | 82 | 8 | 474 | 66 | 143 | 3348 |
| **APPROACH %'s :** | 0.00% | 74.95% | 25.05% | 3.29% | 92.45% | 4.26% | 45.78% | 49.40% | 4.82% | 69.40% | 9.66% | 20.94% | |
| **PEAK HR START TIME :** | 830 AM | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 259 | 83 | 24 | 523 | 18 | 22 | 37 | 1 | 188 | 21 | 84 | 1260 |
| **PEAK HR FACTOR :** | | 0.910 | | | 0.954 | | | 0.714 | | | 0.755 | | 0.875 |

**CONTROL :** Signalized

# Intersection Turning Movement

**Prepared by:**

## National Data & Surveying Services

**Project ID:** Historical

**Day:** Wednesday

**City:** Glendale

**Date:** 2/5/2014

**PM**

| **NS/EW Streets:** | Chevy Chase Dr/Tyler St | | | Chevy Chase Dr/Tyler St | | | Acacia Ave | | | Acacia Ave | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 2 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | |
| 4:00 PM | | 88 | 41 | 7 | 69 | 3 | 6 | 9 | 2 | 28 | 10 | 7 | 270 |
| 4:15 PM | | 113 | 35 | 11 | 81 | 2 | 8 | 10 | 1 | 25 | 8 | 6 | 300 |
| 4:30 PM | | 118 | 33 | 9 | 86 | 5 | 9 | 6 | 1 | 26 | 15 | 5 | 313 |
| 4:45 PM | | 142 | 48 | 7 | 97 | 5 | 7 | 9 | 0 | 27 | 11 | 4 | 357 |
| 5:00 PM | | 117 | 39 | 7 | 83 | 13 | 4 | 12 | 0 | 30 | 16 | 4 | 325 |
| 5:15 PM | | 140 | 50 | 10 | 83 | 4 | 8 | 8 | 0 | 21 | 12 | 2 | 338 |
| 5:30 PM | | 138 | 47 | 7 | 81 | 6 | 6 | 11 | 0 | 19 | 13 | 7 | 335 |
| 5:45 PM | | 128 | 45 | 12 | 75 | 3 | 9 | 5 | 1 | 37 | 10 | 11 | 336 |
| 6:00 PM | | 131 | 48 | 6 | 77 | 5 | 5 | 6 | 1 | 36 | 12 | 5 | 332 |
| 6:15 PM | | 119 | 41 | 6 | 75 | 5 | 6 | 12 | 0 | 36 | 11 | 3 | 314 |
| 6:30 PM | | 97 | 43 | 5 | 63 | 3 | 6 | 7 | 0 | 28 | 7 | 1 | 260 |
| 6:45 PM | | 93 | 43 | 4 | 65 | 3 | 7 | 9 | 1 | 31 | 9 | 7 | 272 |
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| **TOTAL VOLUMES :** | 0 | 1424 | 513 | 91 | 935 | 57 | 81 | 104 | 7 | 344 | 134 | 62 | 3752 |
| **APPROACH %'s :** | 0.00% | 73.52% | 26.48% | 8.40% | 86.33% | 5.26% | 42.19% | 54.17% | 3.65% | 63.70% | 24.81% | 11.48% | |
| **PEAK HR START TIME :** | 445 PM | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 0 | 537 | 184 | 31 | 344 | 28 | 25 | 40 | 0 | 97 | 52 | 17 | 1355 |
| **PEAK HR FACTOR :** | | 0.949 | | | 0.924 | | | 0.956 | | | 0.830 | | 0.949 |

**CONTROL :** Signalized

**Project Title:** **South Glendale Community Plan**
**Intersection:** **43 - Chevy Chase Dr & Acacia Ave**
**Description:** **Proposed Project (2040)**

| | AM | PM | | |
|---|---|---|---|---|
| Thru Lane: | 1,300 vph | 1,600 vph | N-S Split Phase : | N |
| Left Lane: | 1,300 vph | 1,600 vph | E-W Split Phase : | Y |
| Double Lt Penalty: | 20 % | 20 % | Lost Time (% of cycle) : | 10 |
| ITS: | 0 % | 0 % | V/C Round Off (decs.) : | 3 |
| OLA Movements : | | | | |
| FF Movements: | | | | |

**Date/Time:** **AM PEAK HOUR**

| APPROACH | MVMT | LANES | VOLUME | CAPACITY | V/C | ICU ANALYSIS | |
|---|---|---|---|---|---|---|---|
| Southbound | RT | 0.00 | 30 | 0 | 0.000 | N-S(1): | 0.189 * |
| | TH | 2.00 | 380 | 2,600 | 0.158 | N-S(2): | 0.158 |
| | LT | 1.00 | 40 | 1,300 | 0.031 * | E-W(1): | 0.523 * |
| Westbound | RT | 0.00 | 90 | 0 | 0.000 | E-W(2): | 0.000 |
| | TH | 1.00 | 140 | 1,300 | 0.454 * | | |
| | LT | 0.00 | 360 | 1,300 | 0.277 | V/C: | 0.712 |
| Northbound | RT | 0.00 | 90 | 0 | 0.000 | Lost Time: | 0.100 |
| | TH | 2.00 | 320 | 2,600 | 0.158 * | ITS: | 0.000 |
| | LT | 0.00 | 0 | 0 | 0.000 | | |
| Eastbound | RT | 0.00 | 10 | 0 | 0.000 | ICU: | 0.812 |
| | TH | 1.00 | 40 | 1,300 | 0.069 * | | |
| | LT | 0.00 | 40 | 1,300 | 0.031 | LOS: | D |

**Date/Time:** **PM PEAK HOUR**

| APPROACH | MVMT | LANES | VOLUME | CAPACITY | V/C | ICU ANALYSIS | |
|---|---|---|---|---|---|---|---|
| Southbound | RT | 0.00 | 10 | 0 | 0.000 | N-S(1): | 0.294 * |
| | TH | 2.00 | 110 | 3,200 | 0.038 | N-S(2): | 0.038 |
| | LT | 1.00 | 70 | 1,600 | 0.044 * | E-W(1): | 0.388 * |
| Westbound | RT | 0.00 | 70 | 0 | 0.000 | E-W(2): | 0.000 |
| | TH | 1.00 | 90 | 1,600 | 0.275 * | | |
| | LT | 0.00 | 280 | 1,600 | 0.175 | V/C: | 0.682 |
| Northbound | RT | 0.00 | 400 | 1,600 | 0.250 * | Lost Time: | 0.100 |
| | TH | 2.00 | 270 | 1,600 | 0.169 | ITS: | 0.000 |
| | LT | 0.00 | 0 | 0 | 0.000 | | |
| Eastbound | RT | 0.00 | 20 | 0 | 0.000 | ICU: | 0.782 |
| | TH | 1.00 | 150 | 1,600 | 0.113 * | | |
| | LT | 0.00 | 10 | 1,600 | 0.006 | LOS: | C |

* - Denotes critical movement

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | | | | |
|---|---|---|---|---|
| Tue, Aug 25, 20 | LOCATION: | Glendale | PROJECT #: | SC |
| | NORTH & SOUTH: | Chevy Chase | LOCATION #: | 4 |
| | EAST & WEST: | Acacia | CONTROL: | SIGNAL |

NOTES:

AM
PM
MD
OTHER
OTHER

N ▲ ◄ W E ► S ▼

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Chevy Chase | | | SOUTHBOUND Chevy Chase | | | EASTBOUND Acacia | | | WESTBOUND Acacia | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL X | NT 2 | NR 0 | SL 1 | ST 2 | SR 0 | EL 0 | ET 1 | ER 0 | WL 0 | WT 1 | WR 0 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| AM | 7:00 AM | 0 | 24 | 10 | 0 | 32 | 2 | 2 | 1 | 0 | 13 | 1 | 2 | 87 | 0 | 1 | 0 | 0 | 1 |
| | 7:15 AM | 0 | 19 | 10 | 1 | 29 | 2 | 0 | 5 | 0 | 21 | 1 | 1 | 89 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 0 | 35 | 8 | 4 | 44 | 1 | 2 | 5 | 1 | 17 | 8 | 6 | 131 | 0 | 0 | 0 | 1 | 1 |
| | 7:45 AM | 0 | 52 | 12 | 2 | 59 | 4 | 2 | 8 | 0 | 28 | 2 | 8 | 177 | 0 | 0 | 0 | 0 | 0 |
| | 8:00 AM | 0 | 32 | 11 | 2 | 54 | 2 | 0 | 4 | 1 | 20 | 7 | 7 | 140 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 37 | 14 | 2 | 52 | 0 | 0 | 5 | 0 | 25 | 6 | 7 | 148 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 0 | 41 | 14 | 4 | 55 | 1 | 4 | 2 | 0 | 22 | 2 | 6 | 151 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 54 | 15 | 5 | 62 | 3 | 3 | 9 | 0 | 22 | 4 | 6 | 183 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 294 | 94 | 20 | 387 | 15 | 13 | 39 | 2 | 168 | 31 | 43 | 1,108 | 0 | 1 | 0 | 1 | 2 |
| | APPROACH % | 0% | 76% | 24% | 5% | 91% | 4% | 24% | 72% | 4% | 69% | 13% | 18% | | | | | | |
| | APP/DEPART | 388 | / | 351 | 423 | / | 557 | 54 | / | 154 | 243 | / | 46 | 0 | | | | | |
| | BEGIN PEAK HR | | 8:00 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 164 | 54 | 13 | 223 | 6 | 7 | 20 | 1 | 89 | 19 | 26 | 622 | | | | | |
| | APPROACH % | 0% | 75% | 25% | 5% | 92% | 2% | 25% | 71% | 4% | 66% | 14% | 19% | | | | | | |
| | PEAK HR FACTOR | | 0.790 | | | 0.864 | | | 0.583 | | | 0.882 | | 0.850 | | | | | |
| | APP/DEPART | 218 | / | 197 | 242 | / | 313 | 28 | / | 87 | 134 | / | 25 | 0 | | | | | |
| PM | 4:00 PM | 0 | 94 | 32 | 5 | 51 | 3 | 3 | 7 | 0 | 21 | 7 | 3 | 226 | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 0 | 50 | 32 | 4 | 58 | 2 | 5 | 8 | 0 | 24 | 2 | 4 | 189 | 0 | 0 | 0 | 0 | 0 |
| | 4:30 PM | 0 | 84 | 41 | 7 | 64 | 1 | 2 | 4 | 0 | 21 | 10 | 4 | 238 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 93 | 30 | 4 | 62 | 3 | 2 | 3 | 3 | 22 | 5 | 8 | 235 | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 91 | 36 | 7 | 59 | 4 | 4 | 7 | 0 | 19 | 6 | 7 | 240 | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 0 | 76 | 30 | 10 | 61 | 7 | 4 | 5 | 1 | 23 | 2 | 9 | 228 | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 0 | 85 | 38 | 6 | 56 | 4 | 5 | 7 | 1 | 24 | 5 | 5 | 236 | 0 | 0 | 0 | 0 | 0 |
| | 5:45 PM | 0 | 74 | 35 | 7 | 54 | 1 | 1 | 5 | 0 | 17 | 3 | 5 | 202 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 0 | 647 | 274 | 50 | 465 | 25 | 26 | 46 | 5 | 171 | 40 | 45 | 1,794 | 0 | 0 | 0 | 0 | 0 |
| | APPROACH % | 0% | 70% | 30% | 9% | 86% | 5% | 34% | 60% | 6% | 67% | 16% | 18% | | | | | | |
| | APP/DEPART | 921 | / | 718 | 540 | / | 641 | 77 | / | 370 | 256 | / | 65 | 0 | | | | | |
| | BEGIN PEAK HR | | 4:30 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 0 | 344 | 137 | 28 | 246 | 15 | 12 | 19 | 4 | 85 | 23 | 28 | 941 | | | | | |
| | APPROACH % | 0% | 72% | 28% | 10% | 85% | 5% | 34% | 54% | 11% | 63% | 17% | 21% | | | | | | |
| | PEAK HR FACTOR | | 0.947 | | | 0.926 | | | 0.795 | | | 0.971 | | 0.980 | | | | | |
| | APP/DEPART | 481 | / | 384 | 289 | / | 335 | 35 | / | 184 | 136 | / | 38 | 0 | | | | | |

**Chevy Chase**

NORTH SIDE

**Acacia** WEST SIDE EAST SIDE **Acacia**

SOUTH SIDE

**Chevy Chase**

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | | | | |
|---|---|---|---|---|
| Tue, Aug 25, 20 | LOCATION: | Glendale | PROJECT #: | SC |
| | NORTH & SOUTH: | Tyler | LOCATION #: | 4 |
| | EAST & WEST: | Acacia | CONTROL: | SIGNAL |

NOTES:

AM
PM
MD
OTHER
OTHER

N
W
E
S

☐ Add U-Turns to Left Turns

| | | NORTHBOUND Tyler | | | SOUTHBOUND Tyler | | | EASTBOUND Acacia | | | WESTBOUND Acacia | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL 0 | NT 1 | NR 1 | SL 1 | ST 2 | SR 0 | EL 0 | ET 1 | ER 0 | WL 0 | WT 1 | WR 0 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| AM | 7:00 AM | 0 | 2 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 1 |
| | 7:15 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 2 | 0 | 1 | 0 | 3 |
| | 7:30 AM | 2 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 10 | 1 | 0 | 0 | 0 | 1 |
| | 7:45 AM | 0 | 5 | 5 | 0 | 3 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 17 | 2 | 0 | 1 | 0 | 3 |
| | 8:00 AM | 0 | 9 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 21 | 6 | 0 | 1 | 0 | 7 |
| | 8:15 AM | 1 | 5 | 6 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1 | 0 | 1 | 0 | 2 |
| | 8:30 AM | 2 | 6 | 10 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 1 | 0 | 0 | 0 | 1 |
| | 8:45 AM | 1 | 6 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 17 | 2 | 0 | 2 | 0 | 4 |
| | VOLUMES | 6 | 35 | 41 | 0 | 19 | 0 | 0 | 0 | 1 | 15 | 0 | 0 | 139 | 16 | 0 | 6 | 0 | 22 |
| | APPROACH % | 6% | 36% | 42% | 0% | 100% | 0% | 0% | 0% | 14% | 100% | 0% | 0% | | | | | | |
| | APP/DEPART | 98 | / | 35 | 19 | / | 51 | 7 | / | 41 | 15 | / | 12 | 0 | | | | | |
| | BEGIN PEAK HR | | 8:00 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 4 | 26 | 27 | 0 | 12 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 91 | | | | | |
| | APPROACH % | 6% | 39% | 40% | 0% | 100% | 0% | 0% | 0% | 0% | 100% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.838 | | | 0.600 | | | 0.500 | | | 0.400 | | 0.813 | | | | | |
| | APP/DEPART | 67 | / | 26 | 12 | / | 30 | 4 | / | 27 | 8 | / | 8 | 0 | | | | | |
| PM | 4:00 PM | 0 | 3 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 15 | 3 | 0 | 1 | 0 | 4 |
| | 4:15 PM | 0 | 5 | 1 | 0 | 13 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 21 | 4 | 0 | 2 | 0 | 6 |
| | 4:30 PM | 0 | 3 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 0 | 3 | 2 | 0 | 7 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 17 | 3 | 0 | 3 | 0 | 6 |
| | 5:00 PM | 0 | 2 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 14 | 0 | 0 | 4 | 0 | 4 |
| | 5:15 PM | 1 | 3 | 2 | 0 | 4 | 0 | 0 | 0 | 2 | 12 | 0 | 0 | 24 | 1 | 0 | 1 | 0 | 2 |
| | 5:30 PM | 0 | 6 | 9 | 0 | 9 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 29 | 4 | 0 | 4 | 0 | 8 |
| | 5:45 PM | 1 | 6 | 7 | 0 | 9 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 29 | 1 | 0 | 0 | 0 | 1 |
| | VOLUMES | 2 | 31 | 38 | 0 | 57 | 0 | 0 | 0 | 3 | 38 | 0 | 0 | 200 | 16 | 0 | 15 | 0 | 31 |
| | APPROACH % | 2% | 36% | 44% | 0% | 100% | 0% | 0% | 0% | 17% | 100% | 0% | 0% | | | | | | |
| | APP/DEPART | 87 | / | 31 | 57 | / | 114 | 18 | / | 38 | 38 | / | 17 | 0 | | | | | |
| | BEGIN PEAK HR | | 5:00 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 2 | 17 | 23 | 0 | 27 | 0 | 0 | 0 | 3 | 24 | 0 | 0 | 111 | | | | | |
| | APPROACH % | 4% | 35% | 48% | 0% | 100% | 0% | 0% | 0% | 25% | 100% | 0% | 0% | | | | | | |
| | PEAK HR FACTOR | | 0.632 | | | 0.750 | | | 0.600 | | | 0.500 | | 0.750 | | | | | |
| | APP/DEPART | 48 | / | 17 | 27 | / | 60 | 12 | / | 23 | 24 | / | 11 | 0 | | | | | |

**Tyler**

NORTH SIDE

**Acacia** WEST SIDE

EAST SIDE **Acacia**

SOUTH SIDE

**Tyler**

# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

| DATE: | | | | |
|---|---|---|---|---|
| Tue, Aug 25, 20 | LOCATION: | Glendale | PROJECT #: | SC |
| | NORTH & SOUTH: | Chevy Chase | LOCATION #: | 2 |
| | EAST & WEST: | Garfield | CONTROL: | SIGNAL |

NOTES:

AM
PM
MD
OTHER
OTHER

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S ▼

☑ Add U-Turns to Left Turns

| | | NORTHBOUND Chevy Chase | | | SOUTHBOUND Chevy Chase | | | EASTBOUND Garfield | | | WESTBOUND Garfield | | | | U-TURNS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LANES: | NL 1 | NT 2 | NR 0 | SL 1 | ST 2 | SR 0 | EL 0 | ET 1 | ER 0 | WL 0 | WT 1 | WR 0 | TOTAL | NB 0 | SB 0 | EB 0 | WB 0 | TTL |
| AM | 7:00 AM | 0 | 24 | 1 | 2 | 34 | 3 | 3 | 2 | 0 | 1 | 0 | 2 | 72 | 0 | 0 | 0 | 0 | 0 |
| | 7:15 AM | 0 | 23 | 0 | 2 | 33 | 3 | 2 | 2 | 1 | 0 | 0 | 1 | 67 | 0 | 0 | 0 | 0 | 0 |
| | 7:30 AM | 2 | 38 | 1 | 3 | 49 | 6 | 6 | 3 | 1 | 1 | 0 | 0 | 110 | 0 | 1 | 0 | 0 | 1 |
| | 7:45 AM | 3 | 62 | 2 | 14 | 61 | 10 | 4 | 5 | 1 | 3 | 0 | 7 | 172 | 0 | 1 | 0 | 0 | 1 |
| | 8:00 AM | 2 | 44 | 2 | 6 | 60 | 2 | 7 | 2 | 0 | 2 | 1 | 2 | 130 | 0 | 0 | 0 | 0 | 0 |
| | 8:15 AM | 0 | 49 | 1 | 2 | 54 | 2 | 9 | 3 | 0 | 1 | 0 | 5 | 126 | 0 | 0 | 0 | 0 | 0 |
| | 8:30 AM | 3 | 52 | 2 | 3 | 59 | 11 | 5 | 5 | 1 | 3 | 2 | 4 | 150 | 0 | 0 | 0 | 0 | 0 |
| | 8:45 AM | 0 | 68 | 1 | 2 | 73 | 6 | 1 | 1 | 0 | 1 | 1 | 3 | 157 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 10 | 360 | 10 | 34 | 423 | 43 | 37 | 23 | 4 | 12 | 4 | 24 | 984 | 0 | 2 | 0 | 0 | 2 |
| | APPROACH % | 3% | 95% | 3% | 7% | 85% | 9% | 58% | 36% | 6% | 30% | 10% | 60% | | | | | | |
| | APP/DEPART | 380 | / | 423 | 500 | / | 439 | 64 | / | 65 | 40 | / | 57 | 0 | | | | | |
| | BEGIN PEAK HR | | 7:45 AM | | | | | | | | | | | | | | | | |
| | VOLUMES | 8 | 207 | 7 | 25 | 234 | 25 | 25 | 15 | 2 | 9 | 3 | 18 | 578 | | | | | |
| | APPROACH % | 4% | 93% | 3% | 9% | 82% | 9% | 60% | 36% | 5% | 30% | 10% | 60% | | | | | | |
| | PEAK HR FACTOR | | 0.828 | | | 0.835 | | | 0.875 | | | 0.750 | | 0.840 | | | | | |
| | APP/DEPART | 222 | / | 251 | 284 | / | 245 | 42 | / | 46 | 30 | / | 36 | 0 | | | | | |
| PM | 4:00 PM | 2 | 92 | 8 | 6 | 62 | 5 | 6 | 4 | 1 | 1 | 1 | 3 | 191 | 0 | 0 | 0 | 0 | 0 |
| | 4:15 PM | 1 | 61 | 3 | 3 | 74 | 7 | 11 | 4 | 1 | 1 | 0 | 4 | 170 | 0 | 0 | 0 | 0 | 0 |
| | 4:30 PM | 1 | 88 | 2 | 6 | 74 | 6 | 3 | 1 | 2 | 3 | 3 | 3 | 192 | 0 | 0 | 0 | 0 | 0 |
| | 4:45 PM | 4 | 95 | 3 | 1 | 72 | 4 | 5 | 3 | 1 | 0 | 2 | 5 | 195 | 0 | 0 | 0 | 0 | 0 |
| | 5:00 PM | 0 | 98 | 9 | 7 | 73 | 5 | 9 | 3 | 2 | 3 | 2 | 4 | 215 | 0 | 0 | 0 | 0 | 0 |
| | 5:15 PM | 2 | 86 | 4 | 7 | 75 | 7 | 7 | 6 | 2 | 4 | 2 | 10 | 212 | 0 | 0 | 0 | 0 | 0 |
| | 5:30 PM | 1 | 98 | 2 | 7 | 74 | 10 | 4 | 2 | 0 | 2 | 6 | 5 | 211 | 0 | 1 | 0 | 0 | 1 |
| | 5:45 PM | 1 | 80 | 5 | 7 | 67 | 8 | 5 | 2 | 0 | 1 | 7 | 0 | 183 | 0 | 0 | 0 | 0 | 0 |
| | VOLUMES | 12 | 698 | 36 | 44 | 571 | 52 | 50 | 25 | 9 | 15 | 23 | 34 | 1,569 | 0 | 1 | 0 | 0 | 1 |
| | APPROACH % | 2% | 94% | 5% | 7% | 86% | 8% | 60% | 30% | 11% | 21% | 32% | 47% | | | | | | |
| | APP/DEPART | 746 | / | 783 | 667 | / | 595 | 84 | / | 104 | 72 | / | 87 | 0 | | | | | |
| | BEGIN PEAK HR | | 4:45 PM | | | | | | | | | | | | | | | | |
| | VOLUMES | 7 | 377 | 18 | 22 | 294 | 26 | 25 | 14 | 5 | 9 | 12 | 24 | 833 | | | | | |
| | APPROACH % | 2% | 94% | 4% | 6% | 86% | 8% | 57% | 32% | 11% | 20% | 27% | 53% | | | | | | |
| | PEAK HR FACTOR | | 0.939 | | | 0.940 | | | 0.733 | | | 0.703 | | 0.969 | | | | | |
| | APP/DEPART | 402 | / | 427 | 342 | / | 308 | 44 | / | 53 | 45 | / | 45 | 0 | | | | | |

**Chevy Chase**

NORTH SIDE

**Garfield** WEST SIDE

EAST SIDE **Garfield**

SOUTH SIDE

**Chevy Chase**

National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** S Adams St & E Garfield Ave
**City:** Glendale
**Control:** 4-Way Stop

**Project ID:** 20-020164-001
**Date:** 8/18/2020

**Total**

| **NS/EW Streets:** | S Adams St | | | | S Adams St | | | | E Garfield Ave | | | | E Garfield Ave | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 2 | 2 | 0 | 0 | 1 | 2 | 3 | 0 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 18 |
| 7:15 AM | 2 | 10 | 1 | 0 | 2 | 8 | 4 | 0 | 3 | 5 | 0 | 0 | 3 | 3 | 4 | 0 | 45 |
| 7:30 AM | 2 | 8 | 1 | 0 | 2 | 16 | 0 | 0 | 0 | 8 | 2 | 0 | 0 | 3 | 3 | 0 | 45 |
| 7:45 AM | 0 | 5 | 1 | 0 | 0 | 12 | 2 | 0 | 3 | 7 | 4 | 0 | 2 | 2 | 2 | 0 | 40 |
| 8:00 AM | 0 | 6 | 1 | 0 | 1 | 17 | 3 | 0 | 3 | 5 | 3 | 0 | 3 | 1 | 3 | 0 | 46 |
| 8:15 AM | 1 | 8 | 0 | 0 | 0 | 7 | 2 | 0 | 0 | 4 | 2 | 0 | 2 | 2 | 5 | 0 | 33 |
| 8:30 AM | 1 | 17 | 0 | 0 | 0 | 21 | 2 | 0 | 3 | 12 | 1 | 0 | 0 | 3 | 2 | 0 | 62 |
| 8:45 AM | 0 | 10 | 0 | 0 | 0 | 16 | 5 | 0 | 5 | 7 | 4 | 0 | 2 | 2 | 1 | 0 | 52 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 8 | 66 | 4 | 0 | 6 | 99 | 21 | 0 | 20 | 51 | 18 | 0 | 12 | 16 | 20 | 0 | 341 |
| **APPROACH %'s :** | 10.26% | 84.62% | 5.13% | 0.00% | 4.76% | 78.57% | 16.67% | 0.00% | 22.47% | 57.30% | 20.22% | 0.00% | 25.00% | 33.33% | 41.67% | 0.00% | |
| **PEAK HR :** | 08:00 AM - 09:00 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 2 | 41 | 1 | 0 | 1 | 61 | 12 | 0 | 11 | 28 | 10 | 0 | 7 | 8 | 11 | 0 | 193 |
| **PEAK HR FACTOR :** | 0.500 | 0.603 | 0.250 | 0.000 | 0.250 | 0.726 | 0.600 | 0.000 | 0.550 | 0.583 | 0.625 | 0.000 | 0.583 | 0.667 | 0.550 | 0.000 | 0.778 |
| | 0.611 | | | | 0.804 | | | | 0.766 | | | | 0.722 | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 4 | 26 | 0 | 0 | 3 | 38 | 7 | 0 | 5 | 1 | 4 | 0 | 6 | 8 | 3 | 0 | 105 |
| 4:15 PM | 3 | 21 | 0 | 0 | 0 | 27 | 9 | 0 | 6 | 11 | 4 | 0 | 4 | 11 | 2 | 0 | 98 |
| 4:30 PM | 5 | 27 | 3 | 0 | 4 | 22 | 4 | 0 | 4 | 6 | 1 | 0 | 4 | 8 | 4 | 0 | 92 |
| 4:45 PM | 2 | 27 | 1 | 0 | 1 | 27 | 3 | 0 | 4 | 9 | 2 | 0 | 0 | 6 | 2 | 0 | 84 |
| 5:00 PM | 0 | 28 | 2 | 0 | 2 | 34 | 11 | 0 | 8 | 7 | 0 | 0 | 3 | 7 | 3 | 0 | 105 |
| 5:15 PM | 5 | 28 | 3 | 0 | 1 | 25 | 8 | 0 | 8 | 6 | 4 | 0 | 2 | 13 | 2 | 0 | 105 |
| 5:30 PM | 5 | 22 | 2 | 0 | 4 | 27 | 10 | 0 | 8 | 6 | 4 | 0 | 0 | 8 | 4 | 0 | 100 |
| 5:45 PM | 5 | 26 | 1 | 0 | 3 | 23 | 3 | 0 | 2 | 7 | 4 | 0 | 3 | 16 | 1 | 0 | 94 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 29 | 205 | 12 | 0 | 18 | 223 | 55 | 0 | 45 | 53 | 23 | 0 | 22 | 77 | 21 | 0 | 783 |
| **APPROACH %'s :** | 11.79% | 83.33% | 4.88% | 0.00% | 6.08% | 75.34% | 18.58% | 0.00% | 37.19% | 43.80% | 19.01% | 0.00% | 18.33% | 64.17% | 17.50% | 0.00% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 15 | 104 | 8 | 0 | 10 | 109 | 32 | 0 | 26 | 26 | 12 | 0 | 8 | 44 | 10 | 0 | 404 |
| **PEAK HR FACTOR :** | 0.750 | 0.929 | 0.667 | 0.000 | 0.625 | 0.801 | 0.727 | 0.000 | 0.813 | 0.929 | 0.750 | 0.000 | 0.667 | 0.688 | 0.625 | 0.000 | 0.962 |
| | 0.882 | | | | 0.803 | | | | 0.889 | | | | 0.775 | | | | |

National Data & Surveying Services

# Intersection Turning Movement Count

**Location:** S Adams St & E Acacia Ave
**City:** Glendale
**Control:** 4-Way Stop

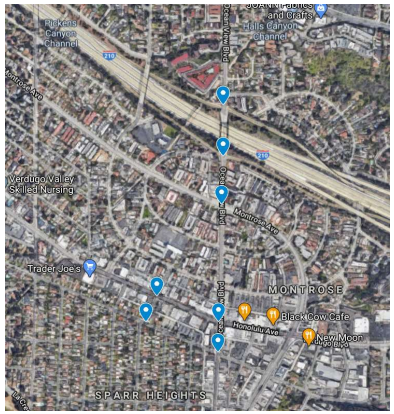
**Project ID:** 20-020164-002
**Date:** 8/18/2020

**Total**

| NS/EW Streets: | S Adams St | | | | S Adams St | | | | E Acacia Ave | | | | E Acacia Ave | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
| | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 7:00 AM | 3 | 2 | 1 | 1 | 0 | 4 | 0 | 0 | 1 | 6 | 3 | 0 | 0 | 0 | 1 | 0 | 22 |
| 7:15 AM | 0 | 7 | 0 | 0 | 2 | 8 | 1 | 0 | 3 | 6 | 0 | 0 | 0 | 1 | 1 | 0 | 29 |
| 7:30 AM | 5 | 7 | 0 | 0 | 1 | 17 | 1 | 0 | 5 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 42 |
| 7:45 AM | 7 | 4 | 1 | 0 | 0 | 11 | 7 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 35 |
| 8:00 AM | 1 | 5 | 0 | 0 | 2 | 18 | 4 | 0 | 3 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 48 |
| 8:15 AM | 3 | 5 | 1 | 0 | 2 | 7 | 2 | 0 | 2 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 35 |
| 8:30 AM | 1 | 14 | 0 | 0 | 1 | 15 | 5 | 0 | 3 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 50 |
| 8:45 AM | 5 | 9 | 2 | 0 | 1 | 14 | 7 | 0 | 2 | 7 | 1 | 0 | 0 | 0 | 1 | 1 | 50 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 25 | 53 | 5 | 1 | 9 | 94 | 27 | 0 | 19 | 55 | 17 | 0 | 0 | 1 | 4 | 1 | 311 |
| **APPROACH %'s :** | 29.76% | 63.10% | 5.95% | 1.19% | 6.92% | 72.31% | 20.77% | 0.00% | 20.88% | 60.44% | 18.68% | 0.00% | 0.00% | 16.67% | 66.67% | 16.67% | |
| **PEAK HR :** | 08:00 AM - 09:00 AM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 10 | 33 | 3 | 0 | 6 | 54 | 18 | 0 | 10 | 34 | 13 | 0 | 0 | 0 | 1 | 1 | 183 |
| **PEAK HR FACTOR :** | 0.500 | 0.589 | 0.375 | 0.000 | 0.750 | 0.750 | 0.643 | 0.000 | 0.833 | 0.773 | 0.542 | 0.000 | 0.000 | 0.000 | 0.250 | 0.250 | 0.915 |
| | 0.719 | | | | 0.813 | | | | 0.792 | | | | 0.250 | | | | |

| **PM** | NORTHBOUND | | | | SOUTHBOUND | | | | EASTBOUND | | | | WESTBOUND | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| 4:00 PM | 0 | 21 | 3 | 0 | 5 | 33 | 9 | 0 | 4 | 12 | 0 | 0 | 2 | 7 | 5 | 0 | 101 |
| 4:15 PM | 2 | 21 | 1 | 0 | 4 | 23 | 11 | 0 | 3 | 7 | 3 | 0 | 0 | 7 | 0 | 0 | 82 |
| 4:30 PM | 1 | 25 | 1 | 0 | 2 | 15 | 6 | 0 | 9 | 6 | 2 | 0 | 0 | 3 | 2 | 0 | 72 |
| 4:45 PM | 3 | 18 | 3 | 0 | 2 | 20 | 7 | 0 | 7 | 5 | 1 | 0 | 2 | 7 | 3 | 0 | 78 |
| 5:00 PM | 2 | 18 | 0 | 0 | 0 | 26 | 7 | 0 | 7 | 5 | 3 | 0 | 1 | 11 | 5 | 0 | 85 |
| 5:15 PM | 4 | 23 | 4 | 1 | 0 | 27 | 3 | 0 | 6 | 6 | 5 | 0 | 1 | 6 | 4 | 0 | 90 |
| 5:30 PM | 2 | 24 | 1 | 0 | 3 | 24 | 4 | 0 | 3 | 12 | 8 | 0 | 0 | 9 | 4 | 0 | 94 |
| 5:45 PM | 5 | 22 | 2 | 0 | 2 | 24 | 2 | 0 | 4 | 6 | 2 | 1 | 0 | 8 | 4 | 0 | 82 |
| | NL | NT | NR | NU | SL | ST | SR | SU | EL | ET | ER | EU | WL | WT | WR | WU | TOTAL |
| **TOTAL VOLUMES :** | 19 | 172 | 15 | 1 | 18 | 192 | 49 | 0 | 43 | 59 | 24 | 1 | 6 | 58 | 27 | 0 | 684 |
| **APPROACH %'s :** | 9.18% | 83.09% | 7.25% | 0.48% | 6.95% | 74.13% | 18.92% | 0.00% | 33.86% | 46.46% | 18.90% | 0.79% | 6.59% | 63.74% | 29.67% | 0.00% | |
| **PEAK HR :** | 05:00 PM - 06:00 PM | | | | | | | | | | | | | | | | TOTAL |
| **PEAK HR VOL :** | 13 | 87 | 7 | 1 | 5 | 101 | 16 | 0 | 20 | 29 | 18 | 1 | 2 | 34 | 17 | 0 | 351 |
| **PEAK HR FACTOR :** | 0.650 | 0.906 | 0.438 | 0.250 | 0.417 | 0.935 | 0.571 | 0.000 | 0.714 | 0.604 | 0.563 | 0.250 | 0.500 | 0.773 | 0.850 | 0.000 | 0.934 |
| | 0.844 | | | | 0.924 | | | | 0.739 | | | | 0.779 | | | | |

# PDC VOLUMES




## August 2020 Raw Counts

| | | | | | | |
|---|---|---|---|---|---|---|
| | PM | 147 | 298 | 0 | | |
| | AM | 131 | 296 | 0 | | |
| 0 | 0 | | | | 147 | 230 |
| 0 | 0 | | NB Ramps | | 0 | 1 |
| 0 | 0 | | | | 191 | 181 |
| | | 138 | 257 | 0 | | |
| | | 270 | 347 | 0 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | PM | 0 | 344 | 143 | | |
| | AM | 0 | 326 | 159 | | |
| 129 | 114 | | | | 0 | 0 |
| 1 | 0 | | SB Ramps | | 0 | 0 |
| 218 | 246 | | | | 0 | 0 |
| | | 0 | 275 | 149 | | |
| | | 0 | 485 | 204 | | |

Ocean View / Montrose

| | | | | | | |
|---|---|---|---|---|---|---|
| | PM | 75 | 296 | 172 | | |
| | AM | 52 | 296 | 240 | | |
| 74 | 74 | | | | 179 | 301 |
| 96 | 118 | | | | 76 | 181 |
| 37 | 31 | | | | 9 | 8 |
| | | 9 | 171 | 3 | | |
| | | 34 | 299 | 9 | | |
| | | 336 | | 183 | | |
| | | 341 | | 342 | | |

AM Factor 1.92
PM Factor 1.53

Ocean View / Honolulu (11/2019)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 475 | | 339 | |
| | | | | | | | | 424 | | 262 | |
| | | | | | PM | 91 | 319 | 65 | | | |
| | | | | | AM | 49 | 313 | 62 | | | |
| | PM | 11 | 7 | 8 | | | | | | | |
| | AM | 9 | 1 | 3 | | | | | | | |
| 2 | 1 | | | 3 | 10 | 118 | 244 | 402 | 182 | 61 | 41 | | | 17 | 32 |
| 241 | 143 | | | 109 | 215 | | | | | 186 | 248 | | | 114 | 247 |
| 5 | 10 | | | 6 | 19 | 150 | 256 | 306 | 379 | 59 | 90 | | | 12 | 25 |
| | | 10 | 6 | 4 | | | | | | | | 19 | 204 | 19 | |
| | | 16 | 6 | 7 | | | | | | | | 64 | 246 | 22 | |
| | | | | | | | | | | | | 415 | | 242 | |
| | | | | | | | | | | | | 403 | | 332 | |
| | | | | | | | | 246 | | 195 | |
| | | | | | | | | 238 | | 130 | |
| | PM | 11 | | 2 | | | | | | | | PM | 29 | 177 | 40 | | |
| | AM | 3 | | 1 | | | | | | | | AM | 26 | 166 | 46 | | |
| 14 | 2 | | | 2 | 5 | | | | | | | 32 | 30 | | | 14 | 36 |
| 83 | 45 | | | 86 | 64 | | | | | | | 79 | 49 | Broadview | | 36 | 78 |
| | | | | | | | | | | | | 18 | 16 | | | 4 | 4 |
| | | | | | | | | | | | | | 14 | 86 | 14 | | |
| | | | | | | | | | | | | | 17 | 127 | 11 | | |

## Adjusted 2020 Counts

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| INT 1 | PM | 226 | 457 | 0 | | | |
| | AM | 251 | 567 | 0 | | | |
| | 0 | 0 | | | 282 | 353 | |
| | 0 | 0 | NB Ramps | | 0 | 2 | |
| | 0 | 0 | | | 366 | 278 | |
| | | 265 | 493 | 0 | | | |
| | | 415 | 533 | 0 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| INT 2 | PM | 0 | 528 | 220 | | | |
| | AM | 0 | 625 | 305 | | | |
| | 198 | 219 | | | 0 | 0 | |
| | 2 | 0 | SB Ramps | | 0 | 0 | |
| | 335 | 472 | | | 0 | 0 | |
| | | 0 | 527 | 286 | | | |
| | | 0 | 744 | 313 | | | |

Ocean View / Montrose

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| INT 3 | PM | 116 | 454 | 264 | | | | | | | |
| | AM | 100 | 567 | 460 | | | | | | | |
| | 114 | 142 | | | 343 | 462 | | | | | |
| | 148 | 226 | | | 146 | 278 | | | | | |
| | 57 | 60 | | | 18 | 13 | | | | | |
| | | 18 | 328 | 6 | | | | | | | |
| | | 53 | 459 | 14 | | | | | | | |
| | | 645 | | 352 | | | | | | | |
| | | 524 | | 526 | | | | | | | |
| | | | | | | | | 475 | | 339 | |
| | | | | | | | | 424 | | 262 | |
| INT 4 | Ocean View / Honolulu (11/2019) | | | | | | | | | | |
| | | | | | | | | 91 | 319 | 65 | |
| | | | | | | | | 49 | 313 | 62 | |
| INT 6 | PM | 17 | 11 | 13 | | | | | | | |
| | AM | 18 | 2 | 6 | | | | | | | |
| 4 | 2 | | | 6 | 16 | 227 | 376 | 402 | 182 | 61 | 41 | | | 17 | 32 |
| 370 | 274 | | | 209 | 330 | | | | | 186 | 248 | | | 114 | 247 |
| 8 | 20 | | | 12 | 30 | 288 | 394 | 306 | 379 | 59 | 90 | | | 12 | 25 |
| | | 20 | 12 | 8 | | | | | | | | 19 | 204 | 19 | |
| | | 25 | 10 | 11 | | | | | | | | 64 | 246 | 22 | |
| | | | | | | | | | | | | 415 | | 242 | |
| | | | | | | | | | | | | 403 | | 332 | |
| | | | | | | | | | | | | 379 | | 301 | |
| | | | | | | | | | | | | 457 | | 250 | |
| INT7 | PM | 17 | | 4 | | | | | | | | INT 5 | PM | 45 | 272 | 62 | | |
| | AM | 6 | | 2 | | | | | | | | | AM | 50 | 318 | 89 | | |
| 4 | 4 | | | 4 | 8 | | | | | | | 50 | 58 | | | 27 | 56 |
| 370 | 87 | | | 165 | 99 | | | | | | | 122 | 94 | Broadview | | 69 | 120 |
| | | | | | | | | | | | | 28 | 31 | | | 8 | 7 |
| | | | | | | | | | | | | | 27 | 165 | 27 | | |
| | | | | | | | | | | | | | 27 | 195 | 17 | | |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Ocean View Boulevard
E/W: I-210 Westbound Ramps
Weather: Clear

File Name : 01_CLA_OV_210W AM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Ocean View Boulevard Southbound | | | | I-210 Westbound Off Ramp Westbound | | | | Ocean View Boulevard Northbound | | | | I-210 Westbound On Ramp Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM | 0 | 44 | 18 | 62 | 20 | 0 | 20 | 40 | 26 | 30 | 0 | 56 | 0 | 0 | 0 | 0 | 158 |
| 07:15 AM | 0 | 55 | 21 | 76 | 21 | 0 | 35 | 56 | 41 | 38 | 0 | 79 | 0 | 0 | 0 | 0 | 211 |
| 07:30 AM | 0 | 76 | 31 | 107 | 30 | 1 | 22 | 53 | 36 | 40 | 0 | 76 | 0 | 0 | 0 | 0 | 236 |
| 07:45 AM | 0 | 70 | 26 | 96 | 28 | 0 | 40 | 68 | 42 | 62 | 0 | 104 | 0 | 0 | 0 | 0 | 268 |
| Total | 0 | 245 | 96 | 341 | 99 | 1 | 117 | 217 | 145 | 170 | 0 | 315 | 0 | 0 | 0 | 0 | 873 |
| 08:00 AM | 0 | 72 | 39 | 111 | 37 | 0 | 37 | 74 | 28 | 55 | 0 | 83 | 0 | 0 | 0 | 0 | 268 |
| 08:15 AM | 0 | 72 | 34 | 106 | 46 | 0 | 32 | 78 | 36 | 55 | 0 | 91 | 0 | 0 | 0 | 0 | 275 |
| 08:30 AM | 0 | 78 | 33 | 111 | 49 | 0 | 36 | 85 | 35 | 65 | 0 | 100 | 0 | 0 | 0 | 0 | 296 |
| 08:45 AM | 0 | 74 | 25 | 99 | 59 | 0 | 42 | 101 | 39 | 82 | 0 | 121 | 0 | 0 | 0 | 0 | 321 |
| Total | 0 | 296 | 131 | 427 | 191 | 0 | 147 | 338 | 138 | 257 | 0 | 395 | 0 | 0 | 0 | 0 | 1160 |
| Grand Total | 0 | 541 | 227 | 768 | 290 | 1 | 264 | 555 | 283 | 427 | 0 | 710 | 0 | 0 | 0 | 0 | 2033 |
| Apprch % | 0 | 70.4 | 29.6 | | 52.3 | 0.2 | 47.6 | | 39.9 | 60.1 | 0 | | 0 | 0 | 0 | | |
| Total % | 0 | 26.6 | 11.2 | 37.8 | 14.3 | 0 | 13 | 27.3 | 13.9 | 21 | 0 | 34.9 | 0 | 0 | 0 | 0 | |
| Passenger Vehicles | 0 | 524 | 220 | 744 | 282 | 1 | 247 | 530 | 276 | 409 | 0 | 685 | 0 | 0 | 0 | 0 | 1959 |
| % Passenger Vehicles | 0 | 96.9 | 96.9 | 96.9 | 97.2 | 100 | 93.6 | 95.5 | 97.5 | 95.8 | 0 | 96.5 | 0 | 0 | 0 | 0 | 96.4 |
| Buses | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 6 |
| % Buses | 0 | 0.4 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0.9 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0.3 |
| Trucks | 0 | 15 | 7 | 22 | 8 | 0 | 17 | 25 | 7 | 14 | 0 | 21 | 0 | 0 | 0 | 0 | 68 |
| % Trucks | 0 | 2.8 | 3.1 | 2.9 | 2.8 | 0 | 6.4 | 4.5 | 2.5 | 3.3 | 0 | 3 | 0 | 0 | 0 | 0 | 3.3 |

| | Ocean View Boulevard Southbound | | | | I-210 Westbound Off Ramp Westbound | | | | Ocean View Boulevard Northbound | | | | I-210 Westbound On Ramp Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 AM | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 72 | **39** | **111** | 37 | 0 | 37 | 74 | 28 | 55 | 0 | 83 | 0 | 0 | 0 | 0 | 268 |
| 08:15 AM | 0 | 72 | 34 | 106 | 46 | 0 | 32 | 78 | 36 | 55 | 0 | 91 | 0 | 0 | 0 | 0 | 275 |
| 08:30 AM | 0 | **78** | 33 | 111 | 49 | 0 | 36 | 85 | 35 | 65 | 0 | 100 | 0 | 0 | 0 | 0 | 296 |
| 08:45 AM | 0 | 74 | 25 | 99 | **59** | 0 | **42** | **101** | **39** | **82** | 0 | **121** | 0 | 0 | 0 | 0 | **321** |
| Total Volume | 0 | 296 | 131 | 427 | 191 | 0 | 147 | 338 | 138 | 257 | 0 | 395 | 0 | 0 | 0 | 0 | 1160 |
| % App. Total | 0 | 69.3 | 30.7 | | 56.5 | 0 | 43.5 | | 34.9 | 65.1 | 0 | | 0 | 0 | 0 | | |
| PHF | .000 | .949 | .840 | .962 | .809 | .000 | .875 | .837 | .885 | .784 | .000 | .816 | .000 | .000 | .000 | .000 | .903 |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Ocean View Boulevard
E/W: I-210 Westbound Ramps
Weather: Clear

File Name : 01_CLA_OV_210W PM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Ocean View Boulevard Southbound | | | | I-210 Westbound Off Ramp Westbound | | | | Ocean View Boulevard Northbound | | | | I-210 Westbound On Ramp Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 04:00 PM | 0 | 82 | 44 | 126 | 44 | 0 | 50 | 94 | 68 | 65 | 0 | 133 | 0 | 0 | 0 | 0 | 353 |
| 04:15 PM | 0 | 80 | 34 | 114 | 40 | 0 | 62 | 102 | 52 | 73 | 0 | 125 | 0 | 0 | 0 | 0 | 341 |
| 04:30 PM | 0 | 95 | 39 | 134 | 48 | 1 | 54 | 103 | 61 | 85 | 0 | 146 | 0 | 0 | 0 | 0 | 383 |
| 04:45 PM | 0 | 52 | 40 | 92 | 45 | 0 | 59 | 104 | 67 | 91 | 0 | 158 | 0 | 0 | 0 | 0 | 354 |
| Total | 0 | 309 | 157 | 466 | 177 | 1 | 225 | 403 | 248 | 314 | 0 | 562 | 0 | 0 | 0 | 0 | 1431 |
| 05:00 PM | 0 | 87 | 41 | 128 | 39 | 0 | 53 | 92 | 73 | 91 | 0 | 164 | 0 | 0 | 0 | 0 | 384 |
| 05:15 PM | 0 | 64 | 27 | 91 | 49 | 0 | 64 | 113 | 69 | 80 | 0 | 149 | 0 | 0 | 0 | 0 | 353 |
| 05:30 PM | 0 | 84 | 33 | 117 | 41 | 1 | 49 | 91 | 75 | 85 | 0 | 160 | 0 | 0 | 0 | 0 | 368 |
| 05:45 PM | 0 | 88 | 24 | 112 | 34 | 0 | 43 | 77 | 44 | 81 | 0 | 125 | 0 | 0 | 0 | 0 | 314 |
| Total | 0 | 323 | 125 | 448 | 163 | 1 | 209 | 373 | 261 | 337 | 0 | 598 | 0 | 0 | 0 | 0 | 1419 |
| Grand Total | 0 | 632 | 282 | 914 | 340 | 2 | 434 | 776 | 509 | 651 | 0 | 1160 | 0 | 0 | 0 | 0 | 2850 |
| Apprch % | 0 | 69.1 | 30.9 | | 43.8 | 0.3 | 55.9 | | 43.9 | 56.1 | 0 | | 0 | 0 | 0 | | |
| Total % | 0 | 22.2 | 9.9 | 32.1 | 11.9 | 0.1 | 15.2 | 27.2 | 17.9 | 22.8 | 0 | 40.7 | 0 | 0 | 0 | 0 | |
| Passenger Vehicles | 0 | 626 | 281 | 907 | 339 | 2 | 430 | 771 | 502 | 643 | 0 | 1145 | 0 | 0 | 0 | 0 | 2823 |
| % Passenger Vehicles | 0 | 99.1 | 99.6 | 99.2 | 99.7 | 100 | 99.1 | 99.4 | 98.6 | 98.8 | 0 | 98.7 | 0 | 0 | 0 | 0 | 99.1 |
| Buses | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 7 |
| % Buses | 0 | 0.3 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0.4 | 0.5 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0.2 |
| Trucks | 0 | 4 | 1 | 5 | 1 | 0 | 4 | 5 | 5 | 5 | 0 | 10 | 0 | 0 | 0 | 0 | 20 |
| % Trucks | 0 | 0.6 | 0.4 | 0.5 | 0.3 | 0 | 0.9 | 0.6 | 1 | 0.8 | 0 | 0.9 | 0 | 0 | 0 | 0 | 0.7 |

| | Ocean View Boulevard Southbound | | | | I-210 Westbound Off Ramp Westbound | | | | Ocean View Boulevard Northbound | | | | I-210 Westbound On Ramp Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | 0 | **95** | 39 | **134** | 48 | **1** | 54 | 103 | 61 | 85 | 0 | 146 | 0 | 0 | 0 | 0 | 383 |
| 04:45 PM | 0 | 52 | 40 | 92 | 45 | 0 | 59 | 104 | 67 | **91** | 0 | 158 | 0 | 0 | 0 | 0 | 354 |
| 05:00 PM | 0 | 87 | **41** | 128 | 39 | 0 | 53 | 92 | **73** | 91 | 0 | **164** | 0 | 0 | 0 | 0 | **384** |
| 05:15 PM | 0 | 64 | 27 | 91 | **49** | 0 | **64** | **113** | 69 | 80 | 0 | 149 | 0 | 0 | 0 | 0 | 353 |
| Total Volume | 0 | 298 | 147 | 445 | 181 | 1 | 230 | 412 | 270 | 347 | 0 | 617 | 0 | 0 | 0 | 0 | 1474 |
| % App. Total | 0 | 67 | 33 | | 43.9 | 0.2 | 55.8 | | 43.8 | 56.2 | 0 | | 0 | 0 | 0 | | |
| PHF | .000 | .784 | .896 | .830 | .923 | .250 | .898 | .912 | .925 | .953 | .000 | .941 | .000 | .000 | .000 | .000 | .960 |

Counts Unlimited
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(951) 268-6268

County of Los Angeles
N/S: Ocean View Boulevard
E/W: I-210 Eastbound Ramps
Weather: Clear

File Name : 02_CLA_OV_210E AM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Ocean View Boulevard Southbound | | | | I-210 Eastbound On Ramp Westbound | | | | Ocean View Boulevard Northbound | | | | I-210 Eastbound Off Ramp Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM | 26 | 38 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 38 | 25 | 63 | 17 | 0 | 42 | 59 | 186 |
| 07:15 AM | 35 | 43 | 0 | 78 | 0 | 0 | 0 | 0 | 0 | 49 | 35 | 84 | 28 | 0 | 46 | 74 | 236 |
| 07:30 AM | 44 | 62 | 0 | 106 | 0 | 0 | 0 | 0 | 0 | 56 | 35 | 91 | 23 | 0 | 49 | 72 | 269 |
| 07:45 AM | 34 | 56 | 0 | 90 | 0 | 0 | 0 | 0 | 0 | 71 | 35 | 106 | 25 | 0 | 58 | 83 | 279 |
| Total | 139 | 199 | 0 | 338 | 0 | 0 | 0 | 0 | 0 | 214 | 130 | 344 | 93 | 0 | 195 | 288 | 970 |
| 08:00 AM | 42 | 73 | 0 | 115 | 0 | 0 | 0 | 0 | 0 | 59 | 40 | 99 | 28 | 0 | 60 | 88 | 302 |
| 08:15 AM | 37 | 75 | 0 | 112 | 0 | 0 | 0 | 0 | 0 | 70 | 33 | 103 | 18 | 0 | 65 | 83 | 298 |
| 08:30 AM | 37 | 87 | 0 | 124 | 0 | 0 | 0 | 0 | 0 | 70 | 33 | 103 | 30 | 0 | 60 | 90 | 317 |
| 08:45 AM | 43 | 91 | 0 | 134 | 0 | 0 | 0 | 0 | 0 | 76 | 43 | 119 | 38 | 0 | 61 | 99 | 352 |
| Total | 159 | 326 | 0 | 485 | 0 | 0 | 0 | 0 | 0 | 275 | 149 | 424 | 114 | 0 | 246 | 360 | 1269 |
| Grand Total | 298 | 525 | 0 | 823 | 0 | 0 | 0 | 0 | 0 | 489 | 279 | 768 | 207 | 0 | 441 | 648 | 2239 |
| Apprch % | 36.2 | 63.8 | 0 | | 0 | 0 | 0 | | 0 | 63.7 | 36.3 | | 31.9 | 0 | 68.1 | | |
| Total % | 13.3 | 23.4 | 0 | 36.8 | 0 | 0 | 0 | 0 | 0 | 21.8 | 12.5 | 34.3 | 9.2 | 0 | 19.7 | 28.9 | |
| Passenger Vehicles | 289 | 510 | 0 | 799 | 0 | 0 | 0 | 0 | 0 | 474 | 276 | 750 | 198 | 0 | 425 | 623 | 2172 |
| % Passenger Vehicles | 97 | 97.1 | 0 | 97.1 | 0 | 0 | 0 | 0 | 0 | 96.9 | 98.9 | 97.7 | 95.7 | 0 | 96.4 | 96.1 | 97 |
| Buses | 1 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 2 | 2 | 9 |
| % Buses | 0.3 | 0.6 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0 | 0.4 | 0 | 0 | 0.5 | 0.3 | 0.4 |
| Trucks | 8 | 12 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 12 | 3 | 15 | 9 | 0 | 14 | 23 | 58 |
| % Trucks | 2.7 | 2.3 | 0 | 2.4 | 0 | 0 | 0 | 0 | 0 | 2.5 | 1.1 | 2 | 4.3 | 0 | 3.2 | 3.5 | 2.6 |

| | Ocean View Boulevard Southbound | | | | I-210 Eastbound On Ramp Westbound | | | | Ocean View Boulevard Northbound | | | | I-210 Eastbound Off Ramp Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 AM | | | | | | | | | | | | | | | | | |
| 08:00 AM | 42 | 73 | 0 | 115 | 0 | 0 | 0 | 0 | 0 | 59 | 40 | 99 | 28 | 0 | 60 | 88 | 302 |
| 08:15 AM | 37 | 75 | 0 | 112 | 0 | 0 | 0 | 0 | 0 | 70 | 33 | 103 | 18 | 0 | **65** | 83 | 298 |
| 08:30 AM | 37 | 87 | 0 | 124 | 0 | 0 | 0 | 0 | 0 | 70 | 33 | 103 | 30 | 0 | 60 | 90 | 317 |
| 08:45 AM | **43** | **91** | 0 | **134** | 0 | 0 | 0 | 0 | 0 | **76** | **43** | **119** | **38** | 0 | 61 | **99** | **352** |
| Total Volume | 159 | 326 | 0 | 485 | 0 | 0 | 0 | 0 | 0 | 275 | 149 | 424 | 114 | 0 | 246 | 360 | 1269 |
| % App. Total | 32.8 | 67.2 | 0 | | 0 | 0 | 0 | | 0 | 64.9 | 35.1 | | 31.7 | 0 | 68.3 | | |
| PHF | .924 | .896 | .000 | .905 | .000 | .000 | .000 | .000 | .000 | .905 | .866 | .891 | .750 | .000 | .946 | .909 | .901 |

Counts Unlimited
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(951) 268-6268

County of Los Angeles
N/S: Ocean View Boulevard
E/W: I-210 Eastbound Ramps
Weather: Clear

File Name : 02_CLA_OV_210E PM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Ocean View Boulevard Southbound | | | | I-210 Eastbound On Ramp Westbound | | | | Ocean View Boulevard Northbound | | | | I-210 Eastbound Off Ramp Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 04:00 PM | 35 | 91 | 0 | 126 | 0 | 0 | 0 | 0 | 0 | 121 | 47 | 168 | 19 | 0 | 49 | 68 | 362 |
| 04:15 PM | 33 | 74 | 0 | 107 | 0 | 0 | 0 | 0 | 0 | 91 | 46 | 137 | 30 | 0 | 47 | 77 | 321 |
| 04:30 PM | 44 | 99 | 0 | 143 | 0 | 0 | 0 | 0 | 0 | 125 | 64 | 189 | 27 | 0 | 49 | 76 | 408 |
| 04:45 PM | 29 | 74 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 117 | 46 | 163 | 37 | 0 | 56 | 93 | 359 |
| Total | 141 | 338 | 0 | 479 | 0 | 0 | 0 | 0 | 0 | 454 | 203 | 657 | 113 | 0 | 201 | 314 | 1450 |
| 05:00 PM | 40 | 91 | 0 | 131 | 0 | 0 | 0 | 0 | 0 | 138 | 44 | 182 | 36 | 0 | 53 | 89 | 402 |
| 05:15 PM | 30 | 80 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 105 | 50 | 155 | 29 | 1 | 60 | 90 | 355 |
| 05:30 PM | 31 | 85 | 0 | 116 | 0 | 0 | 0 | 0 | 0 | 125 | 45 | 170 | 23 | 0 | 42 | 65 | 351 |
| 05:45 PM | 36 | 90 | 0 | 126 | 0 | 0 | 0 | 0 | 0 | 81 | 46 | 127 | 41 | 0 | 50 | 91 | 344 |
| Total | 137 | 346 | 0 | 483 | 0 | 0 | 0 | 0 | 0 | 449 | 185 | 634 | 129 | 1 | 205 | 335 | 1452 |
| Grand Total | 278 | 684 | 0 | 962 | 0 | 0 | 0 | 0 | 0 | 903 | 388 | 1291 | 242 | 1 | 406 | 649 | 2902 |
| Apprch % | 28.9 | 71.1 | 0 | | 0 | 0 | 0 | | 0 | 69.9 | 30.1 | | 37.3 | 0.2 | 62.6 | | |
| Total % | 9.6 | 23.6 | 0 | 33.1 | 0 | 0 | 0 | 0 | 0 | 31.1 | 13.4 | 44.5 | 8.3 | 0 | 14 | 22.4 | |
| Passenger Vehicles | 275 | 681 | 0 | 956 | 0 | 0 | 0 | 0 | 0 | 890 | 386 | 1276 | 241 | 1 | 405 | 647 | 2879 |
| % Passenger Vehicles | 98.9 | 99.6 | 0 | 99.4 | 0 | 0 | 0 | 0 | 0 | 98.6 | 99.5 | 98.8 | 99.6 | 100 | 99.8 | 99.7 | 99.2 |
| Buses | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 1 | 0 | 0 | 1 | 8 |
| % Buses | 0 | 0.3 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0 | 0.4 | 0.4 | 0 | 0 | 0.2 | 0.3 |
| Trucks | 3 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 8 | 2 | 10 | 0 | 0 | 1 | 1 | 15 |
| % Trucks | 1.1 | 0.1 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0.9 | 0.5 | 0.8 | 0 | 0 | 0.2 | 0.2 | 0.5 |

| | Ocean View Boulevard Southbound | | | | I-210 Eastbound On Ramp Westbound | | | | Ocean View Boulevard Northbound | | | | I-210 Eastbound Off Ramp Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | **44** | **99** | 0 | **143** | 0 | 0 | 0 | 0 | 0 | 125 | **64** | **189** | 27 | 0 | 49 | 76 | **408** |
| 04:45 PM | 29 | 74 | 0 | 103 | 0 | 0 | 0 | 0 | 0 | 117 | 46 | 163 | **37** | 0 | 56 | **93** | 359 |
| 05:00 PM | 40 | 91 | 0 | 131 | 0 | 0 | 0 | 0 | 0 | **138** | 44 | 182 | 36 | 0 | 53 | 89 | 402 |
| 05:15 PM | 30 | 80 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 105 | 50 | 155 | 29 | **1** | **60** | 90 | 355 |
| Total Volume | 143 | 344 | 0 | 487 | 0 | 0 | 0 | 0 | 0 | 485 | 204 | 689 | 129 | 1 | 218 | 348 | 1524 |
| % App. Total | 29.4 | 70.6 | 0 | | 0 | 0 | 0 | | 0 | 70.4 | 29.6 | | 37.1 | 0.3 | 62.6 | | |
| PHF | .813 | .869 | .000 | .851 | .000 | .000 | .000 | .000 | .000 | .879 | .797 | .911 | .872 | .250 | .908 | .935 | .934 |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Ocean View Boulevard
E/W: Montrose Avenue
Weather: Clear

File Name : 03_CLA_OV_MO AM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Ocean View Boulevard Southbound | | | | Montrose Avenue Westbound | | | | Ocean View Boulevard Northbound | | | | Montrose Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM | 35 | 39 | 9 | 83 | 0 | 3 | 25 | 28 | 2 | 23 | 1 | 26 | 12 | 14 | 3 | 29 | 166 |
| 07:15 AM | 37 | 36 | 10 | 83 | 3 | 18 | 36 | 57 | 3 | 34 | 1 | 38 | 15 | 21 | 4 | 40 | 218 |
| 07:30 AM | 52 | 51 | 5 | 108 | 0 | 18 | 45 | 63 | 2 | 33 | 1 | 36 | 12 | 29 | 4 | 45 | 252 |
| 07:45 AM | 47 | 64 | 9 | 120 | 1 | 14 | 50 | 65 | 1 | 37 | 1 | 39 | 18 | 37 | 7 | 62 | 286 |
| Total | 171 | 190 | 33 | 394 | 4 | 53 | 156 | 213 | 8 | 127 | 4 | 139 | 57 | 101 | 18 | 176 | 922 |
| 08:00 AM | 53 | 68 | 9 | 130 | 2 | 18 | 43 | 63 | 1 | 35 | 1 | 37 | 20 | 26 | 9 | 55 | 285 |
| 08:15 AM | 64 | 73 | 16 | 153 | 2 | 18 | 43 | 63 | 3 | 48 | 0 | 51 | 17 | 35 | 4 | 56 | 323 |
| 08:30 AM | 59 | 76 | 14 | 149 | 3 | 17 | 40 | 60 | 2 | 43 | 0 | 45 | 15 | 23 | 8 | 46 | 300 |
| 08:45 AM | 64 | 79 | 13 | 156 | 2 | 23 | 53 | 78 | 3 | 45 | 2 | 50 | 22 | 34 | 10 | 66 | 350 |
| Total | 240 | 296 | 52 | 588 | 9 | 76 | 179 | 264 | 9 | 171 | 3 | 183 | 74 | 118 | 31 | 223 | 1258 |
| Grand Total | 411 | 486 | 85 | 982 | 13 | 129 | 335 | 477 | 17 | 298 | 7 | 322 | 131 | 219 | 49 | 399 | 2180 |
| Apprch % | 41.9 | 49.5 | 8.7 | | 2.7 | 27 | 70.2 | | 5.3 | 92.5 | 2.2 | | 32.8 | 54.9 | 12.3 | | |
| Total % | 18.9 | 22.3 | 3.9 | 45 | 0.6 | 5.9 | 15.4 | 21.9 | 0.8 | 13.7 | 0.3 | 14.8 | 6 | 10 | 2.2 | 18.3 | |
| Passenger Vehicles | 394 | 475 | 82 | 951 | 13 | 122 | 322 | 457 | 15 | 294 | 7 | 316 | 129 | 216 | 49 | 394 | 2118 |
| % Passenger Vehicles | 95.9 | 97.7 | 96.5 | 96.8 | 100 | 94.6 | 96.1 | 95.8 | 88.2 | 98.7 | 100 | 98.1 | 98.5 | 98.6 | 100 | 98.7 | 97.2 |
| Buses | 2 | 2 | 0 | 4 | 0 | 3 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 12 |
| % Buses | 0.5 | 0.4 | 0 | 0.4 | 0 | 2.3 | 0.9 | 1.3 | 0 | 0 | 0 | 0 | 0 | 0.9 | 0 | 0.5 | 0.6 |
| Trucks | 15 | 9 | 3 | 27 | 0 | 4 | 10 | 14 | 2 | 4 | 0 | 6 | 2 | 1 | 0 | 3 | 50 |
| % Trucks | 3.6 | 1.9 | 3.5 | 2.7 | 0 | 3.1 | 3 | 2.9 | 11.8 | 1.3 | 0 | 1.9 | 1.5 | 0.5 | 0 | 0.8 | 2.3 |

| | Ocean View Boulevard Southbound | | | | Montrose Avenue Westbound | | | | Ocean View Boulevard Northbound | | | | Montrose Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 AM | | | | | | | | | | | | | | | | | |
| 08:00 AM | 53 | 68 | 9 | 130 | 2 | 18 | 43 | 63 | 1 | 35 | 1 | 37 | 20 | 26 | 9 | 55 | 285 |
| 08:15 AM | **64** | 73 | **16** | 153 | 2 | 18 | 43 | 63 | **3** | **48** | 0 | **51** | 17 | **35** | 4 | 56 | 323 |
| 08:30 AM | 59 | 76 | 14 | 149 | **3** | 17 | 40 | 60 | 2 | 43 | 0 | 45 | 15 | 23 | 8 | 46 | 300 |
| 08:45 AM | 64 | **79** | 13 | **156** | 2 | **23** | **53** | **78** | 3 | 45 | **2** | 50 | **22** | 34 | **10** | **66** | **350** |
| Total Volume | 240 | 296 | 52 | 588 | 9 | 76 | 179 | 264 | 9 | 171 | 3 | 183 | 74 | 118 | 31 | 223 | 1258 |
| % App. Total | 40.8 | 50.3 | 8.8 | | 3.4 | 28.8 | 67.8 | | 4.9 | 93.4 | 1.6 | | 33.2 | 52.9 | 13.9 | | |
| PHF | .938 | .937 | .813 | .942 | .750 | .826 | .844 | .846 | .750 | .891 | .375 | .897 | .841 | .843 | .775 | .845 | .899 |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Los Angeles
N/S: Ocean View Boulevard
E/W: Montrose Avenue
Weather: Clear

File Name : 03_CLA_OV_MO PM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Ocean View Boulevard Southbound | | | | Montrose Avenue Westbound | | | | Ocean View Boulevard Northbound | | | | Montrose Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 04:00 PM | 45 | 78 | 13 | 136 | 4 | 31 | 76 | 111 | 13 | 70 | 3 | 86 | 17 | 26 | 11 | 54 | 387 |
| 04:15 PM | 43 | 69 | 23 | 135 | 1 | 40 | 77 | 118 | 13 | 51 | 1 | 65 | 10 | 28 | 8 | 46 | 364 |
| 04:30 PM | 46 | 74 | 25 | 145 | 2 | 32 | 90 | 124 | 4 | 79 | 3 | 86 | 20 | 22 | 6 | 48 | 403 |
| 04:45 PM | 49 | 60 | 18 | 127 | 2 | 37 | 73 | 112 | 7 | 64 | 2 | 73 | 21 | 26 | 8 | 55 | 367 |
| Total | 183 | 281 | 79 | 543 | 9 | 140 | 316 | 465 | 37 | 264 | 9 | 310 | 68 | 102 | 33 | 203 | 1521 |
| 05:00 PM | 39 | 77 | 23 | 139 | 1 | 56 | 88 | 145 | 12 | 66 | 2 | 80 | 13 | 25 | 13 | 51 | 415 |
| 05:15 PM | 45 | 87 | 10 | 142 | 3 | 37 | 64 | 104 | 5 | 87 | 0 | 92 | 17 | 18 | 7 | 42 | 380 |
| 05:30 PM | 39 | 72 | 24 | 135 | 2 | 51 | 76 | 129 | 10 | 82 | 5 | 97 | 23 | 27 | 9 | 59 | 420 |
| 05:45 PM | 54 | 61 | 18 | 133 | 3 | 45 | 59 | 107 | 5 | 48 | 2 | 55 | 12 | 23 | 11 | 46 | 341 |
| Total | 177 | 297 | 75 | 549 | 9 | 189 | 287 | 485 | 32 | 283 | 9 | 324 | 65 | 93 | 40 | 198 | 1556 |
| Grand Total | 360 | 578 | 154 | 1092 | 18 | 329 | 603 | 950 | 69 | 547 | 18 | 634 | 133 | 195 | 73 | 401 | 3077 |
| Apprch % | 33 | 52.9 | 14.1 | | 1.9 | 34.6 | 63.5 | | 10.9 | 86.3 | 2.8 | | 33.2 | 48.6 | 18.2 | | |
| Total % | 11.7 | 18.8 | 5 | 35.5 | 0.6 | 10.7 | 19.6 | 30.9 | 2.2 | 17.8 | 0.6 | 20.6 | 4.3 | 6.3 | 2.4 | 13 | |
| Passenger Vehicles | 359 | 575 | 154 | 1088 | 18 | 324 | 589 | 931 | 69 | 546 | 18 | 633 | 132 | 191 | 72 | 395 | 3047 |
| % Passenger Vehicles | 99.7 | 99.5 | 100 | 99.6 | 100 | 98.5 | 97.7 | 98 | 100 | 99.8 | 100 | 99.8 | 99.2 | 97.9 | 98.6 | 98.5 | 99 |
| Buses | 0 | 2 | 0 | 2 | 0 | 3 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 14 |
| % Buses | 0 | 0.3 | 0 | 0.2 | 0 | 0.9 | 0.8 | 0.8 | 0 | 0 | 0 | 0 | 0 | 2.1 | 0 | 1 | 0.5 |
| Trucks | 1 | 1 | 0 | 2 | 0 | 2 | 9 | 11 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 16 |
| % Trucks | 0.3 | 0.2 | 0 | 0.2 | 0 | 0.6 | 1.5 | 1.2 | 0 | 0.2 | 0 | 0.2 | 0.8 | 0 | 1.4 | 0.5 | 0.5 |

| | Ocean View Boulevard Southbound | | | | Montrose Avenue Westbound | | | | Ocean View Boulevard Northbound | | | | Montrose Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | |
| 04:45 PM | **49** | 60 | 18 | 127 | 2 | 37 | 73 | 112 | 7 | 64 | 2 | 73 | 21 | 26 | 8 | 55 | 367 |
| 05:00 PM | 39 | 77 | 23 | 139 | 1 | **56** | **88** | **145** | **12** | 66 | 2 | 80 | 13 | 25 | **13** | 51 | 415 |
| 05:15 PM | 45 | **87** | 10 | **142** | **3** | 37 | 64 | 104 | 5 | **87** | 0 | 92 | 17 | 18 | 7 | 42 | 380 |
| 05:30 PM | 39 | 72 | **24** | 135 | 2 | 51 | 76 | 129 | 10 | 82 | **5** | **97** | **23** | **27** | 9 | **59** | **420** |
| Total Volume | 172 | 296 | 75 | 543 | 8 | 181 | 301 | 490 | 34 | 299 | 9 | 342 | 74 | 96 | 37 | 207 | 1582 |
| % App. Total | 31.7 | 54.5 | 13.8 | | 1.6 | 36.9 | 61.4 | | 9.9 | 87.4 | 2.6 | | 35.7 | 46.4 | 17.9 | | |
| PHF | .878 | .851 | .781 | .956 | .667 | .808 | .855 | .845 | .708 | .859 | .450 | .881 | .804 | .889 | .712 | .877 | .942 |

Counts Unlimited
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Corona, CA 92878
(951) 268-6268

City of Glendale
N/S: Ocean View Boulevard
E/W: Honolulu Avenue
Weather: Clear

File Name : 04_GDE_Ocean View_Honolulu AM
Site Code : 99920298
Start Date : 11/12/2019
Page No : 1

Groups Printed- Total Volume

| | Ocean View Boulevard Southbound | | | | Honolulu Avenue Westbound | | | | Ocean View Boulevard Northbound | | | | Honolulu Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM | 10 | 41 | 4 | 55 | 0 | 13 | 2 | 15 | 5 | 33 | 4 | 42 | 3 | 45 | 4 | 52 | 164 |
| 07:15 AM | 8 | 44 | 8 | 60 | 2 | 9 | 4 | 15 | 5 | 36 | 4 | 45 | 6 | 39 | 11 | 56 | 176 |
| 07:30 AM | 9 | 48 | 4 | 61 | 1 | 15 | 4 | 20 | 2 | 65 | 2 | 69 | 4 | 35 | 12 | 51 | 201 |
| 07:45 AM | 16 | 85 | 8 | 109 | 1 | 17 | 5 | 23 | 6 | 75 | 3 | 84 | 9 | 77 | 21 | 107 | 323 |
| Total | 43 | 218 | 24 | 285 | 4 | 54 | 15 | 73 | 18 | 209 | 13 | 240 | 22 | 196 | 48 | 266 | 864 |
| | | | | | | | | | | | | | | | | | |
| 08:00 AM | 11 | 73 | 16 | 100 | 5 | 30 | 3 | 38 | 4 | 62 | 9 | 75 | 9 | 65 | 28 | 102 | 315 |
| 08:15 AM | 15 | 78 | 14 | 107 | 2 | 40 | 3 | 45 | 4 | 32 | 5 | 41 | 14 | 51 | 24 | 89 | 282 |
| 08:30 AM | 20 | 77 | 11 | 108 | 4 | 27 | 6 | 37 | 5 | 35 | 2 | 42 | 9 | 55 | 17 | 81 | 268 |
| 08:45 AM | 9 | 68 | 14 | 91 | 4 | 28 | 8 | 40 | 8 | 30 | 5 | 43 | 7 | 55 | 18 | 80 | 254 |
| Total | 55 | 296 | 55 | 406 | 15 | 125 | 20 | 160 | 21 | 159 | 21 | 201 | 39 | 226 | 87 | 352 | 1119 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 98 | 514 | 79 | 691 | 19 | 179 | 35 | 233 | 39 | 368 | 34 | 441 | 61 | 422 | 135 | 618 | 1983 |
| Apprch % | 14.2 | 74.4 | 11.4 | | 8.2 | 76.8 | 15 | | 8.8 | 83.4 | 7.7 | | 9.9 | 68.3 | 21.8 | | |
| Total % | 4.9 | 25.9 | 4 | 34.8 | 1 | 9 | 1.8 | 11.7 | 2 | 18.6 | 1.7 | 22.2 | 3.1 | 21.3 | 6.8 | 31.2 | |

| | Ocean View Boulevard Southbound | | | | Honolulu Avenue Westbound | | | | Ocean View Boulevard Northbound | | | | Honolulu Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | | | | | | | | |
| 07:45 AM | 16 | **85** | 8 | **109** | 1 | 17 | 5 | 23 | **6** | **75** | 3 | **84** | 9 | **77** | 21 | **107** | **323** |
| 08:00 AM | 11 | 73 | **16** | 100 | **5** | 30 | 3 | 38 | 4 | 62 | **9** | 75 | 9 | 65 | **28** | 102 | 315 |
| 08:15 AM | 15 | 78 | 14 | 107 | 2 | **40** | 3 | **45** | 4 | 32 | 5 | 41 | **14** | 51 | 24 | 89 | 282 |
| 08:30 AM | **20** | 77 | 11 | 108 | 4 | 27 | **6** | 37 | 5 | 35 | 2 | 42 | 9 | 55 | 17 | 81 | 268 |
| Total Volume | 62 | 313 | 49 | 424 | 12 | 114 | 17 | 143 | 19 | 204 | 19 | 242 | 41 | 248 | 90 | 379 | 1188 |
| % App. Total | 14.6 | 73.8 | 11.6 | | 8.4 | 79.7 | 11.9 | | 7.9 | 84.3 | 7.9 | | 10.8 | 65.4 | 23.7 | | |
| PHF | .775 | .921 | .766 | .972 | .600 | .713 | .708 | .794 | .792 | .680 | .528 | .720 | .732 | .805 | .804 | .886 | .920 |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Glendale
N/S: Ocean View Boulevard
E/W: Honolulu Avenue
Weather: Clear

File Name : 04_GDE_Ocean View_Honolulu PM
Site Code : 99920298
Start Date : 11/12/2019
Page No : 1

Groups Printed- Total Volume

| | Ocean View Boulevard Southbound | | | | Honolulu Avenue Westbound | | | | Ocean View Boulevard Northbound | | | | Honolulu Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 04:00 PM | 22 | 75 | 34 | 131 | 8 | 41 | 8 | 57 | 21 | 64 | 5 | 90 | 14 | 47 | 17 | 78 | 356 |
| 04:15 PM | 14 | 72 | 44 | 130 | 5 | 52 | 7 | 64 | 7 | 57 | 4 | 68 | 14 | 30 | 18 | 62 | 324 |
| 04:30 PM | 15 | 81 | 26 | 122 | 6 | 55 | 5 | 66 | 11 | 61 | 2 | 74 | 11 | 52 | 14 | 77 | 339 |
| 04:45 PM | 9 | 78 | 27 | 114 | 5 | 60 | 6 | 71 | 20 | 60 | 6 | 86 | 9 | 45 | 15 | 69 | 340 |
| Total | 60 | 306 | 131 | 497 | 24 | 208 | 26 | 258 | 59 | 242 | 17 | 318 | 48 | 174 | 64 | 286 | 1359 |
| | | | | | | | | | | | | | | | | | |
| 05:00 PM | 18 | 84 | 19 | 121 | 5 | 75 | 10 | 90 | 16 | 66 | 7 | 89 | 20 | 47 | 13 | 80 | 380 |
| 05:15 PM | 23 | 76 | 19 | 118 | 9 | 57 | 11 | 77 | 17 | 59 | 7 | 83 | 21 | 42 | 17 | 80 | 358 |
| 05:30 PM | 17 | 72 | 22 | 111 | 4 | 53 | 7 | 64 | 15 | 52 | 7 | 74 | 10 | 49 | 15 | 74 | 323 |
| 05:45 PM | 23 | 74 | 29 | 126 | 3 | 68 | 9 | 80 | 11 | 47 | 9 | 67 | 17 | 42 | 12 | 71 | 344 |
| Total | 81 | 306 | 89 | 476 | 21 | 253 | 37 | 311 | 59 | 224 | 30 | 313 | 68 | 180 | 57 | 305 | 1405 |
| | | | | | | | | | | | | | | | | | |
| Grand Total | 141 | 612 | 220 | 973 | 45 | 461 | 63 | 569 | 118 | 466 | 47 | 631 | 116 | 354 | 121 | 591 | 2764 |
| Apprch % | 14.5 | 62.9 | 22.6 | | 7.9 | 81 | 11.1 | | 18.7 | 73.9 | 7.4 | | 19.6 | 59.9 | 20.5 | | |
| Total % | 5.1 | 22.1 | 8 | 35.2 | 1.6 | 16.7 | 2.3 | 20.6 | 4.3 | 16.9 | 1.7 | 22.8 | 4.2 | 12.8 | 4.4 | 21.4 | |

| | Ocean View Boulevard Southbound | | | | Honolulu Avenue Westbound | | | | Ocean View Boulevard Northbound | | | | Honolulu Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | 15 | 81 | 26 | **122** | 6 | 55 | 5 | 66 | 11 | 61 | 2 | 74 | 11 | **52** | 14 | 77 | 339 |
| 04:45 PM | 9 | 78 | **27** | 114 | 5 | 60 | 6 | 71 | **20** | 60 | 6 | 86 | 9 | 45 | 15 | 69 | 340 |
| 05:00 PM | 18 | **84** | 19 | 121 | 5 | **75** | 10 | **90** | 16 | **66** | **7** | **89** | 20 | 47 | 13 | **80** | **380** |
| 05:15 PM | **23** | 76 | 19 | 118 | **9** | 57 | **11** | 77 | 17 | 59 | 7 | 83 | **21** | 42 | **17** | 80 | 358 |
| Total Volume | 65 | 319 | 91 | 475 | 25 | 247 | 32 | 304 | 64 | 246 | 22 | 332 | 61 | 186 | 59 | 306 | 1417 |
| % App. Total | 13.7 | 67.2 | 19.2 | | 8.2 | 81.2 | 10.5 | | 19.3 | 74.1 | 6.6 | | 19.9 | 60.8 | 19.3 | | |
| PHF | .707 | .949 | .843 | .973 | .694 | .823 | .727 | .844 | .800 | .932 | .786 | .933 | .726 | .894 | .868 | .956 | .932 |

Counts Unlimited
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(951) 268-6268

City of Glendale
N/S: Ocean View Boulevard
E/W: Broadview Drive
Weather: Clear

File Name : 05_GDE_OV_BR AM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Ocean View Boulevard Southbound | | | | Broadview Drive Westbound | | | | Ocean View Boulevard Northbound | | | | Broadview Drive Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM | 5 | 22 | 2 | 29 | 0 | 7 | 1 | 8 | 1 | 14 | 1 | 16 | 3 | 14 | 3 | 20 | 73 |
| 07:15 AM | 13 | 22 | 3 | 38 | 1 | 4 | 3 | 8 | 1 | 18 | 1 | 20 | 4 | 8 | 1 | 13 | 79 |
| 07:30 AM | 14 | 23 | 3 | 40 | 1 | 11 | 3 | 15 | 1 | 23 | 4 | 28 | 6 | 12 | 3 | 21 | 104 |
| 07:45 AM | 14 | 22 | 6 | 42 | 3 | 4 | 2 | 9 | 3 | 20 | 3 | 26 | 6 | 20 | 3 | 29 | 106 |
| Total | 46 | 89 | 14 | 149 | 5 | 26 | 9 | 40 | 6 | 75 | 9 | 90 | 19 | 54 | 10 | 83 | 362 |
| 08:00 AM | 10 | 31 | 4 | 45 | 1 | 6 | 1 | 8 | 4 | 21 | 2 | 27 | 4 | 15 | 4 | 23 | 103 |
| 08:15 AM | 11 | 35 | 7 | 53 | 0 | 12 | 2 | 14 | 2 | 25 | 3 | 30 | 10 | 14 | 4 | 28 | 125 |
| 08:30 AM | 13 | 57 | 6 | 76 | 2 | 9 | 6 | 17 | 5 | 21 | 7 | 33 | 9 | 12 | 3 | 24 | 150 |
| 08:45 AM | 12 | 43 | 9 | 64 | 1 | 9 | 5 | 15 | 3 | 19 | 2 | 24 | 7 | 8 | 5 | 20 | 123 |
| Total | 46 | 166 | 26 | 238 | 4 | 36 | 14 | 54 | 14 | 86 | 14 | 114 | 30 | 49 | 16 | 95 | 501 |
| Grand Total | 92 | 255 | 40 | 387 | 9 | 62 | 23 | 94 | 20 | 161 | 23 | 204 | 49 | 103 | 26 | 178 | 863 |
| Apprch % | 23.8 | 65.9 | 10.3 | | 9.6 | 66 | 24.5 | | 9.8 | 78.9 | 11.3 | | 27.5 | 57.9 | 14.6 | | |
| Total % | 10.7 | 29.5 | 4.6 | 44.8 | 1 | 7.2 | 2.7 | 10.9 | 2.3 | 18.7 | 2.7 | 23.6 | 5.7 | 11.9 | 3 | 20.6 | |
| Passenger Vehicles | 88 | 248 | 39 | 375 | 9 | 60 | 21 | 90 | 20 | 159 | 22 | 201 | 49 | 102 | 22 | 173 | 839 |
| % Passenger Vehicles | 95.7 | 97.3 | 97.5 | 96.9 | 100 | 96.8 | 91.3 | 95.7 | 100 | 98.8 | 95.7 | 98.5 | 100 | 99 | 84.6 | 97.2 | 97.2 |
| Buses | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 4 |
| % Buses | 3.3 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0.5 |
| Trucks | 1 | 7 | 1 | 9 | 0 | 2 | 2 | 4 | 0 | 1 | 1 | 2 | 0 | 1 | 4 | 5 | 20 |
| % Trucks | 1.1 | 2.7 | 2.5 | 2.3 | 0 | 3.2 | 8.7 | 4.3 | 0 | 0.6 | 4.3 | 1 | 0 | 1 | 15.4 | 2.8 | 2.3 |

| | Ocean View Boulevard Southbound | | | | Broadview Drive Westbound | | | | Ocean View Boulevard Northbound | | | | Broadview Drive Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 AM | | | | | | | | | | | | | | | | | |
| 08:00 AM | 10 | 31 | 4 | 45 | 1 | 6 | 1 | 8 | 4 | 21 | 2 | 27 | 4 | **15** | 4 | 23 | 103 |
| 08:15 AM | 11 | 35 | 7 | 53 | 0 | **12** | 2 | 14 | 2 | **25** | 3 | 30 | **10** | 14 | 4 | **28** | 125 |
| 08:30 AM | **13** | **57** | 6 | **76** | **2** | 9 | **6** | **17** | **5** | 21 | **7** | **33** | 9 | 12 | 3 | 24 | **150** |
| 08:45 AM | 12 | 43 | **9** | 64 | 1 | 9 | 5 | 15 | 3 | 19 | 2 | 24 | 7 | 8 | **5** | 20 | 123 |
| Total Volume | 46 | 166 | 26 | 238 | 4 | 36 | 14 | 54 | 14 | 86 | 14 | 114 | 30 | 49 | 16 | 95 | 501 |
| % App. Total | 19.3 | 69.7 | 10.9 | | 7.4 | 66.7 | 25.9 | | 12.3 | 75.4 | 12.3 | | 31.6 | 51.6 | 16.8 | | |
| PHF | .885 | .728 | .722 | .783 | .500 | .750 | .583 | .794 | .700 | .860 | .500 | .864 | .750 | .817 | .800 | .848 | .835 |

Counts Unlimited
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City of Glendale
N/S: Ocean View Boulevard
E/W: Broadview Drive
Weather: Clear

File Name : 05_GDE_OV_BR PM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Ocean View Boulevard Southbound | | | | Broadview Drive Westbound | | | | Ocean View Boulevard Northbound | | | | Broadview Drive Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 04:00 PM | 17 | 53 | 8 | 78 | 2 | 14 | 9 | 25 | 1 | 31 | 3 | 35 | 9 | 17 | 10 | 36 | 174 |
| 04:15 PM | 5 | 33 | 7 | 45 | 3 | 12 | 8 | 23 | 6 | 24 | 1 | 31 | 5 | 26 | 3 | 34 | 133 |
| 04:30 PM | 12 | 43 | 7 | 62 | 2 | 18 | 8 | 28 | 5 | 31 | 3 | 39 | 13 | 24 | 8 | 45 | 174 |
| 04:45 PM | 6 | 45 | 7 | 58 | 1 | 13 | 12 | 26 | 3 | 27 | 2 | 32 | 7 | 17 | 2 | 26 | 142 |
| Total | 40 | 174 | 29 | 243 | 8 | 57 | 37 | 102 | 15 | 113 | 9 | 137 | 34 | 84 | 23 | 141 | 623 |
| 05:00 PM | 11 | 48 | 5 | 64 | 1 | 22 | 9 | 32 | 3 | 29 | 1 | 33 | 7 | 19 | 4 | 30 | 159 |
| 05:15 PM | 11 | 41 | 10 | 62 | 0 | 25 | 7 | 32 | 6 | 40 | 5 | 51 | 5 | 19 | 4 | 28 | 173 |
| 05:30 PM | 11 | 46 | 4 | 61 | 1 | 24 | 15 | 40 | 3 | 18 | 4 | 25 | 4 | 14 | 4 | 22 | 148 |
| 05:45 PM | 8 | 37 | 1 | 46 | 2 | 19 | 4 | 25 | 4 | 25 | 3 | 32 | 9 | 14 | 6 | 29 | 132 |
| Total | 41 | 172 | 20 | 233 | 4 | 90 | 35 | 129 | 16 | 112 | 13 | 141 | 25 | 66 | 18 | 109 | 612 |
| Grand Total | 81 | 346 | 49 | 476 | 12 | 147 | 72 | 231 | 31 | 225 | 22 | 278 | 59 | 150 | 41 | 250 | 1235 |
| Apprch % | 17 | 72.7 | 10.3 | | 5.2 | 63.6 | 31.2 | | 11.2 | 80.9 | 7.9 | | 23.6 | 60 | 16.4 | | |
| Total % | 6.6 | 28 | 4 | 38.5 | 1 | 11.9 | 5.8 | 18.7 | 2.5 | 18.2 | 1.8 | 22.5 | 4.8 | 12.1 | 3.3 | 20.2 | |
| Passenger Vehicles | 79 | 346 | 49 | 474 | 12 | 147 | 70 | 229 | 31 | 222 | 22 | 275 | 58 | 150 | 40 | 248 | 1226 |
| % Passenger Vehicles | 97.5 | 100 | 100 | 99.6 | 100 | 100 | 97.2 | 99.1 | 100 | 98.7 | 100 | 98.9 | 98.3 | 100 | 97.6 | 99.2 | 99.3 |
| Buses | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| % Buses | 2.5 | 0 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 3 | 0 | 3 | 1 | 0 | 1 | 2 | 7 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 2.8 | 0.9 | 0 | 1.3 | 0 | 1.1 | 1.7 | 0 | 2.4 | 0.8 | 0.6 |

| | Ocean View Boulevard Southbound | | | | Broadview Drive Westbound | | | | Ocean View Boulevard Northbound | | | | Broadview Drive Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | **12** | 43 | 7 | 62 | **2** | 18 | 8 | 28 | 5 | 31 | 3 | 39 | **13** | **24** | **8** | **45** | **174** |
| 04:45 PM | 6 | 45 | 7 | 58 | 1 | 13 | **12** | 26 | 3 | 27 | 2 | 32 | 7 | 17 | 2 | 26 | 142 |
| 05:00 PM | 11 | **48** | 5 | **64** | 1 | 22 | 9 | **32** | 3 | 29 | 1 | 33 | 7 | 19 | 4 | 30 | 159 |
| 05:15 PM | 11 | 41 | **10** | 62 | 0 | **25** | 7 | 32 | **6** | **40** | **5** | **51** | 5 | 19 | 4 | 28 | 173 |
| Total Volume | 40 | 177 | 29 | 246 | 4 | 78 | 36 | 118 | 17 | 127 | 11 | 155 | 32 | 79 | 18 | 129 | 648 |
| % App. Total | 16.3 | 72 | 11.8 | | 3.4 | 66.1 | 30.5 | | 11 | 81.9 | 7.1 | | 24.8 | 61.2 | 14 | | |
| PHF | .833 | .922 | .725 | .961 | .500 | .780 | .750 | .922 | .708 | .794 | .550 | .760 | .615 | .823 | .563 | .717 | .931 |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Glendale
N/S: Wickham Way
E/W: Honolulu Avenue
Weather: Clear

File Name : 06_GDE_WI_HO AM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Wickham Way Southbound | | | | Honolulu Avenue Westbound | | | | Wickham Way Northbound | | | | Honolulu Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM | 1 | 0 | 0 | 1 | 0 | 11 | 2 | 13 | 0 | 0 | 0 | 0 | 0 | 22 | 1 | 23 | 37 |
| 07:15 AM | 1 | 1 | 1 | 3 | 3 | 14 | 1 | 18 | 2 | 0 | 3 | 5 | 0 | 21 | 1 | 22 | 48 |
| 07:30 AM | 1 | 1 | 1 | 3 | 0 | 15 | 0 | 15 | 0 | 2 | 0 | 2 | 0 | 29 | 1 | 30 | 50 |
| 07:45 AM | 1 | 0 | 3 | 4 | 1 | 14 | 0 | 15 | 1 | 1 | 0 | 2 | 0 | 26 | 2 | 28 | 49 |
| Total | 4 | 2 | 5 | 11 | 4 | 54 | 3 | 61 | 3 | 3 | 3 | 9 | 0 | 98 | 5 | 103 | 184 |
| 08:00 AM | 0 | 0 | 1 | 1 | 1 | 20 | 1 | 22 | 4 | 1 | 1 | 6 | 1 | 31 | 3 | 35 | 64 |
| 08:15 AM | 2 | 1 | 1 | 4 | 1 | 26 | 0 | 27 | 0 | 0 | 1 | 1 | 0 | 33 | 2 | 35 | 67 |
| 08:30 AM | 1 | 0 | 1 | 2 | 1 | 25 | 1 | 27 | 3 | 1 | 2 | 6 | 0 | 43 | 2 | 45 | 80 |
| 08:45 AM | 0 | 0 | 6 | 6 | 3 | 38 | 1 | 42 | 3 | 4 | 0 | 7 | 0 | 36 | 3 | 39 | 94 |
| Total | 3 | 1 | 9 | 13 | 6 | 109 | 3 | 118 | 10 | 6 | 4 | 20 | 1 | 143 | 10 | 154 | 305 |
| Grand Total | 7 | 3 | 14 | 24 | 10 | 163 | 6 | 179 | 13 | 9 | 7 | 29 | 1 | 241 | 15 | 257 | 489 |
| Apprch % | 29.2 | 12.5 | 58.3 | | 5.6 | 91.1 | 3.4 | | 44.8 | 31 | 24.1 | | 0.4 | 93.8 | 5.8 | | |
| Total % | 1.4 | 0.6 | 2.9 | 4.9 | 2 | 33.3 | 1.2 | 36.6 | 2.7 | 1.8 | 1.4 | 5.9 | 0.2 | 49.3 | 3.1 | 52.6 | |
| Passenger Vehicles | 5 | 3 | 14 | 22 | 7 | 150 | 5 | 162 | 12 | 9 | 5 | 26 | 1 | 232 | 15 | 248 | 458 |
| % Passenger Vehicles | 71.4 | 100 | 100 | 91.7 | 70 | 92 | 83.3 | 90.5 | 92.3 | 100 | 71.4 | 89.7 | 100 | 96.3 | 100 | 96.5 | 93.7 |
| Buses | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 9 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 3.1 | 0 | 2.8 | 0 | 0 | 0 | 0 | 0 | 1.7 | 0 | 1.6 | 1.8 |
| Trucks | 2 | 0 | 0 | 2 | 3 | 8 | 1 | 12 | 1 | 0 | 2 | 3 | 0 | 5 | 0 | 5 | 22 |
| % Trucks | 28.6 | 0 | 0 | 8.3 | 30 | 4.9 | 16.7 | 6.7 | 7.7 | 0 | 28.6 | 10.3 | 0 | 2.1 | 0 | 1.9 | 4.5 |

| | Wickham Way Southbound | | | | Honolulu Avenue Westbound | | | | Wickham Way Northbound | | | | Honolulu Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 AM | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 1 | 1 | 1 | 20 | **1** | 22 | **4** | 1 | 1 | 6 | **1** | 31 | **3** | 35 | 64 |
| 08:15 AM | **2** | **1** | 1 | 4 | 1 | 26 | 0 | 27 | 0 | 0 | 1 | 1 | 0 | 33 | 2 | 35 | 67 |
| 08:30 AM | 1 | 0 | 1 | 2 | 1 | 25 | 1 | 27 | 3 | 1 | **2** | 6 | 0 | **43** | 2 | **45** | 80 |
| 08:45 AM | 0 | 0 | **6** | **6** | **3** | **38** | 1 | **42** | 3 | **4** | 0 | **7** | 0 | 36 | 3 | 39 | **94** |
| Total Volume | 3 | 1 | 9 | 13 | 6 | 109 | 3 | 118 | 10 | 6 | 4 | 20 | 1 | 143 | 10 | 154 | 305 |
| % App. Total | 23.1 | 7.7 | 69.2 | | 5.1 | 92.4 | 2.5 | | 50 | 30 | 20 | | 0.6 | 92.9 | 6.5 | | |
| PHF | .375 | .250 | .375 | .542 | .500 | .717 | .750 | .702 | .625 | .375 | .500 | .714 | .250 | .831 | .833 | .856 | .811 |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Glendale
N/S: Wickham Way
E/W: Honolulu Avenue
Weather: Clear

File Name : 06_GDE_WI_HO PM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Wickham Way Southbound | | | | Honolulu Avenue Westbound | | | | Wickham Way Northbound | | | | Honolulu Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| 04:00 PM | 3 | 1 | 1 | 5 | 4 | 48 | 2 | 54 | 2 | 2 | 2 | 6 | 1 | 57 | 2 | 60 | 125 |
| 04:15 PM | 0 | 2 | 3 | 5 | 2 | 48 | 5 | 55 | 2 | 0 | 2 | 4 | 4 | 45 | 0 | 49 | 113 |
| 04:30 PM | 3 | 4 | 2 | 9 | 6 | 48 | 2 | 56 | 11 | 2 | 4 | 17 | 0 | 65 | 3 | 68 | 150 |
| 04:45 PM | 1 | 2 | 4 | 7 | 5 | 47 | 4 | 56 | 1 | 2 | 0 | 3 | 1 | 57 | 1 | 59 | 125 |
| Total | 7 | 9 | 10 | 26 | 17 | 191 | 13 | 221 | 16 | 6 | 8 | 30 | 6 | 224 | 6 | 236 | 513 |
| 05:00 PM | 1 | 0 | 4 | 5 | 4 | 60 | 1 | 65 | 2 | 1 | 1 | 4 | 1 | 63 | 1 | 65 | 139 |
| 05:15 PM | 3 | 1 | 1 | 5 | 4 | 60 | 3 | 67 | 2 | 1 | 2 | 5 | 0 | 56 | 0 | 56 | 133 |
| 05:30 PM | 2 | 0 | 2 | 4 | 3 | 47 | 0 | 50 | 5 | 0 | 3 | 8 | 3 | 48 | 1 | 52 | 114 |
| 05:45 PM | 1 | 0 | 4 | 5 | 1 | 50 | 4 | 55 | 6 | 3 | 5 | 14 | 4 | 48 | 0 | 52 | 126 |
| Total | 7 | 1 | 11 | 19 | 12 | 217 | 8 | 237 | 15 | 5 | 11 | 31 | 8 | 215 | 2 | 225 | 512 |
| Grand Total | 14 | 10 | 21 | 45 | 29 | 408 | 21 | 458 | 31 | 11 | 19 | 61 | 14 | 439 | 8 | 461 | 1025 |
| Apprch % | 31.1 | 22.2 | 46.7 | | 6.3 | 89.1 | 4.6 | | 50.8 | 18 | 31.1 | | 3 | 95.2 | 1.7 | | |
| Total % | 1.4 | 1 | 2 | 4.4 | 2.8 | 39.8 | 2 | 44.7 | 3 | 1.1 | 1.9 | 6 | 1.4 | 42.8 | 0.8 | 45 | |
| Passenger Vehicles | 14 | 10 | 21 | 45 | 29 | 402 | 20 | 451 | 31 | 11 | 19 | 61 | 14 | 430 | 8 | 452 | 1009 |
| % Passenger Vehicles | 100 | 100 | 100 | 100 | 100 | 98.5 | 95.2 | 98.5 | 100 | 100 | 100 | 100 | 100 | 97.9 | 100 | 98 | 98.4 |
| Buses | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 8 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0.9 | 0 | 0.9 | 0.8 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 8 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0.5 | 4.8 | 0.7 | 0 | 0 | 0 | 0 | 0 | 1.1 | 0 | 1.1 | 0.8 |

| | Wickham Way Southbound | | | | Honolulu Avenue Westbound | | | | Wickham Way Northbound | | | | Honolulu Avenue Eastbound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | **3** | **4** | 2 | **9** | **6** | 48 | 2 | 56 | **11** | **2** | **4** | **17** | 0 | **65** | **3** | **68** | **150** |
| 04:45 PM | 1 | 2 | **4** | 7 | 5 | 47 | **4** | 56 | 1 | 2 | 0 | 3 | **1** | 57 | 1 | 59 | 125 |
| 05:00 PM | 1 | 0 | 4 | 5 | 4 | **60** | 1 | 65 | 2 | 1 | 1 | 4 | 1 | 63 | 1 | 65 | 139 |
| 05:15 PM | 3 | 1 | 1 | 5 | 4 | 60 | 3 | **67** | 2 | 1 | 2 | 5 | 0 | 56 | 0 | 56 | 133 |
| Total Volume | 8 | 7 | 11 | 26 | 19 | 215 | 10 | 244 | 16 | 6 | 7 | 29 | 2 | 241 | 5 | 248 | 547 |
| % App. Total | 30.8 | 26.9 | 42.3 | | 7.8 | 88.1 | 4.1 | | 55.2 | 20.7 | 24.1 | | 0.8 | 97.2 | 2 | | |
| PHF | .667 | .438 | .688 | .722 | .792 | .896 | .625 | .910 | .364 | .750 | .438 | .426 | .500 | .927 | .417 | .912 | .912 |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Glendale
N/S: Wickham Way
E/W: Broadview Drive
Weather: Clear

File Name : 07_GDE_WI_BR AM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Wickham Way Southbound | | | Broadview Drive Westbound | | | Broadview Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 07:00 AM | 0 | 2 | 2 | 17 | 0 | 17 | 1 | 6 | 7 | 26 |
| 07:15 AM | 0 | 1 | 1 | 10 | 1 | 11 | 1 | 3 | 4 | 16 |
| 07:30 AM | 0 | 0 | 0 | 17 | 1 | 18 | 1 | 9 | 10 | 28 |
| 07:45 AM | 0 | 2 | 2 | 24 | 0 | 24 | 2 | 8 | 10 | 36 |
| Total | 0 | 5 | 5 | 68 | 2 | 70 | 5 | 26 | 31 | 106 |
| 08:00 AM | 0 | 1 | 1 | 17 | 1 | 18 | 0 | 6 | 6 | 25 |
| 08:15 AM | 0 | 0 | 0 | 29 | 1 | 30 | 0 | 19 | 19 | 49 |
| 08:30 AM | 1 | 0 | 1 | 16 | 0 | 16 | 0 | 12 | 12 | 29 |
| 08:45 AM | 1 | 0 | 1 | 15 | 0 | 15 | 0 | 7 | 7 | 23 |
| Total | 2 | 1 | 3 | 77 | 2 | 79 | 0 | 44 | 44 | 126 |
| Grand Total | 2 | 6 | 8 | 145 | 4 | 149 | 5 | 70 | 75 | 232 |
| Apprch % | 25 | 75 | | 97.3 | 2.7 | | 6.7 | 93.3 | | |
| Total % | 0.9 | 2.6 | 3.4 | 62.5 | 1.7 | 64.2 | 2.2 | 30.2 | 32.3 | |
| Passenger Vehicles | 2 | 6 | 8 | 143 | 3 | 146 | 5 | 70 | 75 | 229 |
| % Passenger Vehicles | 100 | 100 | 100 | 98.6 | 75 | 98 | 100 | 100 | 100 | 98.7 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Trucks | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 3 |
| % Trucks | 0 | 0 | 0 | 1.4 | 25 | 2 | 0 | 0 | 0 | 1.3 |

| | Wickham Way Southbound | | | Broadview Drive Westbound | | | Broadview Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | |
| 07:45 AM | 0 | **2** | **2** | 24 | 0 | 24 | **2** | 8 | 10 | 36 |
| 08:00 AM | 0 | 1 | 1 | 17 | **1** | 18 | 0 | 6 | 6 | 25 |
| 08:15 AM | 0 | 0 | 0 | **29** | 1 | **30** | 0 | **19** | **19** | **49** |
| 08:30 AM | **1** | 0 | 1 | 16 | 0 | 16 | 0 | 12 | 12 | 29 |
| Total Volume | 1 | 3 | 4 | 86 | 2 | 88 | 2 | 45 | 47 | 139 |
| % App. Total | 25 | 75 | | 97.7 | 2.3 | | 4.3 | 95.7 | | |
| PHF | .250 | .375 | .500 | .741 | .500 | .733 | .250 | .592 | .618 | .709 |

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Glendale
N/S: Wickham Way
E/W: Broadview Drive
Weather: Clear

File Name : 07_GDE_WI_BR PM
Site Code : 99920298
Start Date : 8/18/2020
Page No : 1

Groups Printed- Passenger Vehicles - Buses - Trucks

| | Wickham Way Southbound | | | Broadview Drive Westbound | | | Broadview Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 18 | 3 | 21 | 2 | 25 | 27 | 48 |
| 04:15 PM | 1 | 6 | 7 | 22 | 0 | 22 | 2 | 22 | 24 | 53 |
| 04:30 PM | 1 | 5 | 6 | 11 | 1 | 12 | 6 | 18 | 24 | 42 |
| 04:45 PM | 0 | 0 | 0 | 13 | 1 | 14 | 4 | 18 | 22 | 36 |
| Total | 2 | 11 | 13 | 64 | 5 | 69 | 14 | 83 | 97 | 179 |
| 05:00 PM | 1 | 1 | 2 | 17 | 1 | 18 | 1 | 25 | 26 | 46 |
| 05:15 PM | 0 | 1 | 1 | 16 | 0 | 16 | 1 | 28 | 29 | 46 |
| 05:30 PM | 1 | 0 | 1 | 12 | 1 | 13 | 0 | 26 | 26 | 40 |
| 05:45 PM | 0 | 0 | 0 | 16 | 4 | 20 | 1 | 17 | 18 | 38 |
| Total | 2 | 2 | 4 | 61 | 6 | 67 | 3 | 96 | 99 | 170 |
| Grand Total | 4 | 13 | 17 | 125 | 11 | 136 | 17 | 179 | 196 | 349 |
| Apprch % | 23.5 | 76.5 | | 91.9 | 8.1 | | 8.7 | 91.3 | | |
| Total % | 1.1 | 3.7 | 4.9 | 35.8 | 3.2 | 39 | 4.9 | 51.3 | 56.2 | |
| Passenger Vehicles | 3 | 13 | 16 | 125 | 11 | 136 | 16 | 179 | 195 | 347 |
| % Passenger Vehicles | 75 | 100 | 94.1 | 100 | 100 | 100 | 94.1 | 100 | 99.5 | 99.4 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Trucks | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| % Trucks | 25 | 0 | 5.9 | 0 | 0 | 0 | 5.9 | 0 | 0.5 | 0.6 |

| | Wickham Way Southbound | | | Broadview Drive Westbound | | | Broadview Drive Eastbound | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:00 PM | | | | | | | | | | |
| 04:00 PM | 0 | 0 | 0 | 18 | **3** | 21 | 2 | **25** | **27** | 48 |
| 04:15 PM | **1** | **6** | **7** | **22** | 0 | **22** | 2 | 22 | 24 | **53** |
| 04:30 PM | 1 | 5 | 6 | 11 | 1 | 12 | **6** | 18 | 24 | 42 |
| 04:45 PM | 0 | 0 | 0 | 13 | 1 | 14 | 4 | 18 | 22 | 36 |
| Total Volume | 2 | 11 | 13 | 64 | 5 | 69 | 14 | 83 | 97 | 179 |
| % App. Total | 15.4 | 84.6 | | 92.8 | 7.2 | | 14.4 | 85.6 | | |
| PHF | .500 | .458 | .464 | .727 | .417 | .784 | .583 | .830 | .898 | .844 |

# Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
(951) 268-6268
email: counts@countsunlimited.com

City of Glendale
Broadview Drive
E/ Wickham Way
24 Hour Directional Volume Count

GDEBREWI
Site Code: 999-20435

| Start Time | 11/17/2020 Tue | Eastbound Morning | Eastbound Afternoon | Hour Totals Morning | Hour Totals Afternoon | Westbound Morning | Westbound Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 0 | **37** | | | 0 | **36** | | | | |
| 12:15 | | 0 | **41** | | | 1 | **32** | | | | |
| 12:30 | | 1 | **34** | | | 0 | **27** | | | | |
| 12:45 | | 0 | **30** | 1 | 142 | 0 | **24** | 1 | 119 | 2 | 261 |
| 01:00 | | 0 | 24 | | | 0 | 27 | | | | |
| 01:15 | | 0 | 38 | | | 0 | 31 | | | | |
| 01:30 | | 1 | 30 | | | 0 | 22 | | | | |
| 01:45 | | 0 | 25 | 1 | 117 | 0 | 28 | 0 | 108 | 1 | 225 |
| 02:00 | | 0 | 26 | | | 0 | 20 | | | | |
| 02:15 | | 1 | 23 | | | 0 | 30 | | | | |
| 02:30 | | 1 | 35 | | | 1 | 27 | | | | |
| 02:45 | | 0 | 36 | 2 | 120 | 0 | 26 | 1 | 103 | 3 | 223 |
| 03:00 | | 0 | 32 | | | 0 | 32 | | | | |
| 03:15 | | 1 | 22 | | | 0 | 29 | | | | |
| 03:30 | | 0 | 32 | | | 1 | 23 | | | | |
| 03:45 | | 0 | 33 | 1 | 119 | 0 | 30 | 1 | 114 | 2 | 233 |
| 04:00 | | 0 | 35 | | | 0 | 26 | | | | |
| 04:15 | | 1 | 36 | | | 1 | 24 | | | | |
| 04:30 | | 0 | 35 | | | 1 | 31 | | | | |
| 04:45 | | 3 | 28 | 4 | 134 | 0 | 25 | 2 | 106 | 6 | 240 |
| 05:00 | | 2 | 35 | | | 0 | 34 | | | | |
| 05:15 | | 0 | 29 | | | 0 | 28 | | | | |
| 05:30 | | 5 | 15 | | | 0 | 25 | | | | |
| 05:45 | | 8 | 24 | 15 | 103 | 4 | 29 | 4 | 116 | 19 | 219 |
| 06:00 | | 3 | 27 | | | 1 | 22 | | | | |
| 06:15 | | 5 | 18 | | | 2 | 25 | | | | |
| 06:30 | | 6 | 20 | | | 4 | 28 | | | | |
| 06:45 | | 17 | 15 | 31 | 80 | 7 | 26 | 14 | 101 | 45 | 181 |
| 07:00 | | 17 | 20 | | | 3 | 13 | | | | |
| 07:15 | | 20 | 10 | | | 6 | 17 | | | | |
| 07:30 | | 15 | 14 | | | 12 | 11 | | | | |
| 07:45 | | 18 | 4 | 70 | 48 | 19 | 10 | 40 | 51 | 110 | 99 |
| 08:00 | | 33 | 5 | | | 15 | 7 | | | | |
| 08:15 | | 27 | 5 | | | 18 | 8 | | | | |
| 08:30 | | 19 | 4 | | | 20 | 5 | | | | |
| 08:45 | | 24 | 6 | 103 | 20 | 21 | 3 | 74 | 23 | 177 | 43 |
| 09:00 | | 28 | 10 | | | 16 | 8 | | | | |
| 09:15 | | 18 | 5 | | | 17 | 4 | | | | |
| 09:30 | | 34 | 2 | | | 27 | 0 | | | | |
| 09:45 | | 23 | 7 | 103 | 24 | 19 | 3 | 79 | 15 | 182 | 39 |
| 10:00 | | 21 | 2 | | | 22 | 2 | | | | |
| 10:15 | | **36** | 0 | | | 17 | 2 | | | | |
| 10:30 | | **29** | 3 | | | 19 | 1 | | | | |
| 10:45 | | **27** | 1 | 113 | 6 | **33** | 3 | 91 | 8 | 204 | 14 |
| 11:00 | | **28** | 2 | | | **22** | 2 | | | | |
| 11:15 | | 23 | 1 | | | **16** | 0 | | | | |
| 11:30 | | 29 | 1 | | | **34** | 0 | | | | |
| 11:45 | | 33 | 1 | 113 | 5 | 22 | 1 | 94 | 3 | 207 | 8 |
| Total | | 557 | 918 | 557 | 918 | 401 | 867 | 401 | 867 | 958 | 1785 |
| Combined Total | | 1475 | | 1475 | | 1268 | | 1268 | | 2743 | |
| AM Peak | - | 10:15 | - | - | - | 10:45 | - | - | - | - | - |
| Vol. | - | 120 | - | - | - | 105 | - | - | - | - | - |
| P.H.F. | | 0.833 | | | | 0.772 | | | | | |
| PM Peak | - | - | 12:00 | - | - | - | 12:00 | - | - | - | - |
| Vol. | - | - | 142 | - | - | - | 119 | - | - | - | - |
| P.H.F. | | | 0.866 | | | | 0.826 | | | | |
| Percentage | | 37.8% | 62.2% | | | 31.6% | 68.4% | | | | |
| ADT/AADT | | ADT 2,743 | | AADT 2,743 | | | | | | | |

# Appendix C: LOS Worksheets

## Verdugo Campus

- ICU Analysis (Signalized)
- Synchro Analysis (Un-signalized)

Turning Movement Report
none

| Volume Type | Northbound Left | Northbound Thru | Northbound Right | Southbound Left | Southbound Thru | Southbound Right | Eastbound Left | Eastbound Thru | Eastbound Right | Westbound Left | Westbound Thru | Westbound Right | Total Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| #1 Glendale Fwy NB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 846 | 2 | 73 | 0 | 0 | 0 | 305 | 80 | 0 | 0 | 261 | 69 | 1636 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 846 | 2 | 73 | 0 | 0 | 0 | 305 | 80 | 0 | 0 | 261 | 69 | 1636 |
| #2 Glendale Fwy SB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 63 | 0 | 751 | 0 | 322 | 494 | 165 | 942 | 0 | 2737 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 63 | 0 | 751 | 0 | 322 | 494 | 165 | 942 | 0 | 2737 |
| #3 Parking Lot Entrance/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 105 | 0 | 151 | 375 | 692 | 0 | 0 | 1270 | 440 | 3033 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 105 | 0 | 151 | 375 | 692 | 0 | 0 | 1270 | 440 | 3033 |
| #4 Chaparro/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 1 | 0 | 7 | 19 | 1140 | 0 | 0 | 1360 | 31 | 2558 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 1 | 0 | 7 | 19 | 1140 | 0 | 0 | 1360 | 31 | 2558 |
| #5 Verdugo/Mountain | | | | | | | | | | | | | |
| Base | 76 | 940 | 374 | 450 | 1725 | 360 | 255 | 298 | 104 | 520 | 318 | 469 | 5889 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 76 | 940 | 374 | 450 | 1725 | 360 | 255 | 298 | 104 | 520 | 318 | 469 | 5889 |
| #6 N Verdugo/Canada | | | | | | | | | | | | | |
| Base | 0 | 840 | 0 | 0 | 751 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1591 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 840 | 0 | 0 | 751 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1591 |
| #7 Verdugo Exit/College Circle | | | | | | | | | | | | | |
| Base | 0 | 500 | 0 | 0 | 874 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1375 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 500 | 0 | 0 | 874 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1375 |
| #8 N. Verdugo Rd/Town St-Campus Way | | | | | | | | | | | | | |
| Base | 5 | 502 | 52 | 7 | 877 | 5 | 5 | 10 | 5 | 35 | 5 | 7 | 1515 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5 | 502 | 52 | 7 | 877 | 5 | 5 | 10 | 5 | 35 | 5 | 7 | 1515 |
| #109 Verdugo Entrance/College Circle | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Turning Movement Report
none

| Volume Type | Northbound Left | Northbound Thru | Northbound Right | Southbound Left | Southbound Thru | Southbound Right | Eastbound Left | Eastbound Thru | Eastbound Right | Westbound Left | Westbound Thru | Westbound Right | Total Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| #1 Glendale Fwy NB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 863 | 2 | 213 | 0 | 0 | 0 | 286 | 174 | 0 | 0 | 198 | 42 | 1778 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 863 | 2 | 213 | 0 | 0 | 0 | 286 | 174 | 0 | 0 | 198 | 42 | 1778 |
| #2 Glendale Fwy SB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 66 | 3 | 337 | 0 | 391 | 471 | 109 | 941 | 0 | 2318 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 66 | 3 | 337 | 0 | 391 | 471 | 109 | 941 | 0 | 2318 |
| #3 Parking Lot Entrance/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 183 | 0 | 141 | 336 | 574 | 0 | 0 | 1004 | 342 | 2580 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 183 | 0 | 141 | 336 | 574 | 0 | 0 | 1004 | 342 | 2580 |
| #4 Chaparro/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 6 | 0 | 10 | 10 | 904 | 0 | 0 | 1139 | 7 | 2076 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 6 | 0 | 10 | 10 | 904 | 0 | 0 | 1139 | 7 | 2076 |
| #5 Verdugo/Mountain | | | | | | | | | | | | | |
| Base | 120 | 1484 | 412 | 318 | 977 | 194 | 295 | 244 | 94 | 273 | 252 | 566 | 5229 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 120 | 1484 | 412 | 318 | 977 | 194 | 295 | 244 | 94 | 273 | 252 | 566 | 5229 |
| #6 N Verdugo/Canada | | | | | | | | | | | | | |
| Base | 0 | 1171 | 0 | 0 | 571 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1742 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 1171 | 0 | 0 | 571 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1742 |
| #7 Verdugo Exit/College Circle | | | | | | | | | | | | | |
| Base | 0 | 781 | 0 | 0 | 571 | 0 | 0 | 0 | 0 | 12 | 0 | 10 | 1374 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 781 | 0 | 0 | 571 | 0 | 0 | 0 | 0 | 12 | 0 | 10 | 1374 |
| #8 N. Verdugo Rd/Town St-Campus Way | | | | | | | | | | | | | |
| Base | 5 | 783 | 37 | 7 | 574 | 5 | 5 | 10 | 5 | 33 | 4 | 7 | 1475 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5 | 783 | 37 | 7 | 574 | 5 | 5 | 10 | 5 | 33 | 4 | 7 | 1475 |
| #109 Verdugo Entrance/College Circle | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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Trip Generation Report

Forecast for P AM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Verdugo Cons | 1.00 | Verdugo Const | 198.00 | 0.00 | 198 | 0 | 198 | 85.7 |
| | Zone 1 Subtotal | | | | | 198 | 0 | 198 | 85.7 |
| 3 | Verdugo Cons | 1.00 | Verdugo Const | 18.00 | 15.00 | 18 | 15 | 33 | 14.3 |
| | Zone 3 Subtotal | | | | | 18 | 15 | 33 | 14.3 |
| TOTAL | | | | | | 216 | 15 | 231 | 100.0 |

Turning Movement Report
P AM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 Glendale Fwy NB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 846 | 2 | 73 | 0 | 0 | 0 | 305 | 80 | 0 | 0 | 261 | 69 | 1636 |
| Added | 153 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 156 |
| Total | 999 | 2 | 73 | 0 | 0 | 0 | 308 | 80 | 0 | 0 | 261 | 69 | 1792 |
| #2 Glendale Fwy SB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 63 | 0 | 751 | 0 | 322 | 494 | 165 | 942 | 0 | 2737 |
| Added | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 3 | 12 | 0 | 153 | 0 | 211 |
| Total | 0 | 0 | 0 | 63 | 0 | 794 | 0 | 325 | 506 | 165 | 1095 | 0 | 2948 |
| #3 Parking Lot Entrance/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 105 | 0 | 151 | 375 | 692 | 0 | 0 | 1270 | 440 | 3033 |
| Added | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 3 | 0 | 0 | 84 | 113 | 212 |
| Total | 0 | 0 | 0 | 117 | 0 | 151 | 375 | 695 | 0 | 0 | 1354 | 553 | 3245 |
| #4 Chaparro/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 1 | 0 | 7 | 19 | 1140 | 0 | 0 | 1360 | 31 | 2558 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 0 | 47 | 37 | 92 |
| Total | 0 | 0 | 0 | 1 | 0 | 7 | 24 | 1143 | 0 | 0 | 1407 | 68 | 2650 |
| #5 Verdugo/Mountain | | | | | | | | | | | | | |
| Base | 76 | 940 | 374 | 450 | 1725 | 360 | 255 | 298 | 104 | 520 | 318 | 469 | 5889 |
| Added | 0 | 5 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 60 |
| Total | 76 | 945 | 379 | 453 | 1725 | 360 | 255 | 298 | 104 | 520 | 318 | 516 | 5949 |
| #6 N Verdugo/Canada | | | | | | | | | | | | | |
| Base | 0 | 840 | 0 | 0 | 751 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1591 |
| Added | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 0 | 840 | 0 | 0 | 754 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1594 |
| #7 Verdugo Exit/College Circle | | | | | | | | | | | | | |
| Base | 0 | 500 | 0 | 0 | 874 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1375 |
| Added | 0 | 47 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| Total | 0 | 547 | 0 | 0 | 877 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1425 |
| #8 N. Verdugo Rd/Town St-Campus Way | | | | | | | | | | | | | |
| Base | 5 | 502 | 52 | 7 | 877 | 5 | 5 | 10 | 5 | 35 | 5 | 7 | 1515 |
| Added | 0 | 0 | 47 | 10 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 60 |
| Total | 5 | 502 | 99 | 17 | 877 | 5 | 5 | 10 | 5 | 38 | 5 | 7 | 1575 |
| #109 Verdugo Entrance/College Circle | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added | 0 | 47 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |
| Total | 0 | 47 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |

Trip Generation Report

Forecast for P PM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Verdugo Cons | 1.00 | Verdugo Const | 0.00 | 198.00 | 0 | 198 | 198 | 85.7 |
| | Zone 1 Subtotal | | | | | 0 | 198 | 198 | 85.7 |
| 3 | Verdugo Cons | 1.00 | Verdugo Const | 15.00 | 18.00 | 15 | 18 | 33 | 14.3 |
| | Zone 3 Subtotal | | | | | 15 | 18 | 33 | 14.3 |
| TOTAL | | | | | | 15 | 216 | 231 | 100.0 |

Turning Movement Report
P PM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 Glendale Fwy NB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 863 | 2 | 213 | 0 | 0 | 0 | 286 | 174 | 0 | 0 | 198 | 42 | 1778 |
| Added | 12 | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 55 |
| Total | 875 | 2 | 213 | 0 | 0 | 0 | 329 | 174 | 0 | 0 | 198 | 42 | 1833 |
| #2 Glendale Fwy SB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 66 | 3 | 337 | 0 | 391 | 471 | 109 | 941 | 0 | 2318 |
| Added | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 43 | 153 | 0 | 12 | 0 | 211 |
| Total | 0 | 0 | 0 | 66 | 3 | 340 | 0 | 434 | 624 | 109 | 953 | 0 | 2529 |
| #3 Parking Lot Entrance/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 183 | 0 | 141 | 336 | 574 | 0 | 0 | 1004 | 342 | 2580 |
| Added | 0 | 0 | 0 | 149 | 0 | 0 | 0 | 48 | 0 | 0 | 4 | 11 | 212 |
| Total | 0 | 0 | 0 | 332 | 0 | 141 | 336 | 622 | 0 | 0 | 1008 | 353 | 2792 |
| #4 Chaparro/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 6 | 0 | 10 | 10 | 904 | 0 | 0 | 1139 | 7 | 2076 |
| Added | 0 | 0 | 0 | 14 | 0 | 5 | 0 | 34 | 0 | 0 | 2 | 2 | 57 |
| Total | 0 | 0 | 0 | 20 | 0 | 15 | 10 | 938 | 0 | 0 | 1141 | 9 | 2133 |
| #5 Verdugo/Mountain | | | | | | | | | | | | | |
| Base | 120 | 1484 | 412 | 318 | 977 | 194 | 295 | 244 | 94 | 273 | 252 | 566 | 5229 |
| Added | 0 | 0 | 0 | 34 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 2 | 46 |
| Total | 120 | 1484 | 412 | 352 | 982 | 194 | 295 | 244 | 94 | 278 | 252 | 568 | 5275 |
| #6 N Verdugo/Canada | | | | | | | | | | | | | |
| Base | 0 | 1171 | 0 | 0 | 571 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1742 |
| Added | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| Total | 0 | 1171 | 0 | 0 | 610 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1781 |
| #7 Verdugo Exit/College Circle | | | | | | | | | | | | | |
| Base | 0 | 781 | 0 | 0 | 571 | 0 | 0 | 0 | 0 | 12 | 0 | 10 | 1374 |
| Added | 0 | 2 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 46 |
| Total | 0 | 783 | 0 | 0 | 610 | 0 | 0 | 0 | 0 | 12 | 0 | 15 | 1420 |
| #8 N. Verdugo Rd/Town St-Campus Way | | | | | | | | | | | | | |
| Base | 5 | 783 | 37 | 7 | 574 | 5 | 5 | 10 | 5 | 33 | 4 | 7 | 1475 |
| Added | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 5 | 51 |
| Total | 5 | 788 | 39 | 7 | 574 | 5 | 5 | 10 | 5 | 72 | 4 | 12 | 1526 |
| #109 Verdugo Entrance/College Circle | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added | 0 | 2 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| Total | 0 | 2 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |

Trip Generation Report

Forecast for O AM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 1809 North V | 1.00 | 1809 North Ver | 9.00 | 6.00 | 9 | 6 | 15 | 100.0 |
| | Zone 2 Subtotal | | | | | 9 | 6 | 15 | 100.0 |
| TOTAL | | | | | | 9 | 6 | 15 | 100.0 |

Turning Movement Report
O AM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 Glendale Fwy NB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 858 | 2 | 74 | 0 | 0 | 0 | 309 | 81 | 0 | 0 | 265 | 70 | 1658 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 4 |
| Total | 858 | 2 | 74 | 0 | 0 | 0 | 309 | 83 | 0 | 0 | 267 | 70 | 1662 |
| #2 Glendale Fwy SB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 64 | 0 | 761 | 0 | 326 | 501 | 167 | 955 | 0 | 2774 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 4 |
| Total | 0 | 0 | 0 | 64 | 0 | 761 | 0 | 328 | 501 | 167 | 957 | 0 | 2778 |
| #3 Parking Lot Entrance/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 106 | 0 | 153 | 380 | 701 | 0 | 0 | 1287 | 446 | 3074 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 4 |
| Total | 0 | 0 | 0 | 106 | 0 | 153 | 380 | 703 | 0 | 0 | 1289 | 446 | 3078 |
| #4 Chaparro/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 1 | 0 | 7 | 19 | 1156 | 0 | 0 | 1378 | 31 | 2593 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 4 |
| Total | 0 | 0 | 0 | 1 | 0 | 7 | 19 | 1158 | 0 | 0 | 1380 | 31 | 2597 |
| #5 Verdugo/Mountain | | | | | | | | | | | | | |
| Base | 77 | 953 | 379 | 456 | 1748 | 365 | 258 | 302 | 105 | 527 | 322 | 475 | 5969 |
| Added | 0 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 8 |
| Total | 77 | 955 | 379 | 458 | 1750 | 365 | 258 | 302 | 105 | 527 | 322 | 477 | 5977 |
| #6 N Verdugo/Canada | | | | | | | | | | | | | |
| Base | 0 | 851 | 0 | 0 | 761 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1613 |
| Added | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 0 | 851 | 0 | 0 | 764 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1616 |
| #7 Verdugo Exit/College Circle | | | | | | | | | | | | | |
| Base | 0 | 507 | 0 | 0 | 886 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1394 |
| Added | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Total | 0 | 512 | 0 | 0 | 889 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1402 |
| #8 N. Verdugo Rd/Town St-Campus Way | | | | | | | | | | | | | |
| Base | 5 | 509 | 53 | 7 | 889 | 5 | 5 | 10 | 5 | 35 | 5 | 7 | 1536 |
| Added | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Total | 5 | 514 | 53 | 7 | 892 | 5 | 5 | 10 | 5 | 35 | 5 | 7 | 1544 |
| #109 Verdugo Entrance/College Circle | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Total | 0 | 5 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |

Trip Generation Report

Forecast for O PM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 1809 North V | 1.00 | 1809 North Ver | 8.00 | 13.00 | 8 | 13 | 21 | 100.0 |
| | Zone 2 Subtotal | | | | | 8 | 13 | 21 | 100.0 |
| TOTAL | | | | | | 8 | 13 | 21 | 100.0 |

Turning Movement Report
O PM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 Glendale Fwy NB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 875 | 2 | 216 | 0 | 0 | 0 | 290 | 176 | 0 | 0 | 201 | 43 | 1802 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 5 |
| Total | 875 | 2 | 216 | 0 | 0 | 0 | 290 | 179 | 0 | 0 | 203 | 43 | 1807 |
| #2 Glendale Fwy SB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 67 | 3 | 342 | 0 | 396 | 477 | 110 | 954 | 0 | 2350 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 5 |
| Total | 0 | 0 | 0 | 67 | 3 | 342 | 0 | 399 | 477 | 110 | 956 | 0 | 2355 |
| #3 Parking Lot Entrance/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 185 | 0 | 143 | 341 | 582 | 0 | 0 | 1018 | 347 | 2615 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 5 |
| Total | 0 | 0 | 0 | 185 | 0 | 143 | 341 | 585 | 0 | 0 | 1020 | 347 | 2620 |
| #4 Chaparro/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 6 | 0 | 10 | 10 | 916 | 0 | 0 | 1154 | 7 | 2104 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 5 |
| Total | 0 | 0 | 0 | 6 | 0 | 10 | 10 | 919 | 0 | 0 | 1156 | 7 | 2109 |
| #5 Verdugo/Mountain | | | | | | | | | | | | | |
| Base | 122 | 1504 | 418 | 322 | 990 | 197 | 299 | 247 | 95 | 277 | 255 | 574 | 5300 |
| Added | 0 | 2 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 10 |
| Total | 122 | 1506 | 418 | 325 | 993 | 197 | 299 | 247 | 95 | 277 | 255 | 576 | 5310 |
| #6 N Verdugo/Canada | | | | | | | | | | | | | |
| Base | 0 | 1187 | 0 | 0 | 579 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1766 |
| Added | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Total | 0 | 1187 | 0 | 0 | 586 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1773 |
| #7 Verdugo Exit/College Circle | | | | | | | | | | | | | |
| Base | 0 | 792 | 0 | 0 | 579 | 0 | 0 | 0 | 0 | 12 | 0 | 10 | 1393 |
| Added | 0 | 4 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Total | 0 | 796 | 0 | 0 | 586 | 0 | 0 | 0 | 0 | 12 | 0 | 10 | 1404 |
| #8 N. Verdugo Rd/Town St-Campus Way | | | | | | | | | | | | | |
| Base | 5 | 794 | 38 | 7 | 582 | 5 | 5 | 10 | 5 | 33 | 4 | 7 | 1495 |
| Added | 0 | 4 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Total | 5 | 798 | 38 | 7 | 589 | 5 | 5 | 10 | 5 | 33 | 4 | 7 | 1506 |
| #109 Verdugo Entrance/College Circle | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added | 0 | 4 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Total | 0 | 4 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |

Trip Generation Report

Forecast for P AM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Verdugo Cons | 1.00 | Verdugo Const | 198.00 | 0.00 | 198 | 0 | 198 | 80.5 |
| | Zone 1 Subtotal | | | | | 198 | 0 | 198 | 80.5 |
| 3 | Verdugo Cons | 1.00 | Verdugo Const | 18.00 | 15.00 | 18 | 15 | 33 | 13.4 |
| | Zone 3 Subtotal | | | | | 18 | 15 | 33 | 13.4 |
| TOTAL | | | | | | 216 | 15 | 231 | 93.9 |

Trip Generation Report

Forecast for O AM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 1809 North V | 1.00 | 1809 North Ver | 9.00 | 6.00 | 9 | 6 | 15 | 6.1 |
| | Zone 2 Subtotal | | | | | 9 | 6 | 15 | 6.1 |
| TOTAL | | | | | | 9 | 6 | 15 | 6.1 |

Turning Movement Report
P AM + O AM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 Glendale Fwy NB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 858 | 2 | 74 | 0 | 0 | 0 | 309 | 81 | 0 | 0 | 265 | 70 | 1658 |
| Added | 153 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 2 | 0 | 160 |
| Total | 1011 | 2 | 74 | 0 | 0 | 0 | 312 | 83 | 0 | 0 | 267 | 70 | 1818 |
| #2 Glendale Fwy SB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 64 | 0 | 761 | 0 | 326 | 501 | 167 | 955 | 0 | 2774 |
| Added | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 5 | 12 | 0 | 155 | 0 | 215 |
| Total | 0 | 0 | 0 | 64 | 0 | 804 | 0 | 331 | 513 | 167 | 1110 | 0 | 2989 |
| #3 Parking Lot Entrance/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 106 | 0 | 153 | 380 | 701 | 0 | 0 | 1287 | 446 | 3074 |
| Added | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 4 | 0 | 0 | 86 | 113 | 215 |
| Total | 0 | 0 | 0 | 118 | 0 | 153 | 380 | 705 | 0 | 0 | 1373 | 559 | 3289 |
| #4 Chaparro/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 1 | 0 | 7 | 19 | 1156 | 0 | 0 | 1378 | 31 | 2593 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 49 | 37 | 95 |
| Total | 0 | 0 | 0 | 1 | 0 | 7 | 24 | 1160 | 0 | 0 | 1427 | 68 | 2688 |
| #5 Verdugo/Mountain | | | | | | | | | | | | | |
| Base | 77 | 953 | 379 | 456 | 1748 | 365 | 258 | 302 | 105 | 527 | 322 | 475 | 5969 |
| Added | 0 | 7 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 67 |
| Total | 77 | 960 | 384 | 460 | 1750 | 365 | 258 | 302 | 105 | 527 | 322 | 524 | 6036 |
| #6 N Verdugo/Canada | | | | | | | | | | | | | |
| Base | 0 | 851 | 0 | 0 | 761 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1613 |
| Added | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total | 0 | 851 | 0 | 0 | 767 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1619 |
| #7 Verdugo Exit/College Circle | | | | | | | | | | | | | |
| Base | 0 | 507 | 0 | 0 | 886 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1394 |
| Added | 0 | 51 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| Total | 0 | 558 | 0 | 0 | 892 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1451 |
| #8 N. Verdugo Rd/Town St-Campus Way | | | | | | | | | | | | | |
| Base | 5 | 509 | 53 | 7 | 889 | 5 | 5 | 10 | 5 | 35 | 5 | 7 | 1536 |
| Added | 0 | 5 | 47 | 10 | 3 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 68 |
| Total | 5 | 514 | 100 | 17 | 892 | 5 | 5 | 10 | 5 | 38 | 5 | 7 | 1604 |
| #109 Verdugo Entrance/College Circle | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added | 0 | 51 | 5 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| Total | 0 | 51 | 5 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |

Trip Generation Report

Forecast for P PM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Verdugo Cons | 1.00 | Verdugo Const | 0.00 | 198.00 | 0 | 198 | 198 | 78.6 |
| | Zone 1 Subtotal | | | | | 0 | 198 | 198 | 78.6 |
| 3 | Verdugo Cons | 1.00 | Verdugo Const | 15.00 | 18.00 | 15 | 18 | 33 | 13.1 |
| | Zone 3 Subtotal | | | | | 15 | 18 | 33 | 13.1 |
| TOTAL | | | | | | 15 | 216 | 231 | 91.7 |

Trip Generation Report

Forecast for O PM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 1809 North V | 1.00 | 1809 North Ver | 8.00 | 13.00 | 8 | 13 | 21 | 8.3 |
| | Zone 2 Subtotal | | | | | 8 | 13 | 21 | 8.3 |
| TOTAL | | | | | | 8 | 13 | 21 | 8.3 |

Turning Movement Report
P PM + O PM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 Glendale Fwy NB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 875 | 2 | 216 | 0 | 0 | 0 | 290 | 176 | 0 | 0 | 201 | 43 | 1802 |
| Added | 12 | 0 | 0 | 0 | 0 | 0 | 43 | 3 | 0 | 0 | 2 | 0 | 60 |
| Total | 887 | 2 | 216 | 0 | 0 | 0 | 333 | 179 | 0 | 0 | 203 | 43 | 1862 |
| #2 Glendale Fwy SB Ramps/E. Mountain St | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 67 | 3 | 342 | 0 | 396 | 477 | 110 | 954 | 0 | 2350 |
| Added | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 46 | 153 | 0 | 14 | 0 | 216 |
| Total | 0 | 0 | 0 | 67 | 3 | 345 | 0 | 442 | 630 | 110 | 968 | 0 | 2566 |
| #3 Parking Lot Entrance/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 185 | 0 | 143 | 341 | 582 | 0 | 0 | 1018 | 347 | 2615 |
| Added | 0 | 0 | 0 | 149 | 0 | 0 | 0 | 51 | 0 | 0 | 6 | 11 | 217 |
| Total | 0 | 0 | 0 | 334 | 0 | 143 | 341 | 633 | 0 | 0 | 1024 | 358 | 2832 |
| #4 Chaparro/Mountain | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 6 | 0 | 10 | 10 | 916 | 0 | 0 | 1154 | 7 | 2104 |
| Added | 0 | 0 | 0 | 14 | 0 | 5 | 0 | 37 | 0 | 0 | 4 | 2 | 62 |
| Total | 0 | 0 | 0 | 20 | 0 | 15 | 10 | 953 | 0 | 0 | 1158 | 9 | 2166 |
| #5 Verdugo/Mountain | | | | | | | | | | | | | |
| Base | 122 | 1504 | 418 | 322 | 990 | 197 | 299 | 247 | 95 | 277 | 255 | 574 | 5300 |
| Added | 0 | 2 | 0 | 37 | 8 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 56 |
| Total | 122 | 1506 | 418 | 359 | 998 | 197 | 299 | 247 | 95 | 282 | 255 | 578 | 5356 |
| #6 N Verdugo/Canada | | | | | | | | | | | | | |
| Base | 0 | 1187 | 0 | 0 | 579 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1766 |
| Added | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| Total | 0 | 1187 | 0 | 0 | 624 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1811 |
| #7 Verdugo Exit/College Circle | | | | | | | | | | | | | |
| Base | 0 | 792 | 0 | 0 | 579 | 0 | 0 | 0 | 0 | 12 | 0 | 10 | 1393 |
| Added | 0 | 6 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 56 |
| Total | 0 | 798 | 0 | 0 | 624 | 0 | 0 | 0 | 0 | 12 | 0 | 15 | 1449 |
| #8 N. Verdugo Rd/Town St-Campus Way | | | | | | | | | | | | | |
| Base | 5 | 794 | 38 | 7 | 582 | 5 | 5 | 10 | 5 | 33 | 4 | 7 | 1495 |
| Added | 0 | 9 | 2 | 0 | 7 | 0 | 0 | 0 | 0 | 39 | 0 | 5 | 62 |
| Total | 5 | 803 | 40 | 7 | 589 | 5 | 5 | 10 | 5 | 72 | 4 | 12 | 1557 |
| #109 Verdugo Entrance/College Circle | | | | | | | | | | | | | |
| Base | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added | 0 | 6 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| Total | 0 | 6 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 19 | 1140 | 1360 | 31 | 1 | 7 |
| Future Vol, veh/h | 19 | 1140 | 1360 | 31 | 1 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 1239 | 1478 | 34 | 1 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1512 | 0 | - | 0 | 2157 | 756 |
| Stage 1 | - | - | - | - | 1495 | - |
| Stage 2 | - | - | - | - | 662 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 220 | - | - | - | 56 | 301 |
| Stage 1 | - | - | - | - | 121 | - |
| Stage 2 | - | - | - | - | 461 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 220 | - | - | - | 51 | 301 |
| Mov Cap-2 Maneuver | - | - | - | - | 51 | - |
| Stage 1 | - | - | - | - | 110 | - |
| Stage 2 | - | - | - | - | 461 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 25.2 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 220 | - | - | - | 187 |
| HCM Lane V/C Ratio | 0.094 | - | - | - | 0.047 |
| HCM Control Delay (s) | 23.1 | - | - | - | 25.2 |
| HCM Lane LOS | C | - | - | - | D |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 500 | 0 | 0 | 875 |
| Future Vol, veh/h | 1 | 0 | 500 | 0 | 0 | 875 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 543 | 0 | 0 | 951 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1019 | 272 | 0 | - | - | - |
| Stage 1 | 543 | - | - | - | - | - |
| Stage 2 | 476 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 233 | 726 | - | 0 | 0 | - |
| Stage 1 | 546 | - | - | 0 | 0 | - |
| Stage 2 | 591 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 233 | 726 | - | - | - | - |
| Mov Cap-2 Maneuver | 233 | - | - | - | - | - |
| Stage 1 | 546 | - | - | - | - | - |
| Stage 2 | 591 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 20.5 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 233 | - | - |
| HCM Lane V/C Ratio | - | 0.005 | - | - |
| HCM Control Delay (s) | - | 20.5 | 0 | - |
| HCM Lane LOS | - | C | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 904 | 1139 | 7 | 6 | 10 |
| Future Vol, veh/h | 10 | 904 | 1139 | 7 | 6 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 983 | 1238 | 8 | 7 | 11 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1246 | 0 | - | 0 | 1756 | 623 |
| Stage 1 | - | - | - | - | 1242 | - |
| Stage 2 | - | - | - | - | 514 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 297 | - | - | - | 98 | 368 |
| Stage 1 | - | - | - | - | 175 | - |
| Stage 2 | - | - | - | - | 547 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 297 | - | - | - | 94 | 368 |
| Mov Cap-2 Maneuver | - | - | - | - | 94 | - |
| Stage 1 | - | - | - | - | 169 | - |
| Stage 2 | - | - | - | - | 547 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 27.7 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 297 | - | - | - | 176 |
| HCM Lane V/C Ratio | 0.037 | - | - | - | 0.099 |
| HCM Control Delay (s) | 17.6 | - | - | - | 27.7 |
| HCM Lane LOS | C | - | - | - | D |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 10 | 781 | 0 | 0 | 571 |
| Future Vol, veh/h | 12 | 10 | 781 | 0 | 0 | 571 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 11 | 849 | 0 | 0 | 621 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1160 | 425 | 0 | - | - | - |
| Stage 1 | 849 | - | - | - | - | - |
| Stage 2 | 311 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 189 | 578 | - | 0 | 0 | - |
| Stage 1 | 380 | - | - | 0 | 0 | - |
| Stage 2 | 716 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 189 | 578 | - | - | - | - |
| Mov Cap-2 Maneuver | 189 | - | - | - | - | - |
| Stage 1 | 380 | - | - | - | - | - |
| Stage 2 | 716 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 19 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 189 | 578 | - |
| HCM Lane V/C Ratio | - | 0.069 | 0.019 | - |
| HCM Control Delay (s) | - | 25.5 | 11.3 | - |
| HCM Lane LOS | - | D | B | - |
| HCM 95th %tile Q(veh) | - | 0.2 | 0.1 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 24 | 1140 | 1405 | 66 | 1 | 7 |
| Future Vol, veh/h | 24 | 1140 | 1405 | 66 | 1 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 1239 | 1527 | 72 | 1 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1599 | 0 | - | 0 | 2235 | 800 |
| Stage 1 | - | - | - | - | 1563 | - |
| Stage 2 | - | - | - | - | 672 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 199 | - | - | - | 50 | 281 |
| Stage 1 | - | - | - | - | 110 | - |
| Stage 2 | - | - | - | - | 456 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 199 | - | - | - | 43 | 281 |
| Mov Cap-2 Maneuver | - | - | - | - | 43 | - |
| Stage 1 | - | - | - | - | 96 | - |
| Stage 2 | - | - | - | - | 456 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 27.9 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 199 | - | - | - | 166 |
| HCM Lane V/C Ratio | 0.131 | - | - | - | 0.052 |
| HCM Control Delay (s) | 25.8 | - | - | - | 27.9 |
| HCM Lane LOS | D | - | - | - | D |
| HCM 95th %tile Q(veh) | 0.4 | - | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 545 | 0 | 0 | 874 |
| Future Vol, veh/h | 1 | 0 | 545 | 0 | 0 | 874 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 592 | 0 | 0 | 950 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1067 | 296 | 0 | - | - | - |
| Stage 1 | 592 | - | - | - | - | - |
| Stage 2 | 475 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 217 | 700 | - | 0 | 0 | - |
| Stage 1 | 516 | - | - | 0 | 0 | - |
| Stage 2 | 592 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 217 | 700 | - | - | - | - |
| Mov Cap-2 Maneuver | 217 | - | - | - | - | - |
| Stage 1 | 516 | - | - | - | - | - |
| Stage 2 | 592 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 21.7 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 217 | - | - |
| HCM Lane V/C Ratio | - | 0.005 | - | - |
| HCM Control Delay (s) | - | 21.7 | 0 | - |
| HCM Lane LOS | - | C | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 935 | 1139 | 7 | 20 | 15 |
| Future Vol, veh/h | 10 | 935 | 1139 | 7 | 20 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 1016 | 1238 | 8 | 22 | 16 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1246 | 0 | - | 0 | 1772 | 623 |
| Stage 1 | - | - | - | - | 1242 | - |
| Stage 2 | - | - | - | - | 530 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 297 | - | - | - | 96 | 368 |
| Stage 1 | - | - | - | - | 175 | - |
| Stage 2 | - | - | - | - | 537 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 297 | - | - | - | 92 | 368 |
| Mov Cap-2 Maneuver | - | - | - | - | 92 | - |
| Stage 1 | - | - | - | - | 169 | - |
| Stage 2 | - | - | - | - | 537 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 41.4 |
| HCM LOS | | | E |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 297 | - | - | - | 136 |
| HCM Lane V/C Ratio | 0.037 | - | - | - | 0.28 |
| HCM Control Delay (s) | 17.6 | - | - | - | 41.4 |
| HCM Lane LOS | C | - | - | - | E |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 15 | 781 | 0 | 0 | 607 |
| Future Vol, veh/h | 12 | 15 | 781 | 0 | 0 | 607 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 16 | 849 | 0 | 0 | 660 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1179 | 425 | 0 | - | - | - |
| Stage 1 | 849 | - | - | - | - | - |
| Stage 2 | 330 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 183 | 578 | - | 0 | 0 | - |
| Stage 1 | 380 | - | - | 0 | 0 | - |
| Stage 2 | 701 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 183 | 578 | - | - | - | - |
| Mov Cap-2 Maneuver | 183 | - | - | - | - | - |
| Stage 1 | 380 | - | - | - | - | - |
| Stage 2 | 701 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 18 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 183 | 578 | - |
| HCM Lane V/C Ratio | - | 0.071 | 0.028 | - |
| HCM Control Delay (s) | - | 26.2 | 11.4 | - |
| HCM Lane LOS | - | D | B | - |
| HCM 95th %tile Q(veh) | - | 0.2 | 0.1 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 19 | 1158 | 1380 | 31 | 1 | 7 |
| Future Vol, veh/h | 19 | 1158 | 1380 | 31 | 1 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 1259 | 1500 | 34 | 1 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1534 | 0 | - | 0 | 2189 | 767 |
| Stage 1 | - | - | - | - | 1517 | - |
| Stage 2 | - | - | - | - | 672 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 214 | - | - | - | 54 | 296 |
| Stage 1 | - | - | - | - | 117 | - |
| Stage 2 | - | - | - | - | 456 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 214 | - | - | - | 49 | 296 |
| Mov Cap-2 Maneuver | - | - | - | - | 49 | - |
| Stage 1 | - | - | - | - | 106 | - |
| Stage 2 | - | - | - | - | 456 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 25.8 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 214 | - | - | - | 182 |
| HCM Lane V/C Ratio | 0.097 | - | - | - | 0.048 |
| HCM Control Delay (s) | 23.6 | - | - | - | 25.8 |
| HCM Lane LOS | C | - | - | - | D |
| HCM 95th %tile Q(veh) | 0.3 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 512 | 0 | 0 | 889 |
| Future Vol, veh/h | 1 | 0 | 512 | 0 | 0 | 889 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 557 | 0 | 0 | 966 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1040 | 279 | 0 | - | - | - |
| Stage 1 | 557 | - | - | - | - | - |
| Stage 2 | 483 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 226 | 718 | - | 0 | 0 | - |
| Stage 1 | 537 | - | - | 0 | 0 | - |
| Stage 2 | 586 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 226 | 718 | - | - | - | - |
| Mov Cap-2 Maneuver | 226 | - | - | - | - | - |
| Stage 1 | 537 | - | - | - | - | - |
| Stage 2 | 586 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 21 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 226 | - | - |
| HCM Lane V/C Ratio | - | 0.005 | - | - |
| HCM Control Delay (s) | - | 21 | 0 | - |
| HCM Lane LOS | - | C | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 919 | 1156 | 7 | 6 | 10 |
| Future Vol, veh/h | 10 | 919 | 1156 | 7 | 6 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 999 | 1257 | 8 | 7 | 11 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1265 | 0 | - | 0 | 1783 | 633 |
| Stage 1 | - | - | - | - | 1261 | - |
| Stage 2 | - | - | - | - | 522 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 291 | - | - | - | 94 | 362 |
| Stage 1 | - | - | - | - | 170 | - |
| Stage 2 | - | - | - | - | 542 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 291 | - | - | - | 90 | 362 |
| Mov Cap-2 Maneuver | - | - | - | - | 90 | - |
| Stage 1 | - | - | - | - | 164 | - |
| Stage 2 | - | - | - | - | 542 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 28.6 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 291 | - | - | - | 170 |
| HCM Lane V/C Ratio | 0.037 | - | - | - | 0.102 |
| HCM Control Delay (s) | 17.9 | - | - | - | 28.6 |
| HCM Lane LOS | C | - | - | - | D |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 512 | 0 | 0 | 889 |
| Future Vol, veh/h | 1 | 0 | 512 | 0 | 0 | 889 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 557 | 0 | 0 | 966 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1040 | 279 | 0 | - | - | - |
| Stage 1 | 557 | - | - | - | - | - |
| Stage 2 | 483 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 226 | 718 | - | 0 | 0 | - |
| Stage 1 | 537 | - | - | 0 | 0 | - |
| Stage 2 | 586 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 226 | 718 | - | - | - | - |
| Mov Cap-2 Maneuver | 226 | - | - | - | - | - |
| Stage 1 | 537 | - | - | - | - | - |
| Stage 2 | 586 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 21 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 226 | - | - |
| HCM Lane V/C Ratio | - | 0.005 | - | - |
| HCM Control Delay (s) | - | 21 | 0 | - |
| HCM Lane LOS | - | C | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 24 | 1158 | 1425 | 66 | 1 | 7 |
| Future Vol, veh/h | 24 | 1158 | 1425 | 66 | 1 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 1259 | 1549 | 72 | 1 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1621 | 0 | - | 0 | 2267 | 811 |
| Stage 1 | - | - | - | - | 1585 | - |
| Stage 2 | - | - | - | - | 682 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 194 | - | - | - | 48 | 277 |
| Stage 1 | - | - | - | - | 106 | - |
| Stage 2 | - | - | - | - | 450 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 194 | - | - | - | 42 | 277 |
| Mov Cap-2 Maneuver | - | - | - | - | 42 | - |
| Stage 1 | - | - | - | - | 92 | - |
| Stage 2 | - | - | - | - | 450 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 28.3 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 194 | - | - | - | 163 |
| HCM Lane V/C Ratio | 0.134 | - | - | - | 0.053 |
| HCM Control Delay (s) | 26.4 | - | - | - | 28.3 |
| HCM Lane LOS | D | - | - | - | D |
| HCM 95th %tile Q(veh) | 0.5 | - | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 556 | 0 | 0 | 889 |
| Future Vol, veh/h | 1 | 0 | 556 | 0 | 0 | 889 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 604 | 0 | 0 | 966 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1087 | 302 | 0 | - | - | - |
| Stage 1 | 604 | - | - | - | - | - |
| Stage 2 | 483 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 211 | 694 | - | 0 | 0 | - |
| Stage 1 | 508 | - | - | 0 | 0 | - |
| Stage 2 | 586 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 211 | 694 | - | - | - | - |
| Mov Cap-2 Maneuver | 211 | - | - | - | - | - |
| Stage 1 | 508 | - | - | - | - | - |
| Stage 2 | 586 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 22.2 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 211 | - | - |
| HCM Lane V/C Ratio | - | 0.005 | - | - |
| HCM Control Delay (s) | - | 22.2 | 0 | - |
| HCM Lane LOS | - | C | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 950 | 1156 | 7 | 20 | 15 |
| Future Vol, veh/h | 10 | 950 | 1156 | 7 | 20 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 1033 | 1257 | 8 | 22 | 16 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1265 | 0 | - | 0 | 1800 | 633 |
| Stage 1 | - | - | - | - | 1261 | - |
| Stage 2 | - | - | - | - | 539 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 291 | - | - | - | 92 | 362 |
| Stage 1 | - | - | - | - | 170 | - |
| Stage 2 | - | - | - | - | 532 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 291 | - | - | - | 89 | 362 |
| Mov Cap-2 Maneuver | - | - | - | - | 89 | - |
| Stage 1 | - | - | - | - | 164 | - |
| Stage 2 | - | - | - | - | 532 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 43 |
| HCM LOS | | | E |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 291 | - | - | - | 132 |
| HCM Lane V/C Ratio | 0.037 | - | - | - | 0.288 |
| HCM Control Delay (s) | 17.9 | - | - | - | 43 |
| HCM Lane LOS | C | - | - | - | E |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 15 | 796 | 0 | 0 | 621 |
| Future Vol, veh/h | 12 | 15 | 796 | 0 | 0 | 621 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 16 | 865 | 0 | 0 | 675 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1203 | 433 | 0 | - | - | - |
| Stage 1 | 865 | - | - | - | - | - |
| Stage 2 | 338 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 177 | 571 | - | 0 | 0 | - |
| Stage 1 | 373 | - | - | 0 | 0 | - |
| Stage 2 | 694 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 177 | 571 | - | - | - | - |
| Mov Cap-2 Maneuver | 177 | - | - | - | - | - |
| Stage 1 | 373 | - | - | - | - | - |
| Stage 2 | 694 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 18.4 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 177 | 571 | - |
| HCM Lane V/C Ratio | - | 0.074 | 0.029 | - |
| HCM Control Delay (s) | - | 27 | 11.5 | - |
| HCM Lane LOS | - | D | B | - |
| HCM 95th %tile Q(veh) | - | 0.2 | 0.1 | - |

## Garfield Campus

- ICU Analysis (Signalized)
- Synchro Analysis (Un-signalized)

Turning Movement Report
none

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 S Adams St/E Garfield Ave | | | | | | | | | | | | | |
| Base | 4 | 77 | 2 | 2 | 114 | 23 | 21 | 53 | 19 | 14 | 15 | 21 | 365 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 4 | 77 | 2 | 2 | 114 | 23 | 21 | 53 | 19 | 14 | 15 | 21 | 365 |
| #2 S. Chevy Chase Dr/E. Garfield Ave | | | | | | | | | | | | | |
| Base | 15 | 386 | 14 | 47 | 436 | 47 | 47 | 28 | 4 | 17 | 6 | 34 | 1081 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 15 | 386 | 14 | 47 | 436 | 47 | 47 | 28 | 4 | 17 | 6 | 34 | 1081 |
| #3 S. Adams St/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 19 | 62 | 6 | 12 | 101 | 34 | 19 | 64 | 25 | 0 | 0 | 2 | 344 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 19 | 62 | 6 | 12 | 101 | 34 | 19 | 64 | 25 | 0 | 0 | 2 | 344 |
| #4 E. Chevy Chase/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 8 | 353 | 150 | 48 | 319 | 20 | 13 | 38 | 2 | 207 | 36 | 49 | 1243 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 8 | 353 | 150 | 48 | 319 | 20 | 13 | 38 | 2 | 207 | 36 | 49 | 1243 |

Turning Movement Report
none

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 S Adams St/E Garfield Ave | | | | | | | | | | | | | |
| Base | 20 | 136 | 11 | 13 | 142 | 42 | 34 | 34 | 16 | 11 | 58 | 13 | 530 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 20 | 136 | 11 | 13 | 142 | 42 | 34 | 34 | 16 | 11 | 58 | 13 | 530 |
| #2 S. Chevy Chase Dr/E. Garfield Ave | | | | | | | | | | | | | |
| Base | 10 | 490 | 24 | 29 | 382 | 34 | 33 | 19 | 7 | 12 | 16 | 32 | 1088 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 10 | 490 | 24 | 29 | 382 | 34 | 33 | 19 | 7 | 12 | 16 | 32 | 1088 |
| #3 S. Adams St/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 17 | 114 | 10 | 7 | 132 | 21 | 26 | 38 | 24 | 3 | 45 | 23 | 460 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 17 | 114 | 10 | 7 | 132 | 21 | 26 | 38 | 24 | 3 | 45 | 23 | 460 |
| #4 E. Chevy Chase/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 3 | 470 | 208 | 64 | 413 | 12 | 16 | 25 | 10 | 154 | 30 | 37 | 1442 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 3 | 470 | 208 | 64 | 413 | 12 | 16 | 25 | 10 | 154 | 30 | 37 | 1442 |

Trip Generation Report

Forecast for P AM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Garfield Cam | 1.00 | Garfield Campu | 47.00 | 3.00 | 47 | 3 | 50 | 100.0 |
| | Zone 1 Subtotal | | | | | 47 | 3 | 50 | 100.0 |
| TOTAL | | | | | | 47 | 3 | 50 | 100.0 |

Turning Movement Report
P AM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 S Adams St/E Garfield Ave | | | | | | | | | | | | | |
| Base | 4 | 77 | 2 | 2 | 114 | 23 | 21 | 53 | 19 | 14 | 15 | 21 | 365 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 4 | 77 | 2 | 2 | 114 | 23 | 21 | 53 | 19 | 14 | 15 | 21 | 365 |
| #2 S. Chevy Chase Dr/E. Garfield Ave | | | | | | | | | | | | | |
| Base | 15 | 386 | 14 | 47 | 436 | 47 | 47 | 28 | 4 | 17 | 6 | 34 | 1081 |
| Added | 0 | 0 | 0 | 0 | 0 | 47 | 3 | 0 | 0 | 0 | 0 | 0 | 50 |
| Total | 15 | 386 | 14 | 47 | 436 | 94 | 50 | 28 | 4 | 17 | 6 | 34 | 1131 |
| #3 S. Adams St/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 19 | 62 | 6 | 12 | 101 | 34 | 19 | 64 | 25 | 0 | 0 | 2 | 344 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 19 | 62 | 6 | 12 | 101 | 34 | 19 | 64 | 25 | 0 | 0 | 2 | 344 |
| #4 E. Chevy Chase/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 8 | 353 | 150 | 48 | 319 | 20 | 13 | 38 | 2 | 207 | 36 | 49 | 1243 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 8 | 353 | 150 | 48 | 319 | 20 | 13 | 38 | 2 | 207 | 36 | 49 | 1243 |

Trip Generation Report

Forecast for P PM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Garfield Cam | 1.00 | Garfield Campu | 3.00 | 47.00 | 3 | 47 | 50 | 100.0 |
| | Zone 1 Subtotal | | | | | 3 | 47 | 50 | 100.0 |
| TOTAL | | | | | | 3 | 47 | 50 | 100.0 |

Turning Movement Report
P PM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 S Adams St/E Garfield Ave | | | | | | | | | | | | | |
| Base | 20 | 136 | 11 | 13 | 142 | 42 | 34 | 34 | 16 | 11 | 58 | 13 | 530 |
| Added | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 20 | 136 | 16 | 13 | 142 | 42 | 34 | 34 | 16 | 11 | 58 | 13 | 535 |
| #2 S. Chevy Chase Dr/E. Garfield Ave | | | | | | | | | | | | | |
| Base | 10 | 490 | 24 | 29 | 382 | 34 | 33 | 19 | 7 | 12 | 16 | 32 | 1088 |
| Added | 0 | 5 | 0 | 0 | 0 | 3 | 42 | 0 | 0 | 0 | 0 | 0 | 50 |
| Total | 10 | 495 | 24 | 29 | 382 | 37 | 75 | 19 | 7 | 12 | 16 | 32 | 1138 |
| #3 S. Adams St/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 17 | 114 | 10 | 7 | 132 | 21 | 26 | 38 | 24 | 3 | 45 | 23 | 460 |
| Added | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 17 | 114 | 10 | 12 | 132 | 21 | 26 | 38 | 24 | 3 | 45 | 23 | 465 |
| #4 E. Chevy Chase/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 3 | 470 | 208 | 64 | 413 | 12 | 16 | 25 | 10 | 154 | 30 | 37 | 1442 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 3 | 470 | 208 | 64 | 413 | 12 | 21 | 25 | 10 | 154 | 30 | 37 | 1447 |

Turning Movement Report
O AM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 S Adams St/E Garfield Ave | | | | | | | | | | | | | |
| Base | 4 | 78 | 2 | 2 | 116 | 23 | 21 | 54 | 19 | 14 | 15 | 21 | 370 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 4 | 78 | 2 | 2 | 116 | 23 | 21 | 54 | 19 | 14 | 15 | 21 | 370 |
| #2 S. Chevy Chase Dr/E. Garfield Ave | | | | | | | | | | | | | |
| Base | 15 | 391 | 14 | 48 | 442 | 48 | 48 | 28 | 4 | 17 | 6 | 34 | 1096 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 15 | 391 | 14 | 48 | 442 | 48 | 48 | 28 | 4 | 17 | 6 | 34 | 1096 |
| #3 S. Adams St/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 19 | 63 | 6 | 12 | 102 | 34 | 19 | 65 | 25 | 0 | 0 | 2 | 349 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 19 | 63 | 6 | 12 | 102 | 34 | 19 | 65 | 25 | 0 | 0 | 2 | 349 |
| #4 E. Chevy Chase/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 8 | 358 | 152 | 49 | 323 | 20 | 13 | 39 | 2 | 210 | 36 | 50 | 1260 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 8 | 358 | 152 | 49 | 323 | 20 | 13 | 39 | 2 | 210 | 36 | 50 | 1260 |

Turning Movement Report
O PM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 S Adams St/E Garfield Ave | | | | | | | | | | | | | |
| Base | 20 | 138 | 11 | 13 | 144 | 43 | 34 | 34 | 16 | 11 | 59 | 13 | 537 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 20 | 138 | 11 | 13 | 144 | 43 | 34 | 34 | 16 | 11 | 59 | 13 | 537 |
| #2 S. Chevy Chase Dr/E. Garfield Ave | | | | | | | | | | | | | |
| Base | 10 | 497 | 24 | 29 | 387 | 34 | 33 | 19 | 7 | 12 | 16 | 32 | 1103 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 10 | 497 | 24 | 29 | 387 | 34 | 33 | 19 | 7 | 12 | 16 | 32 | 1103 |
| #3 S. Adams St/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 17 | 116 | 10 | 7 | 134 | 21 | 26 | 39 | 24 | 3 | 46 | 23 | 466 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 17 | 116 | 10 | 7 | 134 | 21 | 26 | 39 | 24 | 3 | 46 | 23 | 466 |
| #4 E. Chevy Chase/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 3 | 476 | 211 | 65 | 419 | 12 | 16 | 25 | 10 | 156 | 30 | 38 | 1462 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 3 | 476 | 211 | 65 | 419 | 12 | 16 | 25 | 10 | 156 | 30 | 38 | 1462 |

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Trip Generation Report

Forecast for P AM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Garfield Cam | 1.00 | Garfield Campu | 47.00 | 3.00 | 47 | 3 | 50 | 100.0 |
| | Zone 1 Subtotal | | | | | 47 | 3 | 50 | 100.0 |
| TOTAL | | | | | | 47 | 3 | 50 | 100.0 |

Turning Movement Report
P AM + O AM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 S Adams St/E Garfield Ave | | | | | | | | | | | | | |
| Base | 4 | 78 | 2 | 2 | 116 | 23 | 21 | 54 | 19 | 14 | 15 | 21 | 370 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 4 | 78 | 2 | 2 | 116 | 23 | 21 | 54 | 19 | 14 | 15 | 21 | 370 |
| #2 S. Chevy Chase Dr/E. Garfield Ave | | | | | | | | | | | | | |
| Base | 15 | 391 | 14 | 48 | 442 | 48 | 48 | 28 | 4 | 17 | 6 | 34 | 1096 |
| Added | 0 | 0 | 0 | 0 | 0 | 47 | 3 | 0 | 0 | 0 | 0 | 0 | 50 |
| Total | 15 | 391 | 14 | 48 | 442 | 95 | 51 | 28 | 4 | 17 | 6 | 34 | 1146 |
| #3 S. Adams St/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 19 | 63 | 6 | 12 | 102 | 34 | 19 | 65 | 25 | 0 | 0 | 2 | 349 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 19 | 63 | 6 | 12 | 102 | 34 | 19 | 65 | 25 | 0 | 0 | 2 | 349 |
| #4 E. Chevy Chase/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 8 | 358 | 152 | 49 | 323 | 20 | 13 | 39 | 2 | 210 | 36 | 50 | 1260 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 8 | 358 | 152 | 49 | 323 | 20 | 13 | 39 | 2 | 210 | 36 | 50 | 1260 |

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Scenario Report

| | |
|---|---|
| Scenario: | O + P PM |
| Command: | O + P PM |
| Volume: | E PM |
| Geometry: | Default Geometry |
| Impact Fee: | Default Impact Fee |
| Trip Generation: | O + P PM |
| Trip Distribution: | DISTRIBUTION |
| Paths: | Default Path |
| Routes: | Default Route |
| Configuration: | O |

Trip Generation Report

Forecast for P PM

| Zone # | Subzone | Amount | Units | Rate In | Rate Out | Trips In | Trips Out | Total Trips | % Of Total |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Garfield Cam | 1.00 | Garfield Campu | 3.00 | 47.00 | 3 | 47 | 50 | 100.0 |
| | Zone 1 Subtotal | | | | | 3 | 47 | 50 | 100.0 |
| TOTAL | | | | | | 3 | 47 | 50 | 100.0 |

Turning Movement Report
P PM + O PM

| Volume | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Volume |
| #1 S Adams St/E Garfield Ave | | | | | | | | | | | | | |
| Base | 20 | 138 | 11 | 13 | 144 | 43 | 34 | 34 | 16 | 11 | 59 | 13 | 537 |
| Added | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 20 | 138 | 16 | 13 | 144 | 43 | 34 | 34 | 16 | 11 | 59 | 13 | 542 |
| #2 S. Chevy Chase Dr/E. Garfield Ave | | | | | | | | | | | | | |
| Base | 10 | 497 | 24 | 29 | 387 | 34 | 33 | 19 | 7 | 12 | 16 | 32 | 1103 |
| Added | 0 | 5 | 0 | 0 | 0 | 3 | 42 | 0 | 0 | 0 | 0 | 0 | 50 |
| Total | 10 | 502 | 24 | 29 | 387 | 37 | 75 | 19 | 7 | 12 | 16 | 32 | 1153 |
| #3 S. Adams St/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 17 | 116 | 10 | 7 | 134 | 21 | 26 | 39 | 24 | 3 | 46 | 23 | 466 |
| Added | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 17 | 116 | 10 | 12 | 134 | 21 | 26 | 39 | 24 | 3 | 46 | 23 | 471 |
| #4 E. Chevy Chase/E. Acacia Ave | | | | | | | | | | | | | |
| Base | 3 | 476 | 211 | 65 | 419 | 12 | 16 | 25 | 10 | 156 | 30 | 38 | 1462 |
| Added | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 3 | 476 | 211 | 65 | 419 | 12 | 21 | 25 | 10 | 156 | 30 | 38 | 1467 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 15 | 21 | 21 | 53 | 19 | 4 | 77 | 2 | 2 | 114 | 23 |
| Future Vol, veh/h | 14 | 15 | 21 | 21 | 53 | 19 | 4 | 77 | 2 | 2 | 114 | 23 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 15 | 16 | 23 | 23 | 58 | 21 | 4 | 84 | 2 | 2 | 124 | 25 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.7 | 8.1 | 8 | 8.3 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 5% | 28% | 23% | 1% |
| Vol Thru, % | 93% | 30% | 57% | 82% |
| Vol Right, % | 2% | 42% | 20% | 17% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 83 | 50 | 93 | 139 |
| LT Vol | 4 | 14 | 21 | 2 |
| Through Vol | 77 | 15 | 53 | 114 |
| RT Vol | 2 | 21 | 19 | 23 |
| Lane Flow Rate | 90 | 54 | 101 | 151 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.111 | 0.066 | 0.125 | 0.18 |
| Departure Headway (Hd) | 4.448 | 4.397 | 4.46 | 4.294 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 807 | 816 | 806 | 837 |
| Service Time | 2.464 | 2.416 | 2.477 | 2.309 |
| HCM Lane V/C Ratio | 0.112 | 0.066 | 0.125 | 0.18 |
| HCM Control Delay | 8 | 7.7 | 8.1 | 8.3 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.2 | 0.4 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 19 | 64 | 25 | 0 | 0 | 2 | 19 | 62 | 6 | 12 | 101 | 34 |
| Future Vol, veh/h | 19 | 64 | 25 | 0 | 0 | 2 | 19 | 62 | 6 | 12 | 101 | 34 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 70 | 27 | 0 | 0 | 2 | 21 | 67 | 7 | 13 | 110 | 37 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.1 | 7.1 | 8 | 8.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 22% | 18% | 0% | 8% |
| Vol Thru, % | 71% | 59% | 0% | 69% |
| Vol Right, % | 7% | 23% | 100% | 23% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 87 | 108 | 2 | 147 |
| LT Vol | 19 | 19 | 0 | 12 |
| Through Vol | 62 | 64 | 0 | 101 |
| RT Vol | 6 | 25 | 2 | 34 |
| Lane Flow Rate | 95 | 117 | 2 | 160 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.115 | 0.143 | 0.002 | 0.186 |
| Departure Headway (Hd) | 4.375 | 4.394 | 4.029 | 4.198 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 822 | 818 | 890 | 860 |
| Service Time | 2.387 | 2.407 | 2.046 | 2.198 |
| HCM Lane V/C Ratio | 0.116 | 0.143 | 0.002 | 0.186 |
| HCM Control Delay | 8 | 8.1 | 7.1 | 8.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.5 | 0 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.9 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 34 | 34 | 16 | 11 | 58 | 13 | 20 | 136 | 11 | 13 | 142 | 42 |
| Future Vol, veh/h | 34 | 34 | 16 | 11 | 58 | 13 | 20 | 136 | 11 | 13 | 142 | 42 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 37 | 37 | 17 | 12 | 63 | 14 | 22 | 148 | 12 | 14 | 154 | 46 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.7 | 8.6 | 9 | 9.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 12% | 40% | 13% | 7% |
| Vol Thru, % | 81% | 40% | 71% | 72% |
| Vol Right, % | 7% | 19% | 16% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 167 | 84 | 82 | 197 |
| LT Vol | 20 | 34 | 11 | 13 |
| Through Vol | 136 | 34 | 58 | 142 |
| RT Vol | 11 | 16 | 13 | 42 |
| Lane Flow Rate | 182 | 91 | 89 | 214 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.232 | 0.125 | 0.121 | 0.266 |
| Departure Headway (Hd) | 4.604 | 4.919 | 4.889 | 4.474 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 779 | 726 | 731 | 801 |
| Service Time | 2.644 | 2.968 | 2.937 | 2.512 |
| HCM Lane V/C Ratio | 0.234 | 0.125 | 0.122 | 0.267 |
| HCM Control Delay | 9 | 8.7 | 8.6 | 9.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.9 | 0.4 | 0.4 | 1.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.5 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 26 | 38 | 24 | 3 | 45 | 23 | 17 | 114 | 10 | 7 | 132 | 21 |
| Future Vol, veh/h | 26 | 38 | 24 | 3 | 45 | 23 | 17 | 114 | 10 | 7 | 132 | 21 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 28 | 41 | 26 | 3 | 49 | 25 | 18 | 124 | 11 | 8 | 143 | 23 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.4 | 8.2 | 8.6 | 8.7 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 12% | 30% | 4% | 4% |
| Vol Thru, % | 81% | 43% | 63% | 82% |
| Vol Right, % | 7% | 27% | 32% | 13% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 141 | 88 | 71 | 160 |
| LT Vol | 17 | 26 | 3 | 7 |
| Through Vol | 114 | 38 | 45 | 132 |
| RT Vol | 10 | 24 | 23 | 21 |
| Lane Flow Rate | 153 | 96 | 77 | 174 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.192 | 0.124 | 0.099 | 0.215 |
| Departure Headway (Hd) | 4.517 | 4.669 | 4.612 | 4.445 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 794 | 767 | 776 | 807 |
| Service Time | 2.547 | 2.702 | 2.646 | 2.473 |
| HCM Lane V/C Ratio | 0.193 | 0.125 | 0.099 | 0.216 |
| HCM Control Delay | 8.6 | 8.4 | 8.2 | 8.7 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.7 | 0.4 | 0.3 | 0.8 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 15 | 21 | 21 | 53 | 19 | 4 | 77 | 2 | 2 | 114 | 23 |
| Future Vol, veh/h | 14 | 15 | 21 | 21 | 53 | 19 | 4 | 77 | 2 | 2 | 114 | 23 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 15 | 16 | 23 | 23 | 58 | 21 | 4 | 84 | 2 | 2 | 124 | 25 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.7 | 8.1 | 8 | 8.3 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 5% | 28% | 23% | 1% |
| Vol Thru, % | 93% | 30% | 57% | 82% |
| Vol Right, % | 2% | 42% | 20% | 17% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 83 | 50 | 93 | 139 |
| LT Vol | 4 | 14 | 21 | 2 |
| Through Vol | 77 | 15 | 53 | 114 |
| RT Vol | 2 | 21 | 19 | 23 |
| Lane Flow Rate | 90 | 54 | 101 | 151 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.111 | 0.066 | 0.125 | 0.18 |
| Departure Headway (Hd) | 4.448 | 4.397 | 4.46 | 4.294 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 807 | 816 | 806 | 837 |
| Service Time | 2.464 | 2.416 | 2.477 | 2.309 |
| HCM Lane V/C Ratio | 0.112 | 0.066 | 0.125 | 0.18 |
| HCM Control Delay | 8 | 7.7 | 8.1 | 8.3 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.2 | 0.4 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 19 | 64 | 25 | 0 | 0 | 2 | 19 | 62 | 6 | 12 | 101 | 34 |
| Future Vol, veh/h | 19 | 64 | 25 | 0 | 0 | 2 | 19 | 62 | 6 | 12 | 101 | 34 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 70 | 27 | 0 | 0 | 2 | 21 | 67 | 7 | 13 | 110 | 37 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.1 | 7.1 | 8 | 8.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 22% | 18% | 0% | 8% |
| Vol Thru, % | 71% | 59% | 0% | 69% |
| Vol Right, % | 7% | 23% | 100% | 23% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 87 | 108 | 2 | 147 |
| LT Vol | 19 | 19 | 0 | 12 |
| Through Vol | 62 | 64 | 0 | 101 |
| RT Vol | 6 | 25 | 2 | 34 |
| Lane Flow Rate | 95 | 117 | 2 | 160 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.115 | 0.143 | 0.002 | 0.186 |
| Departure Headway (Hd) | 4.375 | 4.394 | 4.029 | 4.198 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 822 | 818 | 890 | 860 |
| Service Time | 2.387 | 2.407 | 2.046 | 2.198 |
| HCM Lane V/C Ratio | 0.116 | 0.143 | 0.002 | 0.186 |
| HCM Control Delay | 8 | 8.1 | 7.1 | 8.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.5 | 0 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 34 | 34 | 16 | 11 | 58 | 13 | 20 | 136 | 16 | 13 | 142 | 42 |
| Future Vol, veh/h | 34 | 34 | 16 | 11 | 58 | 13 | 20 | 136 | 16 | 13 | 142 | 42 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 37 | 37 | 17 | 12 | 63 | 14 | 22 | 148 | 17 | 14 | 154 | 46 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.7 | 8.6 | 9.1 | 9.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 12% | 40% | 13% | 7% |
| Vol Thru, % | 79% | 40% | 71% | 72% |
| Vol Right, % | 9% | 19% | 16% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 172 | 84 | 82 | 197 |
| LT Vol | 20 | 34 | 11 | 13 |
| Through Vol | 136 | 34 | 58 | 142 |
| RT Vol | 16 | 16 | 13 | 42 |
| Lane Flow Rate | 187 | 91 | 89 | 214 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.238 | 0.125 | 0.121 | 0.266 |
| Departure Headway (Hd) | 4.588 | 4.933 | 4.902 | 4.48 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 781 | 724 | 729 | 801 |
| Service Time | 2.627 | 2.98 | 2.949 | 2.518 |
| HCM Lane V/C Ratio | 0.239 | 0.126 | 0.122 | 0.267 |
| HCM Control Delay | 9.1 | 8.7 | 8.6 | 9.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.9 | 0.4 | 0.4 | 1.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 26 | 38 | 24 | 3 | 45 | 23 | 17 | 114 | 10 | 12 | 132 | 21 |
| Future Vol, veh/h | 26 | 38 | 24 | 3 | 45 | 23 | 17 | 114 | 10 | 12 | 132 | 21 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 28 | 41 | 26 | 3 | 49 | 25 | 18 | 124 | 11 | 13 | 143 | 23 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.4 | 8.2 | 8.6 | 8.8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 12% | 30% | 4% | 7% |
| Vol Thru, % | 81% | 43% | 63% | 80% |
| Vol Right, % | 7% | 27% | 32% | 13% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 141 | 88 | 71 | 165 |
| LT Vol | 17 | 26 | 3 | 12 |
| Through Vol | 114 | 38 | 45 | 132 |
| RT Vol | 10 | 24 | 23 | 21 |
| Lane Flow Rate | 153 | 96 | 77 | 179 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.193 | 0.124 | 0.099 | 0.222 |
| Departure Headway (Hd) | 4.526 | 4.682 | 4.626 | 4.455 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 792 | 764 | 773 | 805 |
| Service Time | 2.553 | 2.717 | 2.661 | 2.482 |
| HCM Lane V/C Ratio | 0.193 | 0.126 | 0.1 | 0.222 |
| HCM Control Delay | 8.6 | 8.4 | 8.2 | 8.8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.7 | 0.4 | 0.3 | 0.8 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 21 | 54 | 19 | 14 | 15 | 21 | 4 | 78 | 2 | 2 | 116 | 23 |
| Future Vol, veh/h | 21 | 54 | 19 | 14 | 15 | 21 | 4 | 78 | 2 | 2 | 116 | 23 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 23 | 59 | 21 | 15 | 16 | 23 | 4 | 85 | 2 | 2 | 126 | 25 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.1 | 7.7 | 8 | 8.3 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 5% | 22% | 28% | 1% |
| Vol Thru, % | 93% | 57% | 30% | 82% |
| Vol Right, % | 2% | 20% | 42% | 16% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 84 | 94 | 50 | 141 |
| LT Vol | 4 | 21 | 14 | 2 |
| Through Vol | 78 | 54 | 15 | 116 |
| RT Vol | 2 | 19 | 21 | 23 |
| Lane Flow Rate | 91 | 102 | 54 | 153 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.113 | 0.127 | 0.067 | 0.183 |
| Departure Headway (Hd) | 4.455 | 4.471 | 4.408 | 4.301 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 806 | 803 | 814 | 835 |
| Service Time | 2.473 | 2.489 | 2.427 | 2.318 |
| HCM Lane V/C Ratio | 0.113 | 0.127 | 0.066 | 0.183 |
| HCM Control Delay | 8 | 8.1 | 7.7 | 8.3 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.4 | 0.2 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 19 | 65 | 25 | 0 | 0 | 2 | 19 | 63 | 6 | 12 | 102 | 34 |
| Future Vol, veh/h | 19 | 65 | 25 | 0 | 0 | 2 | 19 | 63 | 6 | 12 | 102 | 34 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 71 | 27 | 0 | 0 | 2 | 21 | 68 | 7 | 13 | 111 | 37 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.2 | 7.1 | 8 | 8.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 22% | 17% | 0% | 8% |
| Vol Thru, % | 72% | 60% | 0% | 69% |
| Vol Right, % | 7% | 23% | 100% | 23% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 88 | 109 | 2 | 148 |
| LT Vol | 19 | 19 | 0 | 12 |
| Through Vol | 63 | 65 | 0 | 102 |
| RT Vol | 6 | 25 | 2 | 34 |
| Lane Flow Rate | 96 | 118 | 2 | 161 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.116 | 0.145 | 0.002 | 0.188 |
| Departure Headway (Hd) | 4.38 | 4.401 | 4.036 | 4.204 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 821 | 817 | 888 | 859 |
| Service Time | 2.393 | 2.414 | 2.054 | 2.204 |
| HCM Lane V/C Ratio | 0.117 | 0.144 | 0.002 | 0.187 |
| HCM Control Delay | 8 | 8.2 | 7.1 | 8.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.5 | 0 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 34 | 34 | 16 | 11 | 59 | 13 | 20 | 138 | 11 | 13 | 144 | 43 |
| Future Vol, veh/h | 34 | 34 | 16 | 11 | 59 | 13 | 20 | 138 | 11 | 13 | 144 | 43 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 37 | 37 | 17 | 12 | 64 | 14 | 22 | 150 | 12 | 14 | 157 | 47 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.7 | 8.6 | 9.1 | 9.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 12% | 40% | 13% | 7% |
| Vol Thru, % | 82% | 40% | 71% | 72% |
| Vol Right, % | 7% | 19% | 16% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 169 | 84 | 83 | 200 |
| LT Vol | 20 | 34 | 11 | 13 |
| Through Vol | 138 | 34 | 59 | 144 |
| RT Vol | 11 | 16 | 13 | 43 |
| Lane Flow Rate | 184 | 91 | 90 | 217 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.235 | 0.125 | 0.123 | 0.271 |
| Departure Headway (Hd) | 4.612 | 4.935 | 4.902 | 4.48 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 777 | 723 | 728 | 800 |
| Service Time | 2.653 | 2.986 | 2.953 | 2.517 |
| HCM Lane V/C Ratio | 0.237 | 0.126 | 0.124 | 0.271 |
| HCM Control Delay | 9.1 | 8.7 | 8.6 | 9.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.9 | 0.4 | 0.4 | 1.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 26 | 39 | 24 | 3 | 46 | 23 | 17 | 116 | 10 | 7 | 134 | 21 |
| Future Vol, veh/h | 26 | 39 | 24 | 3 | 46 | 23 | 17 | 116 | 10 | 7 | 134 | 21 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 28 | 42 | 26 | 3 | 50 | 25 | 18 | 126 | 11 | 8 | 146 | 23 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.4 | 8.2 | 8.7 | 8.7 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 12% | 29% | 4% | 4% |
| Vol Thru, % | 81% | 44% | 64% | 83% |
| Vol Right, % | 7% | 27% | 32% | 13% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 143 | 89 | 72 | 162 |
| LT Vol | 17 | 26 | 3 | 7 |
| Through Vol | 116 | 39 | 46 | 134 |
| RT Vol | 10 | 24 | 23 | 21 |
| Lane Flow Rate | 155 | 97 | 78 | 176 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.196 | 0.126 | 0.101 | 0.218 |
| Departure Headway (Hd) | 4.528 | 4.683 | 4.628 | 4.456 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 793 | 764 | 773 | 805 |
| Service Time | 2.558 | 2.718 | 2.664 | 2.486 |
| HCM Lane V/C Ratio | 0.195 | 0.127 | 0.101 | 0.219 |
| HCM Control Delay | 8.7 | 8.4 | 8.2 | 8.7 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.7 | 0.4 | 0.3 | 0.8 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 21 | 54 | 19 | 14 | 15 | 21 | 4 | 78 | 2 | 2 | 116 | 23 |
| Future Vol, veh/h | 21 | 54 | 19 | 14 | 15 | 21 | 4 | 78 | 2 | 2 | 116 | 23 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 23 | 59 | 21 | 15 | 16 | 23 | 4 | 85 | 2 | 2 | 126 | 25 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.1 | 7.7 | 8 | 8.3 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 5% | 22% | 28% | 1% |
| Vol Thru, % | 93% | 57% | 30% | 82% |
| Vol Right, % | 2% | 20% | 42% | 16% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 84 | 94 | 50 | 141 |
| LT Vol | 4 | 21 | 14 | 2 |
| Through Vol | 78 | 54 | 15 | 116 |
| RT Vol | 2 | 19 | 21 | 23 |
| Lane Flow Rate | 91 | 102 | 54 | 153 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.113 | 0.127 | 0.067 | 0.183 |
| Departure Headway (Hd) | 4.455 | 4.471 | 4.408 | 4.301 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 806 | 803 | 814 | 835 |
| Service Time | 2.473 | 2.489 | 2.427 | 2.318 |
| HCM Lane V/C Ratio | 0.113 | 0.127 | 0.066 | 0.183 |
| HCM Control Delay | 8 | 8.1 | 7.7 | 8.3 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.4 | 0.2 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 19 | 65 | 25 | 0 | 0 | 2 | 19 | 63 | 6 | 12 | 102 | 34 |
| Future Vol, veh/h | 19 | 65 | 25 | 0 | 0 | 2 | 19 | 63 | 6 | 12 | 102 | 34 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 71 | 27 | 0 | 0 | 2 | 21 | 68 | 7 | 13 | 111 | 37 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.2 | 7.1 | 8 | 8.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 22% | 17% | 0% | 8% |
| Vol Thru, % | 72% | 60% | 0% | 69% |
| Vol Right, % | 7% | 23% | 100% | 23% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 88 | 109 | 2 | 148 |
| LT Vol | 19 | 19 | 0 | 12 |
| Through Vol | 63 | 65 | 0 | 102 |
| RT Vol | 6 | 25 | 2 | 34 |
| Lane Flow Rate | 96 | 118 | 2 | 161 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.116 | 0.145 | 0.002 | 0.188 |
| Departure Headway (Hd) | 4.38 | 4.401 | 4.036 | 4.204 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 821 | 817 | 888 | 859 |
| Service Time | 2.393 | 2.414 | 2.054 | 2.204 |
| HCM Lane V/C Ratio | 0.117 | 0.144 | 0.002 | 0.187 |
| HCM Control Delay | 8 | 8.2 | 7.1 | 8.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 0.5 | 0 | 0.7 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 34 | 34 | 16 | 11 | 59 | 13 | 20 | 138 | 16 | 13 | 144 | 43 |
| Future Vol, veh/h | 34 | 34 | 16 | 11 | 59 | 13 | 20 | 138 | 16 | 13 | 144 | 43 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 37 | 37 | 17 | 12 | 64 | 14 | 22 | 150 | 17 | 14 | 157 | 47 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.7 | 8.7 | 9.1 | 9.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 11% | 40% | 13% | 7% |
| Vol Thru, % | 79% | 40% | 71% | 72% |
| Vol Right, % | 9% | 19% | 16% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 174 | 84 | 83 | 200 |
| LT Vol | 20 | 34 | 11 | 13 |
| Through Vol | 138 | 34 | 59 | 144 |
| RT Vol | 16 | 16 | 13 | 43 |
| Lane Flow Rate | 189 | 91 | 90 | 217 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.241 | 0.125 | 0.123 | 0.271 |
| Departure Headway (Hd) | 4.596 | 4.948 | 4.916 | 4.486 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 779 | 722 | 726 | 800 |
| Service Time | 2.636 | 2.997 | 2.964 | 2.523 |
| HCM Lane V/C Ratio | 0.243 | 0.126 | 0.124 | 0.271 |
| HCM Control Delay | 9.1 | 8.7 | 8.7 | 9.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.9 | 0.4 | 0.4 | 1.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 26 | 39 | 24 | 3 | 46 | 23 | 17 | 116 | 10 | 12 | 134 | 21 |
| Future Vol, veh/h | 26 | 39 | 24 | 3 | 46 | 23 | 17 | 116 | 10 | 12 | 134 | 21 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 28 | 42 | 26 | 3 | 50 | 25 | 18 | 126 | 11 | 13 | 146 | 23 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.4 | 8.2 | 8.7 | 8.8 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 12% | 29% | 4% | 7% |
| Vol Thru, % | 81% | 44% | 64% | 80% |
| Vol Right, % | 7% | 27% | 32% | 13% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 143 | 89 | 72 | 167 |
| LT Vol | 17 | 26 | 3 | 12 |
| Through Vol | 116 | 39 | 46 | 134 |
| RT Vol | 10 | 24 | 23 | 21 |
| Lane Flow Rate | 155 | 97 | 78 | 182 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.196 | 0.126 | 0.101 | 0.225 |
| Departure Headway (Hd) | 4.535 | 4.696 | 4.641 | 4.464 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 791 | 762 | 771 | 804 |
| Service Time | 2.564 | 2.732 | 2.677 | 2.494 |
| HCM Lane V/C Ratio | 0.196 | 0.127 | 0.101 | 0.226 |
| HCM Control Delay | 8.7 | 8.4 | 8.2 | 8.8 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.7 | 0.4 | 0.3 | 0.9 |

# PDC

- ICU Analysis (Signalized)
- Synchro Analysis (Un-signalized)

Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Oceanview//210 WB Ramps | C | xxxxx | 0.756 | C | xxxxx | 0.756 | + 0.000 V/C |
| # 2 Oceanview/210 EB Ramps | D | xxxxx | 0.847 | D | xxxxx | 0.847 | + 0.000 V/C |
| # 3 Oceanview/Montrose | D | xxxxx | 0.800 | D | xxxxx | 0.800 | + 0.000 V/C |
| # 4 OceanView/Honolulu | A | xxxxx | 0.556 | A | xxxxx | 0.556 | + 0.000 V/C |
| # 5 Ocean View/Broadview | A | xxxxx | 0.507 | A | xxxxx | 0.507 | + 0.000 V/C |
| # 6 Wickham/Honolulu | A | 9.2 | 0.359 | A | 9.2 | 0.359 | + 0.000 V/C |
| # 7 Wickham/Broadview | A | 7.8 | 0.190 | A | 7.8 | 0.190 | + 0.000 V/C |
| #101 Proj Dwy North/Honolulu | A | 0.0 | 0.000 | A | 0.0 | 0.000 | + 0.000 D/V |
| #102 Proj Dwy South/Broadview | A | 0.0 | 0.000 | A | 0.0 | 0.000 | + 0.000 D/V |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Oceanview//210 WB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.756 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 58 | Level Of Service: | C |

| Street Name: | Ocean View Blvd | | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | | |
| Rights: | Include | | | Include | | | Include | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Lanes: | 1 0 | 2 0 | 0 | 0 0 | 1 1 | 0 | 0 0 | 0 0 | 0 | 0 1 | 0 0 | 1 | |
| Volume Module: | | | | | | | | | | | | | |
| Base Vol: | 265 | 493 | 0 | 0 | 567 | 251 | 0 | 0 | 0 | 366 | 0 | 282 | |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | |
| Initial Bse: | 268 | 498 | 0 | 0 | 573 | 254 | 0 | 0 | 0 | 370 | 0 | 285 | |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Initial Fut: | 268 | 498 | 0 | 0 | 573 | 254 | 0 | 0 | 0 | 370 | 0 | 285 | |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 268 | 498 | 0 | 0 | 573 | 254 | 0 | 0 | 0 | 370 | 0 | 285 | |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced Vol: | 268 | 498 | 0 | 0 | 573 | 254 | 0 | 0 | 0 | 370 | 0 | 285 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 268 | 498 | 0 | 0 | 573 | 254 | 0 | 0 | 0 | 370 | 0 | 285 | |
| Saturation Flow Module: | | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 2.00 | 0.00 | 0.00 | 1.39 | 0.61 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | |
| Final Sat.: | 1600 | 3200 | 0 | 0 | 2218 | 982 | 0 | 0 | 0 | 1600 | 0 | 1600 | |
| Capacity Analysis Module: | | | | | | | | | | | | | |
| Vol/Sat: | 0.17 | 0.16 | 0.00 | 0.00 | 0.26 | 0.26 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 | 0.18 | |
| Crit Moves: | **** | | | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Oceanview/210 EB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.847 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 79 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1 1 | 0 | 1 0 | 2 0 | 0 | 0 1 | 0 0 | 1 | 0 0 | 0 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 527 | 286 | 305 | 625 | 0 | 219 | 0 | 472 | 0 | 0 | 0 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 532 | 289 | 308 | 631 | 0 | 221 | 0 | 477 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 532 | 289 | 308 | 631 | 0 | 221 | 0 | 477 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 532 | 289 | 308 | 631 | 0 | 221 | 0 | 477 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 532 | 289 | 308 | 631 | 0 | 221 | 0 | 477 | 0 | 0 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 532 | 289 | 308 | 631 | 0 | 221 | 0 | 477 | 0 | 0 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.30 | 0.70 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0 | 2074 | 1126 | 1600 | 3200 | 0 | 1600 | 0 | 1600 | 0 | 0 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.26 | 0.26 | 0.19 | 0.20 | 0.00 | 0.14 | 0.00 | 0.30 | 0.00 | 0.00 | 0.00 |
| Crit Moves: | | **** | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Oceanview/Montrose

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.800 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 67 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | Montrose Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 1 1 | 0 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 18 | 328 | 6 | 460 | 567 | 100 | 142 | 226 | 60 | 18 | 146 | 343 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 18 | 331 | 6 | 465 | 573 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 331 | 6 | 465 | 573 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 18 | 331 | 6 | 465 | 573 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 18 | 331 | 6 | 465 | 573 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 18 | 331 | 6 | 465 | 573 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 1.70 | 0.30 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 2720 | 480 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.10 | 0.00 | 0.29 | 0.21 | 0.21 | 0.09 | 0.07 | 0.04 | 0.01 | 0.05 | 0.22 |
| Crit Moves: | | **** | | **** | | | **** | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 OceanView/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.556 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 37 | Level Of Service: | A |

| Street Name: | Oceanview Blvd | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 0 1 | 0 | 1 0 | 1 0 | 1 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 19 | 204 | 19 | 62 | 313 | 49 | 41 | 248 | 90 | 12 | 114 | 17 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 19 | 206 | 19 | 63 | 316 | 49 | 41 | 250 | 91 | 12 | 115 | 17 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 19 | 206 | 19 | 63 | 316 | 49 | 41 | 250 | 91 | 12 | 115 | 17 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 19 | 206 | 19 | 63 | 316 | 49 | 41 | 250 | 91 | 12 | 115 | 17 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 19 | 206 | 19 | 63 | 316 | 49 | 41 | 250 | 91 | 12 | 115 | 17 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 19 | 206 | 19 | 63 | 316 | 49 | 41 | 250 | 91 | 12 | 115 | 17 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.91 | 0.09 | 1.00 | 1.00 | 1.00 | 0.11 | 0.65 | 0.24 | 0.08 | 0.80 | 0.12 |
| Final Sat.: | 1600 | 1464 | 136 | 1600 | 1600 | 1600 | 173 | 1047 | 380 | 134 | 1276 | 190 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.14 | 0.14 | 0.04 | 0.20 | 0.03 | 0.03 | 0.24 | 0.24 | 0.01 | 0.09 | 0.09 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ocean View/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.507 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 34 | Level Of Service: | A |

| Street Name: | Ocean View Blvd | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 1 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 27 | 165 | 27 | 89 | 318 | 50 | 58 | 94 | 31 | 8 | 69 | 27 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 27 | 167 | 27 | 90 | 321 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 27 | 167 | 27 | 90 | 321 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 167 | 27 | 90 | 321 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 27 | 167 | 27 | 90 | 321 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 27 | 167 | 27 | 90 | 321 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.12 | 0.76 | 0.12 | 0.19 | 0.70 | 0.11 | 0.38 | 0.62 | 1.00 | 0.10 | 0.90 | 1.00 |
| Final Sat.: | 197 | 1205 | 197 | 312 | 1113 | 175 | 611 | 989 | 1600 | 166 | 1434 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.14 | 0.14 | 0.06 | 0.29 | 0.29 | 0.04 | 0.10 | 0.02 | 0.01 | 0.05 | 0.02 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Wickham/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.359 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 9.2 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 274 | 20 | 12 | 209 | 6 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 277 | 20 | 12 | 211 | 6 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 277 | 20 | 12 | 211 | 6 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 277 | 20 | 12 | 211 | 6 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 277 | 20 | 12 | 211 | 6 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 277 | 20 | 12 | 211 | 6 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.50 | 0.30 | 0.20 | 0.23 | 0.08 | 0.69 | 0.01 | 0.92 | 0.07 | 0.05 | 0.92 | 0.03 |
| Final Sat.: | 328 | 197 | 131 | 160 | 53 | 480 | 6 | 771 | 56 | 43 | 747 | 21 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.36 | 0.36 | 0.36 | 0.28 | 0.28 | 0.28 |
| Crit Moves: | **** | | | | **** | | | **** | | | **** | |
| Delay/Veh: | 8.3 | 8.3 | 8.3 | 7.8 | 7.8 | 7.8 | 9.6 | 9.6 | 9.6 | 9.0 | 9.0 | 9.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.3 | 8.3 | 8.3 | 7.8 | 7.8 | 7.8 | 9.6 | 9.6 | 9.6 | 9.0 | 9.0 | 9.0 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | 8.3 | | | 7.8 | | | 9.6 | | | 9.0 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 8.3 | | | 7.8 | | | 9.6 | | | 9.0 | | |
| LOS by Appr: | A | | | A | | | A | | | A | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 Wickham/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.190 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 7.8 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 0 | 0 0 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 87 | 0 | 0 | 165 | 4 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 88 | 0 | 0 | 167 | 4 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 88 | 0 | 0 | 167 | 4 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 88 | 0 | 0 | 167 | 4 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 88 | 0 | 0 | 167 | 4 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 88 | 0 | 0 | 167 | 4 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.00 | 0.00 | 0.25 | 0.00 | 0.75 | 0.04 | 0.96 | 0.00 | 0.00 | 0.98 | 0.02 |
| Final Sat.: | 0 | 769 | 0 | 211 | 0 | 632 | 38 | 837 | 0 | 0 | 878 | 21 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | xxxx | 0.00 | xxxx | 0.01 | xxxx | 0.01 | 0.10 | 0.10 | xxxx | xxxx | 0.19 | 0.19 |
| Crit Moves: | | **** | | **** | | | | **** | | | | **** |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | 7.1 | 7.5 | 7.5 | 0.0 | 0.0 | 7.9 | 7.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | 7.1 | 7.5 | 7.5 | 0.0 | 0.0 | 7.9 | 7.9 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 7.1 | | | 7.5 | | | 7.9 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 7.1 | | | 7.5 | | | 7.9 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |
| AllWayAvgQ: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |

Note: Queue reported is the number of cars per lane.

Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Oceanview//210 WB Ramps | D | xxxxx | 0.800 | D | xxxxx | 0.800 | + 0.000 V/C |
| # 2 Oceanview/210 EB Ramps | C | xxxxx | 0.784 | C | xxxxx | 0.784 | + 0.000 V/C |
| # 3 Oceanview/Montrose | C | xxxxx | 0.775 | C | xxxxx | 0.775 | + 0.000 V/C |
| # 4 OceanView/Honolulu | A | xxxxx | 0.572 | A | xxxxx | 0.572 | + 0.000 V/C |
| # 5 Ocean View/Broadview | A | xxxxx | 0.468 | A | xxxxx | 0.468 | + 0.000 V/C |
| # 6 Wickham/Honolulu | B | 11.4 | 0.495 | B | 11.4 | 0.495 | + 0.000 V/C |
| # 7 Wickham/Broadview | A | 7.7 | 0.173 | A | 7.7 | 0.173 | + 0.000 V/C |
| #101 Proj Dwy North/Honolulu | A | 0.0 | 0.000 | A | 0.0 | 0.000 | + 0.000 D/V |
| #102 Proj Dwy South/Broadview | A | 0.0 | 0.000 | A | 0.0 | 0.000 | + 0.000 D/V |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Oceanview//210 WB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.800 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 67 | Level Of Service: | D |

Street Name: Ocean View Blvd 210 WB Ramps

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L - | T - | R | L - | T - | R | L - | T - | R | L - | T - | R |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 0 | 0 0 | 1 1 | 0 | 0 0 | 0 0 | 0 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 415 | 533 | 0 | 0 | 457 | 226 | 0 | 0 | 0 | 278 | 0 | 353 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 419 | 538 | 0 | 0 | 462 | 228 | 0 | 0 | 0 | 281 | 0 | 357 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 419 | 538 | 0 | 0 | 462 | 228 | 0 | 0 | 0 | 281 | 0 | 357 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 419 | 538 | 0 | 0 | 462 | 228 | 0 | 0 | 0 | 281 | 0 | 357 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 419 | 538 | 0 | 0 | 462 | 228 | 0 | 0 | 0 | 281 | 0 | 357 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 419 | 538 | 0 | 0 | 462 | 228 | 0 | 0 | 0 | 281 | 0 | 357 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 0.00 | 0.00 | 1.34 | 0.66 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 0 | 0 | 2141 | 1059 | 0 | 0 | 0 | 1600 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.26 | 0.17 | 0.00 | 0.00 | 0.22 | 0.22 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.22 |
| Crit Moves: | **** | | | | **** | | | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Oceanview/210 EB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.784 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 63 | Level Of Service: | C |

| Street Name: | Oceanview Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1 1 | 0 | 1 0 | 2 0 | 0 | 0 1 | 0 0 | 1 | 0 0 | 0 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 744 | 313 | 220 | 528 | 0 | 198 | 2 | 335 | 0 | 0 | 0 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 751 | 316 | 222 | 533 | 0 | 200 | 2 | 338 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 751 | 316 | 222 | 533 | 0 | 200 | 2 | 338 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 751 | 316 | 222 | 533 | 0 | 200 | 2 | 338 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 751 | 316 | 222 | 533 | 0 | 200 | 2 | 338 | 0 | 0 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 751 | 316 | 222 | 533 | 0 | 200 | 2 | 338 | 0 | 0 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.41 | 0.59 | 1.00 | 2.00 | 0.00 | 0.99 | 0.01 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0 | 2252 | 948 | 1600 | 3200 | 0 | 1584 | 16 | 1600 | 0 | 0 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.33 | 0.33 | 0.14 | 0.17 | 0.00 | 0.13 | 0.13 | 0.21 | 0.00 | 0.00 | 0.00 |
| Crit Moves: | | **** | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Oceanview/Montrose

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.775 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 62 | Level Of Service: | C |

| Street Name: | Oceanview Blvd | | | | | | Montrose Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 1 1 | 0 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 53 | 459 | 14 | 264 | 454 | 116 | 114 | 148 | 57 | 13 | 278 | 462 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 54 | 464 | 14 | 267 | 459 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 54 | 464 | 14 | 267 | 459 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 54 | 464 | 14 | 267 | 459 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 54 | 464 | 14 | 267 | 459 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 54 | 464 | 14 | 267 | 459 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 1.59 | 0.41 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 2549 | 651 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.14 | 0.01 | 0.17 | 0.18 | 0.18 | 0.07 | 0.05 | 0.04 | 0.01 | 0.09 | 0.29 |
| Crit Moves: | | **** | | **** | | | **** | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 OceanView/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.572 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 38 | Level Of Service: | A |

| Street Name: | Oceanview Blvd | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 0 1 | 0 | 1 0 | 1 0 | 1 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 64 | 246 | 22 | 65 | 319 | 91 | 61 | 186 | 59 | 25 | 247 | 32 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 65 | 248 | 22 | 66 | 322 | 92 | 62 | 188 | 60 | 25 | 249 | 32 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 65 | 248 | 22 | 66 | 322 | 92 | 62 | 188 | 60 | 25 | 249 | 32 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 65 | 248 | 22 | 66 | 322 | 92 | 62 | 188 | 60 | 25 | 249 | 32 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 65 | 248 | 22 | 66 | 322 | 92 | 62 | 188 | 60 | 25 | 249 | 32 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 65 | 248 | 22 | 66 | 322 | 92 | 62 | 188 | 60 | 25 | 249 | 32 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.92 | 0.08 | 1.00 | 1.00 | 1.00 | 0.20 | 0.61 | 0.19 | 0.08 | 0.81 | 0.11 |
| Final Sat.: | 1600 | 1469 | 131 | 1600 | 1600 | 1600 | 319 | 973 | 308 | 132 | 1300 | 168 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.17 | 0.17 | 0.04 | 0.20 | 0.06 | 0.04 | 0.19 | 0.19 | 0.02 | 0.19 | 0.19 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ocean View/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.468 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 32 | Level Of Service: | A |

| Street Name: | Ocean View Blvd | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 1 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 27 | 195 | 17 | 62 | 272 | 45 | 50 | 122 | 28 | 7 | 120 | 56 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 27 | 197 | 17 | 63 | 275 | 45 | 51 | 123 | 28 | 7 | 121 | 57 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 27 | 197 | 17 | 63 | 275 | 45 | 51 | 123 | 28 | 7 | 121 | 57 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 197 | 17 | 63 | 275 | 45 | 51 | 123 | 28 | 7 | 121 | 57 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 27 | 197 | 17 | 63 | 275 | 45 | 51 | 123 | 28 | 7 | 121 | 57 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 27 | 197 | 17 | 63 | 275 | 45 | 51 | 123 | 28 | 7 | 121 | 57 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.11 | 0.82 | 0.07 | 0.16 | 0.72 | 0.12 | 0.29 | 0.71 | 1.00 | 0.06 | 0.94 | 1.00 |
| Final Sat.: | 181 | 1305 | 114 | 262 | 1148 | 190 | 465 | 1135 | 1600 | 88 | 1512 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.15 | 0.15 | 0.04 | 0.24 | 0.24 | 0.03 | 0.11 | 0.02 | 0.00 | 0.08 | 0.04 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Wickham/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.495 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 11.4 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Street Name: | Wickham Way | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 370 | 8 | 30 | 330 | 16 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 374 | 8 | 30 | 333 | 16 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 374 | 8 | 30 | 333 | 16 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 374 | 8 | 30 | 333 | 16 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 374 | 8 | 30 | 333 | 16 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 374 | 8 | 30 | 333 | 16 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.54 | 0.22 | 0.24 | 0.32 | 0.27 | 0.41 | 0.01 | 0.97 | 0.02 | 0.08 | 0.88 | 0.04 |
| Final Sat.: | 313 | 125 | 138 | 186 | 157 | 243 | 8 | 755 | 16 | 62 | 683 | 33 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | 0.07 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Crit Moves: | **** | | | | | **** | | **** | | **** | | |
| Delay/Veh: | 9.0 | 9.0 | 9.0 | 8.8 | 8.8 | 8.8 | 11.7 | 11.7 | 11.7 | 11.6 | 11.6 | 11.6 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.0 | 9.0 | 9.0 | 8.8 | 8.8 | 8.8 | 11.7 | 11.7 | 11.7 | 11.6 | 11.6 | 11.6 |
| LOS by Move: | A | A | A | A | A | A | B | B | B | B | B | B |
| ApproachDel: | 9.0 | | | 8.8 | | | 11.7 | | | 11.6 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 9.0 | | | 8.8 | | | 11.7 | | | 11.6 | | |
| LOS by Appr: | A | | | A | | | B | | | B | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 Wickham/Broadview

Cycle (sec): 100 Critical Vol./Cap.(X): 0.173
Loss Time (sec): 0 Average Delay (sec/veh): 7.7
Optimal Cycle: 0 Level Of Service: A

| Street Name: | Wickham Way | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 0 | 0 0 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 128 | 0 | 0 | 99 | 8 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 129 | 0 | 0 | 100 | 8 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 129 | 0 | 0 | 100 | 8 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 129 | 0 | 0 | 100 | 8 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 129 | 0 | 0 | 100 | 8 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 129 | 0 | 0 | 100 | 8 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.00 | 0.00 | 0.19 | 0.00 | 0.81 | 0.15 | 0.85 | 0.00 | 0.00 | 0.93 | 0.07 |
| Final Sat.: | 0 | 767 | 0 | 163 | 0 | 691 | 129 | 749 | 0 | 0 | 817 | 66 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | xxxx | 0.00 | xxxx | 0.02 | xxxx | 0.02 | 0.17 | 0.17 | xxxx | xxxx | 0.12 | 0.12 |
| Crit Moves: | | **** | | **** | | | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | 7.1 | 7.9 | 7.9 | 0.0 | 0.0 | 7.6 | 7.6 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | 7.1 | 7.9 | 7.9 | 0.0 | 0.0 | 7.6 | 7.6 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 7.1 | | | 7.9 | | | 7.6 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 7.1 | | | 7.9 | | | 7.6 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |
| AllWayAvgQ: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |

Note: Queue reported is the number of cars per lane.

Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Oceanview//210 WB Ramps | C | xxxxx | 0.756 | C | xxxxx | 0.773 | + 0.017 V/C |
| # 2 Oceanview/210 EB Ramps | D | xxxxx | 0.847 | D | xxxxx | 0.861 | + 0.014 V/C |
| # 3 Oceanview/Montrose | D | xxxxx | 0.800 | D | xxxxx | 0.803 | + 0.003 V/C |
| # 4 OceanView/Honolulu | A | xxxxx | 0.556 | A | xxxxx | 0.580 | + 0.023 V/C |
| # 5 Ocean View/Broadview | A | xxxxx | 0.507 | A | xxxxx | 0.533 | + 0.026 V/C |
| # 6 Wickham/Honolulu | A | 9.2 | 0.359 | A | 9.3 | 0.368 | + 0.009 V/C |
| # 7 Wickham/Broadview | A | 7.8 | 0.190 | A | 7.8 | 0.194 | + 0.004 V/C |
| #101 Proj Dwy North/Honolulu | A | 0.0 | 0.000 | A | 0.2 | 0.000 | + 0.000 D/V |
| #102 Proj Dwy South/Broadview | A | 0.0 | 0.000 | A | 0.3 | 0.000 | + 0.000 D/V |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Oceanview//210 WB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.773 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 61 | Level Of Service: | C |

| Street Name: | Ocean View Blvd | | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | | |
| Rights: | Include | | | Include | | | Include | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Lanes: | 1 0 | 2 0 | 0 | 0 0 | 1 1 | 0 | 0 0 | 0 0 | 0 | 0 1 | 0 0 | 1 | |
| Volume Module: | | | | | | | | | | | | | |
| Base Vol: | 265 | 493 | 0 | 0 | 567 | 251 | 0 | 0 | 0 | 366 | 0 | 282 | |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | |
| Initial Bse: | 268 | 498 | 0 | 0 | 573 | 254 | 0 | 0 | 0 | 370 | 0 | 285 | |
| Added Vol: | 4 | 2 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Initial Fut: | 272 | 500 | 0 | 0 | 582 | 254 | 0 | 0 | 0 | 388 | 0 | 285 | |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 272 | 500 | 0 | 0 | 582 | 254 | 0 | 0 | 0 | 388 | 0 | 285 | |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced Vol: | 272 | 500 | 0 | 0 | 582 | 254 | 0 | 0 | 0 | 388 | 0 | 285 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 272 | 500 | 0 | 0 | 582 | 254 | 0 | 0 | 0 | 388 | 0 | 285 | |
| Saturation Flow Module: | | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 2.00 | 0.00 | 0.00 | 1.39 | 0.61 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | |
| Final Sat.: | 1600 | 3200 | 0 | 0 | 2229 | 971 | 0 | 0 | 0 | 1600 | 0 | 1600 | |
| Capacity Analysis Module: | | | | | | | | | | | | | |
| Vol/Sat: | 0.17 | 0.16 | 0.00 | 0.00 | 0.26 | 0.26 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.18 | |
| Crit Moves: | **** | | | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Oceanview/210 EB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.861 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 84 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1 1 | 0 | 1 0 | 2 0 | 0 | 0 1 | 0 0 | 1 | 0 0 | 0 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 527 | 286 | 305 | 625 | 0 | 219 | 0 | 472 | 0 | 0 | 0 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 532 | 289 | 308 | 631 | 0 | 221 | 0 | 477 | 0 | 0 | 0 |
| Added Vol: | 0 | 6 | 4 | 0 | 27 | 0 | 0 | 0 | 18 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 538 | 293 | 308 | 658 | 0 | 221 | 0 | 495 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 538 | 293 | 308 | 658 | 0 | 221 | 0 | 495 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 538 | 293 | 308 | 658 | 0 | 221 | 0 | 495 | 0 | 0 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 538 | 293 | 308 | 658 | 0 | 221 | 0 | 495 | 0 | 0 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.30 | 0.70 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0 | 2072 | 1128 | 1600 | 3200 | 0 | 1600 | 0 | 1600 | 0 | 0 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.26 | 0.26 | 0.19 | 0.21 | 0.00 | 0.14 | 0.00 | 0.31 | 0.00 | 0.00 | 0.00 |
| Crit Moves: | | **** | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Oceanview/Montrose

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.803 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 67 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | Montrose Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 1 1 | 0 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 18 | 328 | 6 | 460 | 567 | 100 | 142 | 226 | 60 | 18 | 146 | 343 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 18 | 331 | 6 | 465 | 573 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| Added Vol: | 0 | 11 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 342 | 6 | 465 | 618 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 18 | 342 | 6 | 465 | 618 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 18 | 342 | 6 | 465 | 618 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 18 | 342 | 6 | 465 | 618 | 101 | 143 | 228 | 61 | 18 | 147 | 346 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 1.72 | 0.28 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 2750 | 450 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.11 | 0.00 | 0.29 | 0.22 | 0.22 | 0.09 | 0.07 | 0.04 | 0.01 | 0.05 | 0.22 |
| Crit Moves: | | **** | | **** | | | **** | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 OceanView/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.580 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 38 | Level Of Service: | A |

| Street Name: | Oceanview Blvd | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 0 1 | 0 | 1 0 | 1 0 | 1 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 19 | 204 | 19 | 62 | 313 | 49 | 41 | 248 | 90 | 12 | 114 | 17 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 19 | 206 | 19 | 63 | 316 | 49 | 41 | 250 | 91 | 12 | 115 | 17 |
| Added Vol: | 9 | 8 | 2 | 0 | 23 | 23 | 3 | 2 | 0 | 0 | 14 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 28 | 214 | 21 | 63 | 339 | 72 | 44 | 252 | 91 | 12 | 129 | 17 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 28 | 214 | 21 | 63 | 339 | 72 | 44 | 252 | 91 | 12 | 129 | 17 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 28 | 214 | 21 | 63 | 339 | 72 | 44 | 252 | 91 | 12 | 129 | 17 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 28 | 214 | 21 | 63 | 339 | 72 | 44 | 252 | 91 | 12 | 129 | 17 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.91 | 0.09 | 1.00 | 1.00 | 1.00 | 0.11 | 0.66 | 0.23 | 0.08 | 0.81 | 0.11 |
| Final Sat.: | 1600 | 1456 | 144 | 1600 | 1600 | 1600 | 183 | 1042 | 375 | 122 | 1304 | 173 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.15 | 0.15 | 0.04 | 0.21 | 0.05 | 0.03 | 0.24 | 0.24 | 0.01 | 0.10 | 0.10 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ocean View/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.533 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 35 | Level Of Service: | A |

| Street Name: | Ocean View Blvd | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 1 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 27 | 165 | 27 | 89 | 318 | 50 | 58 | 94 | 31 | 8 | 69 | 27 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 27 | 167 | 27 | 90 | 321 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| Added Vol: | 9 | 9 | 0 | 0 | 0 | 23 | 9 | 1 | 4 | 0 | 5 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 36 | 176 | 27 | 90 | 321 | 74 | 68 | 96 | 35 | 8 | 75 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 36 | 176 | 27 | 90 | 321 | 74 | 68 | 96 | 35 | 8 | 75 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 36 | 176 | 27 | 90 | 321 | 74 | 68 | 96 | 35 | 8 | 75 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 36 | 176 | 27 | 90 | 321 | 74 | 68 | 96 | 35 | 8 | 75 | 27 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.15 | 0.74 | 0.11 | 0.19 | 0.66 | 0.15 | 0.41 | 0.59 | 1.00 | 0.10 | 0.90 | 1.00 |
| Final Sat.: | 243 | 1175 | 182 | 297 | 1061 | 243 | 661 | 939 | 1600 | 156 | 1444 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.15 | 0.15 | 0.06 | 0.30 | 0.30 | 0.04 | 0.10 | 0.02 | 0.01 | 0.05 | 0.02 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Wickham/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.368 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 9.3 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - | T - | R | L - | T - | R | L - | T - | R | L - | T - | R |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 274 | 20 | 12 | 209 | 6 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 277 | 20 | 12 | 211 | 6 |
| Added Vol: | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 5 | 0 | 7 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 21 | 12 | 14 | 6 | 2 | 18 | 2 | 282 | 20 | 19 | 211 | 6 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 21 | 12 | 14 | 6 | 2 | 18 | 2 | 282 | 20 | 19 | 211 | 6 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 21 | 12 | 14 | 6 | 2 | 18 | 2 | 282 | 20 | 19 | 211 | 6 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 21 | 12 | 14 | 6 | 2 | 18 | 2 | 282 | 20 | 19 | 211 | 6 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.45 | 0.25 | 0.30 | 0.23 | 0.08 | 0.69 | 0.01 | 0.93 | 0.06 | 0.08 | 0.89 | 0.03 |
| Final Sat.: | 295 | 169 | 196 | 158 | 53 | 475 | 5 | 766 | 55 | 65 | 719 | 21 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.07 | 0.07 | 0.04 | 0.04 | 0.04 | 0.37 | 0.37 | 0.37 | 0.29 | 0.29 | 0.29 |
| Crit Moves: | **** | | | | **** | | | **** | | | **** | |
| Delay/Veh: | 8.3 | 8.3 | 8.3 | 7.9 | 7.9 | 7.9 | 9.7 | 9.7 | 9.7 | 9.1 | 9.1 | 9.1 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.3 | 8.3 | 8.3 | 7.9 | 7.9 | 7.9 | 9.7 | 9.7 | 9.7 | 9.1 | 9.1 | 9.1 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | 8.3 | | | 7.9 | | | 9.7 | | | 9.1 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 8.3 | | | 7.9 | | | 9.7 | | | 9.1 | | |
| LOS by Appr: | A | | | A | | | A | | | A | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 Wickham/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.194 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 7.8 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 0 | 0 0 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 87 | 0 | 0 | 165 | 4 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 88 | 0 | 0 | 167 | 4 |
| Added Vol: | 0 | 0 | 0 | 10 | 0 | 1 | 2 | 2 | 0 | 0 | 1 | 1 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 12 | 0 | 7 | 6 | 90 | 0 | 0 | 168 | 5 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 12 | 0 | 7 | 6 | 90 | 0 | 0 | 168 | 5 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 12 | 0 | 7 | 6 | 90 | 0 | 0 | 168 | 5 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 0 | 0 | 12 | 0 | 7 | 6 | 90 | 0 | 0 | 168 | 5 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.00 | 0.00 | 0.63 | 0.00 | 0.37 | 0.06 | 0.94 | 0.00 | 0.00 | 0.97 | 0.03 |
| Final Sat.: | 0 | 762 | 0 | 494 | 0 | 290 | 55 | 812 | 0 | 0 | 866 | 26 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | xxxx | 0.00 | xxxx | 0.02 | xxxx | 0.02 | 0.11 | 0.11 | xxxx | xxxx | 0.19 | 0.19 |
| Crit Moves: | | **** | | **** | | | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 7.4 | 0.0 | 7.4 | 7.6 | 7.6 | 0.0 | 0.0 | 8.0 | 8.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 7.4 | 0.0 | 7.4 | 7.6 | 7.6 | 0.0 | 0.0 | 8.0 | 8.0 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 7.4 | | | 7.6 | | | 8.0 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 7.4 | | | 7.6 | | | 8.0 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |
| AllWayAvgQ: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |

Note: Queue reported is the number of cars per lane.

Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Oceanview//210 WB Ramps | D | xxxxx | 0.800 | D | xxxxx | 0.808 | + 0.008 V/C |
| # 2 Oceanview/210 EB Ramps | C | xxxxx | 0.784 | C | xxxxx | 0.799 | + 0.015 V/C |
| # 3 Oceanview/Montrose | C | xxxxx | 0.775 | C | xxxxx | 0.783 | + 0.008 V/C |
| # 4 OceanView/Honolulu | A | xxxxx | 0.572 | A | xxxxx | 0.595 | + 0.023 V/C |
| # 5 Ocean View/Broadview | A | xxxxx | 0.468 | A | xxxxx | 0.497 | + 0.029 V/C |
| # 6 Wickham/Honolulu | B | 11.4 | 0.495 | B | 11.6 | 0.505 | + 0.010 V/C |
| # 7 Wickham/Broadview | A | 7.7 | 0.173 | A | 7.8 | 0.179 | + 0.007 V/C |
| #101 Proj Dwy North/Honolulu | A | 0.0 | 0.000 | B | 0.1 | 0.000 | + 0.000 D/V |
| #102 Proj Dwy South/Broadview | A | 0.0 | 0.000 | B | 0.4 | 0.000 | + 0.000 D/V |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Oceanview//210 WB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.808 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 69 | Level Of Service: | D |

| Street Name: | Ocean View Blvd | | | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 0 | 0 0 | 1 1 | 0 | 0 0 | 0 0 | 0 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 415 | 533 | 0 | 0 | 457 | 226 | 0 | 0 | 0 | 278 | 0 | 353 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 419 | 538 | 0 | 0 | 462 | 228 | 0 | 0 | 0 | 281 | 0 | 357 |
| Added Vol: | 10 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 12 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 429 | 543 | 0 | 0 | 468 | 228 | 0 | 0 | 0 | 293 | 0 | 357 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 429 | 543 | 0 | 0 | 468 | 228 | 0 | 0 | 0 | 293 | 0 | 357 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 429 | 543 | 0 | 0 | 468 | 228 | 0 | 0 | 0 | 293 | 0 | 357 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 429 | 543 | 0 | 0 | 468 | 228 | 0 | 0 | 0 | 293 | 0 | 357 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 0.00 | 0.00 | 1.34 | 0.66 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 0 | 0 | 2150 | 1050 | 0 | 0 | 0 | 1600 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.27 | 0.17 | 0.00 | 0.00 | 0.22 | 0.22 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.22 |
| Crit Moves: | **** | | | | **** | | | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Oceanview/210 EB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.799 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 67 | Level Of Service: | C |

| Street Name: | Oceanview Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1 1 | 0 | 1 0 | 2 0 | 0 | 0 1 | 0 0 | 1 | 0 0 | 0 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 744 | 313 | 220 | 528 | 0 | 198 | 2 | 335 | 0 | 0 | 0 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 751 | 316 | 222 | 533 | 0 | 200 | 2 | 338 | 0 | 0 | 0 |
| Added Vol: | 0 | 15 | 10 | 0 | 19 | 0 | 0 | 0 | 12 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 766 | 326 | 222 | 552 | 0 | 200 | 2 | 350 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 766 | 326 | 222 | 552 | 0 | 200 | 2 | 350 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 766 | 326 | 222 | 552 | 0 | 200 | 2 | 350 | 0 | 0 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 766 | 326 | 222 | 552 | 0 | 200 | 2 | 350 | 0 | 0 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.40 | 0.60 | 1.00 | 2.00 | 0.00 | 0.99 | 0.01 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0 | 2245 | 955 | 1600 | 3200 | 0 | 1584 | 16 | 1600 | 0 | 0 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.34 | 0.34 | 0.14 | 0.17 | 0.00 | 0.13 | 0.13 | 0.22 | 0.00 | 0.00 | 0.00 |
| Crit Moves: | | **** | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Oceanview/Montrose

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.783 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 63 | Level Of Service: | C |

| Street Name: | Oceanview Blvd | | | | | | Montrose Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 1 1 | 0 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 53 | 459 | 14 | 264 | 454 | 116 | 114 | 148 | 57 | 13 | 278 | 462 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 54 | 464 | 14 | 267 | 459 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| Added Vol: | 0 | 25 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 54 | 489 | 14 | 267 | 490 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 54 | 489 | 14 | 267 | 490 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 54 | 489 | 14 | 267 | 490 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 54 | 489 | 14 | 267 | 490 | 117 | 115 | 149 | 58 | 13 | 281 | 467 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 1.61 | 0.39 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 2582 | 618 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.15 | 0.01 | 0.17 | 0.19 | 0.19 | 0.07 | 0.05 | 0.04 | 0.01 | 0.09 | 0.29 |
| Crit Moves: | | **** | | **** | | | **** | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 OceanView/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.595 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 40 | Level Of Service: | A |

| Street Name: | Oceanview Blvd | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 0 1 | 0 | 1 0 | 1 0 | 1 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 64 | 246 | 22 | 65 | 319 | 91 | 61 | 186 | 59 | 25 | 247 | 32 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 65 | 248 | 22 | 66 | 322 | 92 | 62 | 188 | 60 | 25 | 249 | 32 |
| Added Vol: | 6 | 18 | 4 | 0 | 16 | 16 | 6 | 4 | 0 | 0 | 9 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 71 | 266 | 26 | 66 | 338 | 108 | 68 | 192 | 60 | 25 | 258 | 32 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 71 | 266 | 26 | 66 | 338 | 108 | 68 | 192 | 60 | 25 | 258 | 32 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 71 | 266 | 26 | 66 | 338 | 108 | 68 | 192 | 60 | 25 | 258 | 32 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 71 | 266 | 26 | 66 | 338 | 108 | 68 | 192 | 60 | 25 | 258 | 32 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.91 | 0.09 | 1.00 | 1.00 | 1.00 | 0.21 | 0.60 | 0.19 | 0.08 | 0.82 | 0.10 |
| Final Sat.: | 1600 | 1457 | 143 | 1600 | 1600 | 1600 | 339 | 962 | 299 | 128 | 1309 | 164 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.18 | 0.18 | 0.04 | 0.21 | 0.07 | 0.04 | 0.20 | 0.20 | 0.02 | 0.20 | 0.20 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ocean View/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.497 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 33 | Level Of Service: | A |

| Street Name: | Ocean View Blvd | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 1 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 27 | 195 | 17 | 62 | 272 | 45 | 50 | 122 | 28 | 7 | 120 | 56 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 27 | 197 | 17 | 63 | 275 | 45 | 51 | 123 | 28 | 7 | 121 | 57 |
| Added Vol: | 6 | 6 | 0 | 0 | 0 | 16 | 22 | 2 | 10 | 0 | 3 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 33 | 203 | 17 | 63 | 275 | 61 | 73 | 125 | 38 | 7 | 124 | 57 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 33 | 203 | 17 | 63 | 275 | 61 | 73 | 125 | 38 | 7 | 124 | 57 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 33 | 203 | 17 | 63 | 275 | 61 | 73 | 125 | 38 | 7 | 124 | 57 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 33 | 203 | 17 | 63 | 275 | 61 | 73 | 125 | 38 | 7 | 124 | 57 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.13 | 0.80 | 0.07 | 0.16 | 0.69 | 0.15 | 0.37 | 0.63 | 1.00 | 0.05 | 0.95 | 1.00 |
| Final Sat.: | 210 | 1282 | 108 | 251 | 1102 | 247 | 587 | 1013 | 1600 | 86 | 1514 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.16 | 0.16 | 0.04 | 0.25 | 0.25 | 0.05 | 0.12 | 0.02 | 0.00 | 0.08 | 0.04 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Wickham/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.505 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 11.6 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Street Name: | Wickham Way | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 370 | 8 | 30 | 330 | 16 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 374 | 8 | 30 | 333 | 16 |
| Added Vol: | 2 | 0 | 11 | 0 | 0 | 0 | 0 | 3 | 0 | 5 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 27 | 10 | 22 | 13 | 11 | 17 | 4 | 377 | 8 | 35 | 333 | 16 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 10 | 22 | 13 | 11 | 17 | 4 | 377 | 8 | 35 | 333 | 16 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 27 | 10 | 22 | 13 | 11 | 17 | 4 | 377 | 8 | 35 | 333 | 16 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 27 | 10 | 22 | 13 | 11 | 17 | 4 | 377 | 8 | 35 | 333 | 16 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.46 | 0.17 | 0.37 | 0.32 | 0.27 | 0.41 | 0.01 | 0.97 | 0.02 | 0.09 | 0.87 | 0.04 |
| Final Sat.: | 266 | 99 | 216 | 183 | 155 | 239 | 8 | 746 | 16 | 71 | 666 | 32 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.10 | 0.10 | 0.07 | 0.07 | 0.07 | 0.51 | 0.51 | 0.51 | 0.50 | 0.50 | 0.50 |
| Crit Moves: | | | **** | **** | | | | **** | | **** | | |
| Delay/Veh: | 9.0 | 9.0 | 9.0 | 8.8 | 8.8 | 8.8 | 12.0 | 12.0 | 12.0 | 11.9 | 11.9 | 11.9 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.0 | 9.0 | 9.0 | 8.8 | 8.8 | 8.8 | 12.0 | 12.0 | 12.0 | 11.9 | 11.9 | 11.9 |
| LOS by Move: | A | A | A | A | A | A | B | B | B | B | B | B |
| ApproachDel: | 9.0 | | | 8.8 | | | 12.0 | | | 11.9 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 9.0 | | | 8.8 | | | 12.0 | | | 11.9 | | |
| LOS by Appr: | A | | | A | | | B | | | B | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc.

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 Wickham/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.179 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 7.8 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 0 | 0 0 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 128 | 0 | 0 | 99 | 8 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 129 | 0 | 0 | 100 | 8 |
| Added Vol: | 0 | 0 | 0 | 13 | 0 | 1 | 2 | 2 | 0 | 0 | 1 | 1 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 17 | 0 | 18 | 24 | 131 | 0 | 0 | 101 | 9 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 17 | 0 | 18 | 24 | 131 | 0 | 0 | 101 | 9 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 17 | 0 | 18 | 24 | 131 | 0 | 0 | 101 | 9 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 0 | 0 | 17 | 0 | 18 | 24 | 131 | 0 | 0 | 101 | 9 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.00 | 0.00 | 0.48 | 0.00 | 0.52 | 0.16 | 0.84 | 0.00 | 0.00 | 0.92 | 0.08 |
| Final Sat.: | 0 | 760 | 0 | 390 | 0 | 416 | 135 | 732 | 0 | 0 | 801 | 72 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | xxxx | 0.00 | xxxx | 0.04 | xxxx | 0.04 | 0.18 | 0.18 | xxxx | xxxx | 0.13 | 0.13 |
| Crit Moves: | | **** | | | | **** | | **** | | | **** | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 7.4 | 0.0 | 7.4 | 8.0 | 8.0 | 0.0 | 0.0 | 7.6 | 7.6 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 7.4 | 0.0 | 7.4 | 8.0 | 8.0 | 0.0 | 0.0 | 7.6 | 7.6 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | xxxxxx | | | 7.4 | | | 8.0 | | | 7.6 | | |
| Delay Adj: | xxxxx | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | xxxxxx | | | 7.4 | | | 8.0 | | | 7.6 | | |
| LOS by Appr: | * | | | A | | | A | | | A | | |
| AllWayAvgQ: | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |

Note: Queue reported is the number of cars per lane.

Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Oceanview//210 WB Ramps | C | xxxxx | 0.759 | C | xxxxx | 0.759 | + 0.001 V/C |
| # 2 Oceanview/210 EB Ramps | D | xxxxx | 0.850 | D | xxxxx | 0.851 | + 0.001 V/C |
| # 3 Oceanview/Montrose | D | xxxxx | 0.803 | D | xxxxx | 0.803 | + 0.001 V/C |
| # 4 OceanView/Honolulu | A | xxxxx | 0.558 | A | xxxxx | 0.559 | + 0.001 V/C |
| # 5 Ocean View/Broadview | A | xxxxx | 0.508 | A | xxxxx | 0.509 | + 0.001 V/C |
| # 6 Wickham/Honolulu | A | 9.2 | 0.361 | A | 9.2 | 0.361 | + 0.000 V/C |
| # 7 Wickham/Broadview | A | 1.7 | 0.155 | A | 1.7 | 0.155 | + 0.000 V/C |
| #101 Proj Dwy North/Honolulu | A | 0.0 | 0.000 | A | 0.0 | 0.000 | + 0.000 D/V |
| #102 Proj Dwy South/Broadview | A | 0.0 | 0.000 | A | 0.0 | 0.000 | + 0.000 D/V |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Oceanview//210 WB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.759 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 59 | Level Of Service: | C |

| Street Name: | Ocean View Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 0 | 0 0 | 1 1 | 0 | 0 0 | 0 0 | 0 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 265 | 493 | 0 | 0 | 567 | 251 | 0 | 0 | 0 | 366 | 0 | 282 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 269 | 500 | 0 | 0 | 575 | 254 | 0 | 0 | 0 | 371 | 0 | 286 |
| Added Vol: | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 270 | 501 | 0 | 0 | 575 | 254 | 0 | 0 | 0 | 371 | 0 | 286 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 270 | 501 | 0 | 0 | 575 | 254 | 0 | 0 | 0 | 371 | 0 | 286 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 270 | 501 | 0 | 0 | 575 | 254 | 0 | 0 | 0 | 371 | 0 | 286 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 270 | 501 | 0 | 0 | 575 | 254 | 0 | 0 | 0 | 371 | 0 | 286 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 0.00 | 0.00 | 1.39 | 0.61 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 0 | 0 | 2218 | 982 | 0 | 0 | 0 | 1600 | 0 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.17 | 0.16 | 0.00 | 0.00 | 0.26 | 0.26 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 | 0.18 |
| Crit Moves: | **** | | | | **** | | | | | **** | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Oceanview/210 EB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.851 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 80 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1 1 | 0 | 1 0 | 2 0 | 0 | 0 1 | 0 0 | 1 | 0 0 | 0 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 527 | 286 | 305 | 625 | 0 | 219 | 0 | 472 | 0 | 0 | 0 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 534 | 290 | 309 | 634 | 0 | 222 | 0 | 478 | 0 | 0 | 0 |
| Added Vol: | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 536 | 291 | 309 | 635 | 0 | 222 | 0 | 478 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 536 | 291 | 309 | 635 | 0 | 222 | 0 | 478 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 536 | 291 | 309 | 635 | 0 | 222 | 0 | 478 | 0 | 0 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 536 | 291 | 309 | 635 | 0 | 222 | 0 | 478 | 0 | 0 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.30 | 0.70 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0 | 2075 | 1125 | 1600 | 3200 | 0 | 1600 | 0 | 1600 | 0 | 0 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.26 | 0.26 | 0.19 | 0.20 | 0.00 | 0.14 | 0.00 | 0.30 | 0.00 | 0.00 | 0.00 |
| Crit Moves: | | **** | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Oceanview/Montrose

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.803 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 67 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | Montrose Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 1 1 | 0 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 18 | 328 | 6 | 460 | 567 | 100 | 142 | 226 | 60 | 18 | 146 | 343 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 18 | 332 | 6 | 466 | 575 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| Added Vol: | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 334 | 6 | 466 | 576 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 18 | 334 | 6 | 466 | 576 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 18 | 334 | 6 | 466 | 576 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 18 | 334 | 6 | 466 | 576 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 1.70 | 0.30 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 2721 | 479 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.10 | 0.00 | 0.29 | 0.21 | 0.21 | 0.09 | 0.07 | 0.04 | 0.01 | 0.05 | 0.22 |
| Crit Moves: | | **** | | **** | | | **** | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 OceanView/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.559 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 37 | Level Of Service: | A |

| Street Name: | Oceanview Blvd | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 0 1 | 0 | 1 0 | 1 | 0 1 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 19 | 204 | 19 | 62 | 313 | 49 | 41 | 248 | 90 | 12 | 114 | 17 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 19 | 207 | 19 | 63 | 317 | 50 | 42 | 251 | 91 | 12 | 116 | 17 |
| Added Vol: | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 19 | 209 | 19 | 63 | 318 | 50 | 42 | 251 | 91 | 12 | 116 | 17 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 19 | 209 | 19 | 63 | 318 | 50 | 42 | 251 | 91 | 12 | 116 | 17 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 19 | 209 | 19 | 63 | 318 | 50 | 42 | 251 | 91 | 12 | 116 | 17 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 19 | 209 | 19 | 63 | 318 | 50 | 42 | 251 | 91 | 12 | 116 | 17 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.92 | 0.08 | 1.00 | 1.00 | 1.00 | 0.11 | 0.65 | 0.24 | 0.08 | 0.80 | 0.12 |
| Final Sat.: | 1600 | 1465 | 135 | 1600 | 1600 | 1600 | 173 | 1047 | 380 | 134 | 1276 | 190 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.14 | 0.14 | 0.04 | 0.20 | 0.03 | 0.03 | 0.24 | 0.24 | 0.01 | 0.09 | 0.09 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ocean View/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.509 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 34 | Level Of Service: | A |

| Street Name: | Ocean View Blvd | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 1 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 27 | 165 | 27 | 89 | 318 | 50 | 58 | 94 | 31 | 8 | 69 | 27 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 27 | 167 | 27 | 90 | 322 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| Added Vol: | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 27 | 169 | 27 | 90 | 323 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 169 | 27 | 90 | 323 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 27 | 169 | 27 | 90 | 323 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 27 | 169 | 27 | 90 | 323 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.12 | 0.76 | 0.12 | 0.19 | 0.70 | 0.11 | 0.38 | 0.62 | 1.00 | 0.10 | 0.90 | 1.00 |
| Final Sat.: | 195 | 1209 | 195 | 311 | 1114 | 175 | 611 | 989 | 1600 | 166 | 1434 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.14 | 0.14 | 0.06 | 0.29 | 0.29 | 0.04 | 0.10 | 0.02 | 0.01 | 0.05 | 0.02 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Wickham/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.361 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 9.2 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 274 | 20 | 12 | 209 | 6 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 278 | 20 | 12 | 212 | 6 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 278 | 20 | 12 | 212 | 6 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 278 | 20 | 12 | 212 | 6 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 278 | 20 | 12 | 212 | 6 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 278 | 20 | 12 | 212 | 6 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.50 | 0.30 | 0.20 | 0.23 | 0.08 | 0.69 | 0.01 | 0.92 | 0.07 | 0.05 | 0.92 | 0.03 |
| Final Sat.: | 327 | 196 | 131 | 160 | 53 | 480 | 6 | 770 | 56 | 43 | 747 | 21 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.36 | 0.36 | 0.36 | 0.28 | 0.28 | 0.28 |
| Crit Moves: | **** | | | **** | | | **** | | | **** | | |
| Delay/Veh: | 8.3 | 8.3 | 8.3 | 7.9 | 7.9 | 7.9 | 9.6 | 9.6 | 9.6 | 9.0 | 9.0 | 9.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.3 | 8.3 | 8.3 | 7.9 | 7.9 | 7.9 | 9.6 | 9.6 | 9.6 | 9.0 | 9.0 | 9.0 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | 8.3 | | | 7.9 | | | 9.6 | | | 9.0 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 8.3 | | | 7.9 | | | 9.6 | | | 9.0 | | |
| LOS by Appr: | A | | | A | | | A | | | A | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |

Note: Queue reported is the number of cars per lane.

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            1994 HCM 4-Way Stop Method (Future Volume Alternative)
******************************************************************************
Intersection #7 Wickham/Broadview
******************************************************************************
Cycle (sec):           1                Critical Vol./Cap.(X):         0.155
Loss Time (sec):       0                Average Delay (sec/veh):         1.7
Optimal Cycle:         0                Level Of Service:                  A
******************************************************************************
Street Name:           Wickham Way                        Broadview Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     2    0     6     4   87     0     0  165     4
Growth Adj:  1.01 1.01  1.01  1.01 1.01  1.01  1.01 1.01  1.01  1.01 1.01  1.01
Initial Bse:    0    0     0     2    0     6     4   88     0     0  167     4
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     2    0     6     4   88     0     0  167     4
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     2    0     6     4   88     0     0  167     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     2    0     6     4   88     0     0  167     4
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    0    0     0     2    0     6     4   88     0     0  167     4
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     196  196   196   130  130   130  1036 1036  1036  1105 1105  1105
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.00 1.00  0.00  0.25 0.00  0.75  0.04 0.96  0.00  0.00 0.98  0.02
Final Sat.:     0  196     0    33    0    98    46  990     0     0 1079    26
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.06 0.00  0.06  0.09 0.09  0.00  0.00 0.16  0.16
Crit Moves:             ****             ****  ****                   ****
ApproachV/S:      0.00             0.06             0.09             0.16
Delay/Veh:    0.0  0.0   0.0   1.3  0.0   1.3   1.4  1.4   0.0   0.0  1.8   1.8
Delay Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   1.3  0.0   1.3   1.4  1.4   0.0   0.0  1.8   1.8
LOS by Move:    *    *     *     A    *     A     A    A     *     *    A     A
ApproachDel:       1.0              1.3              1.4              1.8
Delay Adj:        1.00             1.00             1.00             1.00
ApprAdjDel:        1.0              1.3              1.4              1.8
LOS by Appr:         A                A                A                A
******************************************************************************
```

Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Oceanview//210 WB Ramps | D | xxxxx | 0.803 | D | xxxxx | 0.804 | + 0.001 V/C |
| # 2 Oceanview/210 EB Ramps | C | xxxxx | 0.786 | C | xxxxx | 0.788 | + 0.001 V/C |
| # 3 Oceanview/Montrose | C | xxxxx | 0.778 | C | xxxxx | 0.778 | + 0.001 V/C |
| # 4 OceanView/Honolulu | A | xxxxx | 0.574 | A | xxxxx | 0.576 | + 0.002 V/C |
| # 5 Ocean View/Broadview | A | xxxxx | 0.469 | A | xxxxx | 0.471 | + 0.002 V/C |
| # 6 Wickham/Honolulu | B | 11.4 | 0.497 | B | 11.4 | 0.497 | + 0.000 V/C |
| # 7 Wickham/Broadview | A | 1.6 | 0.137 | A | 1.6 | 0.137 | + 0.000 V/C |
| #101 Proj Dwy North/Honolulu | A | 0.0 | 0.000 | A | 0.0 | 0.000 | + 0.000 D/V |
| #102 Proj Dwy South/Broadview | A | 0.0 | 0.000 | A | 0.0 | 0.000 | + 0.000 D/V |

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #1 Oceanview//210 WB Ramps

**********

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.804 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 68 | Level Of Service: | D |

**********

| Street Name: | Ocean View Blvd | | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | | |
| Rights: | Include | | | Include | | | Include | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Lanes: | 1 0 | 2 0 | 0 | 0 0 | 1 1 | 0 | 0 0 | 0 0 | 0 | 0 1 | 0 0 | 1 | |
| Volume Module: | | | | | | | | | | | | | |
| Base Vol: | 415 | 533 | 0 | 0 | 457 | 226 | 0 | 0 | 0 | 278 | 0 | 353 | |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | |
| Initial Bse: | 421 | 540 | 0 | 0 | 463 | 229 | 0 | 0 | 0 | 282 | 0 | 358 | |
| Added Vol: | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Initial Fut: | 422 | 541 | 0 | 0 | 464 | 229 | 0 | 0 | 0 | 283 | 0 | 358 | |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 422 | 541 | 0 | 0 | 464 | 229 | 0 | 0 | 0 | 283 | 0 | 358 | |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced Vol: | 422 | 541 | 0 | 0 | 464 | 229 | 0 | 0 | 0 | 283 | 0 | 358 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 422 | 541 | 0 | 0 | 464 | 229 | 0 | 0 | 0 | 283 | 0 | 358 | |
| Saturation Flow Module: | | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 2.00 | 0.00 | 0.00 | 1.34 | 0.66 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | |
| Final Sat.: | 1600 | 3200 | 0 | 0 | 2143 | 1057 | 0 | 0 | 0 | 1600 | 0 | 1600 | |
| Capacity Analysis Module: | | | | | | | | | | | | | |
| Vol/Sat: | 0.26 | 0.17 | 0.00 | 0.00 | 0.22 | 0.22 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.22 | |
| Crit Moves: | **** | | | | **** | | | | | | | **** | |

**********

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Oceanview/210 EB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.788 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 64 | Level Of Service: | C |

| Street Name: | Oceanview Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1 1 | 0 | 1 0 | 2 0 | 0 | 0 1 | 0 0 | 1 | 0 0 | 0 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 744 | 313 | 220 | 528 | 0 | 198 | 2 | 335 | 0 | 0 | 0 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 754 | 317 | 223 | 535 | 0 | 201 | 2 | 340 | 0 | 0 | 0 |
| Added Vol: | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 755 | 318 | 223 | 537 | 0 | 201 | 2 | 341 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 755 | 318 | 223 | 537 | 0 | 201 | 2 | 341 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 755 | 318 | 223 | 537 | 0 | 201 | 2 | 341 | 0 | 0 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 755 | 318 | 223 | 537 | 0 | 201 | 2 | 341 | 0 | 0 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.41 | 0.59 | 1.00 | 2.00 | 0.00 | 0.99 | 0.01 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0 | 2251 | 949 | 1600 | 3200 | 0 | 1584 | 16 | 1600 | 0 | 0 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.34 | 0.34 | 0.14 | 0.17 | 0.00 | 0.13 | 0.13 | 0.21 | 0.00 | 0.00 | 0.00 |
| Crit Moves: | | **** | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Oceanview/Montrose

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.778 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 62 | Level Of Service: | C |

| Street Name: | Oceanview Blvd | | | | | | Montrose Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 1 1 | 0 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 53 | 459 | 14 | 264 | 454 | 116 | 114 | 148 | 57 | 13 | 278 | 462 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 54 | 465 | 14 | 268 | 460 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| Added Vol: | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 54 | 467 | 14 | 268 | 463 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 54 | 467 | 14 | 268 | 463 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 54 | 467 | 14 | 268 | 463 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 54 | 467 | 14 | 268 | 463 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 1.60 | 0.40 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 2552 | 648 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.15 | 0.01 | 0.17 | 0.18 | 0.18 | 0.07 | 0.05 | 0.04 | 0.01 | 0.09 | 0.29 |
| Crit Moves: | | **** | | **** | | | **** | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 OceanView/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.576 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 38 | Level Of Service: | A |

| Street Name: | Oceanview Blvd | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - | T - | R | L - | T - | R | L - | T - | R | L - | T - | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 0 1 | 0 | 1 0 | 1 0 | 1 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 64 | 246 | 22 | 65 | 319 | 91 | 61 | 186 | 59 | 25 | 247 | 32 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 65 | 249 | 22 | 66 | 323 | 92 | 62 | 189 | 60 | 25 | 250 | 32 |
| Added Vol: | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 65 | 251 | 22 | 66 | 326 | 92 | 62 | 189 | 60 | 25 | 250 | 32 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 65 | 251 | 22 | 66 | 326 | 92 | 62 | 189 | 60 | 25 | 250 | 32 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 65 | 251 | 22 | 66 | 326 | 92 | 62 | 189 | 60 | 25 | 250 | 32 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 65 | 251 | 22 | 66 | 326 | 92 | 62 | 189 | 60 | 25 | 250 | 32 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.92 | 0.08 | 1.00 | 1.00 | 1.00 | 0.20 | 0.61 | 0.19 | 0.08 | 0.81 | 0.11 |
| Final Sat.: | 1600 | 1470 | 130 | 1600 | 1600 | 1600 | 319 | 973 | 308 | 132 | 1300 | 168 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.17 | 0.17 | 0.04 | 0.20 | 0.06 | 0.04 | 0.19 | 0.19 | 0.02 | 0.19 | 0.19 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ocean View/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.471 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 32 | Level of Service: | A |

| Street Name: | Ocean View Blvd | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 1 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 27 | 195 | 17 | 62 | 272 | 45 | 50 | 122 | 28 | 7 | 120 | 56 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 27 | 198 | 17 | 63 | 276 | 46 | 51 | 124 | 28 | 7 | 122 | 57 |
| Added Vol: | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 27 | 200 | 17 | 63 | 279 | 46 | 51 | 124 | 28 | 7 | 122 | 57 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 200 | 17 | 63 | 279 | 46 | 51 | 124 | 28 | 7 | 122 | 57 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 27 | 200 | 17 | 63 | 279 | 46 | 51 | 124 | 28 | 7 | 122 | 57 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 27 | 200 | 17 | 63 | 279 | 46 | 51 | 124 | 28 | 7 | 122 | 57 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.11 | 0.82 | 0.07 | 0.16 | 0.72 | 0.12 | 0.29 | 0.71 | 1.00 | 0.06 | 0.94 | 1.00 |
| Final Sat.: | 179 | 1308 | 113 | 260 | 1152 | 189 | 465 | 1135 | 1600 | 88 | 1512 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.15 | 0.15 | 0.04 | 0.24 | 0.24 | 0.03 | 0.11 | 0.02 | 0.00 | 0.08 | 0.04 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Wickham/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.497 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 11.4 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Street Name: | Wickham Way | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 370 | 8 | 30 | 330 | 16 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 375 | 8 | 30 | 334 | 16 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 375 | 8 | 30 | 334 | 16 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 375 | 8 | 30 | 334 | 16 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 375 | 8 | 30 | 334 | 16 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 375 | 8 | 30 | 334 | 16 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.54 | 0.22 | 0.24 | 0.32 | 0.27 | 0.41 | 0.01 | 0.97 | 0.02 | 0.08 | 0.88 | 0.04 |
| Final Sat.: | 312 | 125 | 137 | 186 | 157 | 243 | 8 | 755 | 16 | 62 | 683 | 33 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | 0.07 | 0.50 | 0.50 | 0.50 | 0.49 | 0.49 | 0.49 |
| Crit Moves: | **** | | | **** | | | | **** | | | **** | |
| Delay/Veh: | 9.0 | 9.0 | 9.0 | 8.8 | 8.8 | 8.8 | 11.8 | 11.8 | 11.8 | 11.7 | 11.7 | 11.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.0 | 9.0 | 9.0 | 8.8 | 8.8 | 8.8 | 11.8 | 11.8 | 11.8 | 11.7 | 11.7 | 11.7 |
| LOS by Move: | A | A | A | A | A | A | B | B | B | B | B | B |
| ApproachDel: | 9.0 | | | 8.8 | | | 11.8 | | | 11.7 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 9.0 | | | 8.8 | | | 11.8 | | | 11.7 | | |
| LOS by Appr: | A | | | A | | | B | | | B | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |

Note: Queue reported is the number of cars per lane.

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            1994 HCM 4-Way Stop Method (Future Volume Alternative)
******************************************************************************
Intersection #7 Wickham/Broadview
******************************************************************************
Cycle (sec):           1                Critical Vol./Cap.(X):         0.137
Loss Time (sec):       0                Average Delay (sec/veh):         1.6
Optimal Cycle:         0                Level Of Service:                  A
******************************************************************************
Street Name:           Wickham Way                        Broadview Dr
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     4    0    17    22  128     0     0   99     8
Growth Adj:  1.01 1.01  1.01  1.01 1.01  1.01  1.01 1.01  1.01  1.01 1.01  1.01
Initial Bse:    0    0     0     4    0    17    22  130     0     0  100     8
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     4    0    17    22  130     0     0  100     8
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     4    0    17    22  130     0     0  100     8
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0     4    0    17    22  130     0     0  100     8
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    0    0     0     4    0    17    22  130     0     0  100     8
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     241  241   241   159  159   159  1110 1110  1110  1004 1004  1004
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.00 1.00  0.00  0.19 0.00  0.81  0.15 0.85  0.00  0.00 0.93  0.07
Final Sat.:     0  241     0    30    0   129   163  947     0     0  929    75
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00  0.13 0.00  0.13  0.14 0.14  0.00  0.00 0.11  0.11
Crit Moves:              ****  ****                 ****                    ****
ApproachV/S:      0.00             0.13             0.14             0.11
Delay/Veh:    0.0  0.0   0.0   1.7  0.0   1.7   1.7  1.7   0.0   0.0  1.5   1.5
Delay Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   0.0  0.0   0.0   1.7  0.0   1.7   1.7  1.7   0.0   0.0  1.5   1.5
LOS by Move:    *    *     *     A    *     A     A    A     *     *    A     A
ApproachDel:       1.0              1.7              1.7              1.5
Delay Adj:        1.00             1.00             1.00             1.00
ApprAdjDel:        1.0              1.7              1.7              1.5
LOS by Appr:         A                A                A                A
******************************************************************************
```

Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Oceanview//210 WB Ramps | C | xxxxx | 0.759 | C | xxxxx | 0.776 | + 0.017 V/C |
| # 2 Oceanview/210 EB Ramps | D | xxxxx | 0.850 | D | xxxxx | 0.865 | + 0.015 V/C |
| # 3 Oceanview/Montrose | D | xxxxx | 0.803 | D | xxxxx | 0.807 | + 0.004 V/C |
| # 4 OceanView/Honolulu | A | xxxxx | 0.558 | A | xxxxx | 0.581 | + 0.023 V/C |
| # 5 Ocean View/Broadview | A | xxxxx | 0.508 | A | xxxxx | 0.535 | + 0.027 V/C |
| # 6 Wickham/Honolulu | A | 9.2 | 0.361 | A | 9.3 | 0.369 | + 0.009 V/C |
| # 7 Wickham/Broadview | A | 1.7 | 0.155 | A | 2.0 | 0.208 | + 0.053 V/C |
| #101 Proj Dwy North/Honolulu | A | 0.0 | 0.000 | A | 0.2 | 0.000 | + 0.000 D/V |
| #102 Proj Dwy South/Broadview | A | 0.0 | 0.000 | A | 0.3 | 0.000 | + 0.000 D/V |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Oceanview//210 WB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.776 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 62 | Level Of Service: | C |

| Street Name: | Ocean View Blvd | | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | | |
| Rights: | Include | | | Include | | | Include | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Lanes: | 1 0 | 2 0 | 0 | 0 0 | 1 1 | 0 | 0 0 | 0 0 | 0 | 0 1 | 0 0 | 1 | |
| Volume Module: | | | | | | | | | | | | | |
| Base Vol: | 265 | 493 | 0 | 0 | 567 | 251 | 0 | 0 | 0 | 366 | 0 | 282 | |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | |
| Initial Bse: | 269 | 500 | 0 | 0 | 575 | 254 | 0 | 0 | 0 | 371 | 0 | 286 | |
| Added Vol: | 5 | 3 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Initial Fut: | 274 | 503 | 0 | 0 | 584 | 254 | 0 | 0 | 0 | 389 | 0 | 286 | |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 274 | 503 | 0 | 0 | 584 | 254 | 0 | 0 | 0 | 389 | 0 | 286 | |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced Vol: | 274 | 503 | 0 | 0 | 584 | 254 | 0 | 0 | 0 | 389 | 0 | 286 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 274 | 503 | 0 | 0 | 584 | 254 | 0 | 0 | 0 | 389 | 0 | 286 | |
| Saturation Flow Module: | | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 2.00 | 0.00 | 0.00 | 1.39 | 0.61 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | |
| Final Sat.: | 1600 | 3200 | 0 | 0 | 2229 | 971 | 0 | 0 | 0 | 1600 | 0 | 1600 | |
| Capacity Analysis Module: | | | | | | | | | | | | | |
| Vol/Sat: | 0.17 | 0.16 | 0.00 | 0.00 | 0.26 | 0.26 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.18 | |
| Crit Moves: | **** | | | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Oceanview/210 EB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.865 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 85 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1 1 | 0 | 1 0 | 2 0 | 0 | 0 1 | 0 0 | 1 | 0 0 | 0 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 527 | 286 | 305 | 625 | 0 | 219 | 0 | 472 | 0 | 0 | 0 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 534 | 290 | 309 | 634 | 0 | 222 | 0 | 478 | 0 | 0 | 0 |
| Added Vol: | 0 | 8 | 5 | 0 | 28 | 0 | 0 | 0 | 18 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 542 | 295 | 309 | 662 | 0 | 222 | 0 | 496 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 542 | 295 | 309 | 662 | 0 | 222 | 0 | 496 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 542 | 295 | 309 | 662 | 0 | 222 | 0 | 496 | 0 | 0 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 542 | 295 | 309 | 662 | 0 | 222 | 0 | 496 | 0 | 0 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.30 | 0.70 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0 | 2073 | 1127 | 1600 | 3200 | 0 | 1600 | 0 | 1600 | 0 | 0 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.26 | 0.26 | 0.19 | 0.21 | 0.00 | 0.14 | 0.00 | 0.31 | 0.00 | 0.00 | 0.00 |
| Crit Moves: | | **** | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Oceanview/Montrose

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.807 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 68 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | Montrose Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 1 1 | 0 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 18 | 328 | 6 | 460 | 567 | 100 | 142 | 226 | 60 | 18 | 146 | 343 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 18 | 332 | 6 | 466 | 575 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| Added Vol: | 0 | 13 | 0 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 18 | 345 | 6 | 466 | 621 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 18 | 345 | 6 | 466 | 621 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 18 | 345 | 6 | 466 | 621 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 18 | 345 | 6 | 466 | 621 | 101 | 144 | 229 | 61 | 18 | 148 | 348 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 1.72 | 0.28 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 2751 | 449 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.01 | 0.11 | 0.00 | 0.29 | 0.23 | 0.23 | 0.09 | 0.07 | 0.04 | 0.01 | 0.05 | 0.22 |
| Crit Moves: | | **** | | **** | | | **** | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 OceanView/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.581 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 39 | Level Of Service: | A |

| Street Name: | Oceanview Blvd | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 0 1 | 0 | 1 0 | 1 0 | 1 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 19 | 204 | 19 | 62 | 313 | 49 | 41 | 248 | 90 | 12 | 114 | 17 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 19 | 207 | 19 | 63 | 317 | 50 | 42 | 251 | 91 | 12 | 116 | 17 |
| Added Vol: | 9 | 10 | 2 | 0 | 23 | 23 | 3 | 2 | 0 | 0 | 14 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 28 | 217 | 21 | 63 | 340 | 73 | 45 | 253 | 91 | 12 | 130 | 17 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 28 | 217 | 21 | 63 | 340 | 73 | 45 | 253 | 91 | 12 | 130 | 17 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 28 | 217 | 21 | 63 | 340 | 73 | 45 | 253 | 91 | 12 | 130 | 17 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 28 | 217 | 21 | 63 | 340 | 73 | 45 | 253 | 91 | 12 | 130 | 17 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.91 | 0.09 | 1.00 | 1.00 | 1.00 | 0.11 | 0.66 | 0.23 | 0.08 | 0.81 | 0.11 |
| Final Sat.: | 1600 | 1457 | 143 | 1600 | 1600 | 1600 | 183 | 1042 | 375 | 122 | 1304 | 173 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.15 | 0.15 | 0.04 | 0.21 | 0.05 | 0.03 | 0.24 | 0.24 | 0.01 | 0.10 | 0.10 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ocean View/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.535 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 35 | Level Of Service: | A |

| Street Name: | Ocean View Blvd | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 1 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 27 | 165 | 27 | 89 | 318 | 50 | 58 | 94 | 31 | 8 | 69 | 27 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 27 | 167 | 27 | 90 | 322 | 51 | 59 | 95 | 31 | 8 | 70 | 27 |
| Added Vol: | 9 | 11 | 0 | 0 | 1 | 23 | 9 | 1 | 4 | 0 | 5 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 36 | 178 | 27 | 90 | 323 | 74 | 68 | 96 | 35 | 8 | 75 | 27 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 36 | 178 | 27 | 90 | 323 | 74 | 68 | 96 | 35 | 8 | 75 | 27 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 36 | 178 | 27 | 90 | 323 | 74 | 68 | 96 | 35 | 8 | 75 | 27 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 36 | 178 | 27 | 90 | 323 | 74 | 68 | 96 | 35 | 8 | 75 | 27 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.15 | 0.74 | 0.11 | 0.19 | 0.66 | 0.15 | 0.41 | 0.59 | 1.00 | 0.10 | 0.90 | 1.00 |
| Final Sat.: | 240 | 1179 | 181 | 296 | 1062 | 242 | 661 | 939 | 1600 | 156 | 1444 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.15 | 0.15 | 0.06 | 0.30 | 0.30 | 0.04 | 0.10 | 0.02 | 0.01 | 0.05 | 0.02 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Wickham/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.369 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 9.3 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 274 | 20 | 12 | 209 | 6 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 20 | 12 | 8 | 6 | 2 | 18 | 2 | 278 | 20 | 12 | 212 | 6 |
| Added Vol: | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 5 | 0 | 7 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 21 | 12 | 14 | 6 | 2 | 18 | 2 | 283 | 20 | 19 | 212 | 6 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 21 | 12 | 14 | 6 | 2 | 18 | 2 | 283 | 20 | 19 | 212 | 6 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 21 | 12 | 14 | 6 | 2 | 18 | 2 | 283 | 20 | 19 | 212 | 6 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 21 | 12 | 14 | 6 | 2 | 18 | 2 | 283 | 20 | 19 | 212 | 6 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.45 | 0.25 | 0.30 | 0.23 | 0.08 | 0.69 | 0.01 | 0.93 | 0.06 | 0.08 | 0.89 | 0.03 |
| Final Sat.: | 295 | 169 | 196 | 158 | 53 | 474 | 5 | 765 | 55 | 65 | 718 | 21 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.07 | 0.07 | 0.04 | 0.04 | 0.04 | 0.37 | 0.37 | 0.37 | 0.29 | 0.29 | 0.29 |
| Crit Moves: | **** | | | **** | | | **** | | | **** | | |
| Delay/Veh: | 8.3 | 8.3 | 8.3 | 7.9 | 7.9 | 7.9 | 9.7 | 9.7 | 9.7 | 9.2 | 9.2 | 9.2 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 8.3 | 8.3 | 8.3 | 7.9 | 7.9 | 7.9 | 9.7 | 9.7 | 9.7 | 9.2 | 9.2 | 9.2 |
| LOS by Move: | A | A | A | A | A | A | A | A | A | A | A | A |
| ApproachDel: | 8.3 | | | 7.9 | | | 9.7 | | | 9.2 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 8.3 | | | 7.9 | | | 9.7 | | | 9.2 | | |
| LOS by Appr: | A | | | A | | | A | | | A | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 0.6 | 0.6 | 0.4 | 0.4 | 0.4 |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
1994 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 Wickham/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 1 | Critical Vol./Cap.(X): | 0.208 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 2.0 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | | | Broadview Dr | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | | South Bound | | | | East Bound | | | | West Bound | | | |
| Movement: | L | - T | - R | | L | - T | - R | | L | - T | - R | | L | - T | - R | |
| Control: | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | | Stop Sign | | | |
| Rights: | Include | | | | Include | | | | Include | | | | Include | | | |
| Lanes: | 0 0 | 1! 0 | 0 | | 0 0 | 1! 0 | 0 | | 0 1 | 0 0 | 0 | | 0 0 | 0 1 | 0 | |
| **Volume Module:** | | | | | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 87 | 0 | 0 | 165 | 4 | | | | |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | | | | |
| Initial Bse: | 0 | 0 | 0 | 2 | 0 | 6 | 4 | 88 | 0 | 0 | 167 | 4 | | | | |
| Added Vol: | 0 | 0 | 0 | 10 | 0 | 1 | 2 | 2 | 0 | 0 | 1 | 1 | | | | |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Initial Fut: | 0 | 0 | 0 | 12 | 0 | 7 | 6 | 90 | 0 | 0 | 168 | 5 | | | | |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | |
| PHF Volume: | 0 | 0 | 0 | 12 | 0 | 7 | 6 | 90 | 0 | 0 | 168 | 5 | | | | |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| Reduced Vol: | 0 | 0 | 0 | 12 | 0 | 7 | 6 | 90 | 0 | 0 | 168 | 5 | | | | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | |
| FinalVolume: | 0 | 0 | 0 | 12 | 0 | 7 | 6 | 90 | 0 | 0 | 168 | 5 | | | | |
| **Saturation Flow Module:** | | | | | | | | | | | | | | | | |
| Sat/Lane: | 30 | 30 | 30 | 166 | 166 | 166 | 780 | 780 | 780 | 835 | 835 | 835 | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | |
| Lanes: | 0.00 | 1.00 | 0.00 | 0.63 | 0.00 | 0.37 | 0.06 | 0.94 | 0.00 | 0.00 | 0.97 | 0.03 | | | | |
| Final Sat.: | 0 | 30 | 0 | 104 | 0 | 62 | 49 | 731 | 0 | 0 | 811 | 24 | | | | |
| **Capacity Analysis Module:** | | | | | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.12 | 0.12 | 0.12 | 0.00 | 0.00 | 0.21 | 0.21 | | | | |
| Crit Moves: | | | **** | **** | | | **** | | | | **** | | | | | |
| ApproachV/S: | 0.00 | | | 0.12 | | | 0.12 | | | | 0.21 | | | | | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 1.5 | 1.6 | 1.6 | 0.0 | 0.0 | 2.2 | 2.2 | | | | |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 1.5 | 1.6 | 1.6 | 0.0 | 0.0 | 2.2 | 2.2 | | | | |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A | | | | |
| ApproachDel: | 1.0 | | | 1.5 | | | 1.6 | | | | 2.2 | | | | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | | 1.00 | | | | | |
| ApprAdjDel: | 1.0 | | | 1.5 | | | 1.6 | | | | 2.2 | | | | | |
| LOS by Appr: | A | | | A | | | A | | | | A | | | | | |

Impact Analysis Report
Level Of Service

| Intersection | Base LOS | Base Del/ Veh | Base V/ C | Future LOS | Future Del/ Veh | Future V/ C | Change in |
|---|---|---|---|---|---|---|---|
| # 1 Oceanview//210 WB Ramps | D | xxxxx | 0.803 | D | xxxxx | 0.811 | + 0.008 V/C |
| # 2 Oceanview/210 EB Ramps | C | xxxxx | 0.786 | D | xxxxx | 0.803 | + 0.016 V/C |
| # 3 Oceanview/Montrose | C | xxxxx | 0.778 | C | xxxxx | 0.786 | + 0.008 V/C |
| # 4 OceanView/Honolulu | A | xxxxx | 0.574 | A | xxxxx | 0.599 | + 0.025 V/C |
| # 5 Ocean View/Broadview | A | xxxxx | 0.469 | A | xxxxx | 0.501 | + 0.031 V/C |
| # 6 Wickham/Honolulu | B | 11.4 | 0.497 | B | 11.7 | 0.507 | + 0.010 V/C |
| # 7 Wickham/Broadview | A | 1.6 | 0.137 | A | 1.9 | 0.176 | + 0.039 V/C |
| #101 Proj Dwy North/Honolulu | A | 0.0 | 0.000 | B | 0.1 | 0.000 | + 0.000 D/V |
| #102 Proj Dwy South/Broadview | A | 0.0 | 0.000 | B | 0.4 | 0.000 | + 0.000 D/V |

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #1 Oceanview//210 WB Ramps

**********

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.811 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 69 | Level Of Service: | D |

**********

| Street Name: | Ocean View Blvd | | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | | |
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | | |
| Rights: | Include | | | Include | | | Include | | | Include | | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | |
| Lanes: | 1 0 | 2 0 | 0 | 0 0 | 1 1 | 0 | 0 0 | 0 0 | 0 | 0 1 | 0 0 | 1 | |
| Volume Module: | | | | | | | | | | | | | |
| Base Vol: | 415 | 533 | 0 | 0 | 457 | 226 | 0 | 0 | 0 | 278 | 0 | 353 | |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | |
| Initial Bse: | 421 | 540 | 0 | 0 | 463 | 229 | 0 | 0 | 0 | 282 | 0 | 358 | |
| Added Vol: | 10 | 5 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Initial Fut: | 431 | 545 | 0 | 0 | 470 | 229 | 0 | 0 | 0 | 295 | 0 | 358 | |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| PHF Volume: | 431 | 545 | 0 | 0 | 470 | 229 | 0 | 0 | 0 | 295 | 0 | 358 | |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced Vol: | 431 | 545 | 0 | 0 | 470 | 229 | 0 | 0 | 0 | 295 | 0 | 358 | |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| FinalVolume: | 431 | 545 | 0 | 0 | 470 | 229 | 0 | 0 | 0 | 295 | 0 | 358 | |
| Saturation Flow Module: | | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Lanes: | 1.00 | 2.00 | 0.00 | 0.00 | 1.34 | 0.66 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | |
| Final Sat.: | 1600 | 3200 | 0 | 0 | 2152 | 1048 | 0 | 0 | 0 | 1600 | 0 | 1600 | |
| Capacity Analysis Module: | | | | | | | | | | | | | |
| Vol/Sat: | 0.27 | 0.17 | 0.00 | 0.00 | 0.22 | 0.22 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.22 | |
| Crit Moves: | **** | | | | **** | | | | | | | **** | |

**********

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Oceanview/210 EB Ramps

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.803 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 67 | Level Of Service: | D |

| Street Name: | Oceanview Blvd | | | | | | 210 WB Ramps | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Protected | | | Protected | | | Split Phase | | | Split Phase | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1 1 | 0 | 1 0 | 2 0 | 0 | 0 1 | 0 0 | 1 | 0 0 | 0 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 744 | 313 | 220 | 528 | 0 | 198 | 2 | 335 | 0 | 0 | 0 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 754 | 317 | 223 | 535 | 0 | 201 | 2 | 340 | 0 | 0 | 0 |
| Added Vol: | 0 | 16 | 10 | 0 | 21 | 0 | 0 | 0 | 13 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 770 | 327 | 223 | 556 | 0 | 201 | 2 | 353 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 770 | 327 | 223 | 556 | 0 | 201 | 2 | 353 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 770 | 327 | 223 | 556 | 0 | 201 | 2 | 353 | 0 | 0 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 770 | 327 | 223 | 556 | 0 | 201 | 2 | 353 | 0 | 0 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.40 | 0.60 | 1.00 | 2.00 | 0.00 | 0.99 | 0.01 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0 | 2246 | 954 | 1600 | 3200 | 0 | 1584 | 16 | 1600 | 0 | 0 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.34 | 0.34 | 0.14 | 0.17 | 0.00 | 0.13 | 0.13 | 0.22 | 0.00 | 0.00 | 0.00 |
| Crit Moves: | | **** | | **** | | | | | **** | | | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Oceanview/Montrose

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.786 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 64 | Level Of Service: | C |

| Street Name: | Oceanview Blvd | | | | | | Montrose Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 1 1 | 0 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 53 | 459 | 14 | 264 | 454 | 116 | 114 | 148 | 57 | 13 | 278 | 462 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 54 | 465 | 14 | 268 | 460 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| Added Vol: | 0 | 26 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 54 | 491 | 14 | 268 | 494 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 54 | 491 | 14 | 268 | 494 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 54 | 491 | 14 | 268 | 494 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 54 | 491 | 14 | 268 | 494 | 118 | 116 | 150 | 58 | 13 | 282 | 468 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 1.62 | 0.38 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 2585 | 615 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.03 | 0.15 | 0.01 | 0.17 | 0.19 | 0.19 | 0.07 | 0.05 | 0.04 | 0.01 | 0.09 | 0.29 |
| Crit Moves: | | **** | | **** | | | **** | | | | | **** |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 OceanView/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.599 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 40 | Level Of Service: | A |

| Street Name: | Oceanview Blvd | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 1 0 | 0 1 | 0 | 1 0 | 1 0 | 1 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 64 | 246 | 22 | 65 | 319 | 91 | 61 | 186 | 59 | 25 | 247 | 32 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 65 | 249 | 22 | 66 | 323 | 92 | 62 | 189 | 60 | 25 | 250 | 32 |
| Added Vol: | 6 | 20 | 4 | 0 | 19 | 16 | 6 | 4 | 0 | 0 | 9 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 71 | 269 | 26 | 66 | 342 | 108 | 68 | 193 | 60 | 25 | 259 | 32 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 71 | 269 | 26 | 66 | 342 | 108 | 68 | 193 | 60 | 25 | 259 | 32 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 71 | 269 | 26 | 66 | 342 | 108 | 68 | 193 | 60 | 25 | 259 | 32 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 71 | 269 | 26 | 66 | 342 | 108 | 68 | 193 | 60 | 25 | 259 | 32 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.91 | 0.09 | 1.00 | 1.00 | 1.00 | 0.21 | 0.60 | 0.19 | 0.08 | 0.82 | 0.10 |
| Final Sat.: | 1600 | 1458 | 142 | 1600 | 1600 | 1600 | 339 | 962 | 299 | 128 | 1309 | 164 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.04 | 0.18 | 0.18 | 0.04 | 0.21 | 0.07 | 0.04 | 0.20 | 0.20 | 0.02 | 0.20 | 0.20 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Ocean View/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.501 |
| Loss Time (sec): | 10 | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 33 | Level Of Service: | A |

| Street Name: | Ocean View Blvd | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y+R: | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 1 | 0 0 | 1 | 0 1 | 0 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 27 | 195 | 17 | 62 | 272 | 45 | 50 | 122 | 28 | 7 | 120 | 56 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 27 | 198 | 17 | 63 | 276 | 46 | 51 | 124 | 28 | 7 | 122 | 57 |
| Added Vol: | 6 | 8 | 0 | 0 | 3 | 16 | 22 | 2 | 10 | 0 | 3 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 33 | 206 | 17 | 63 | 279 | 62 | 73 | 126 | 38 | 7 | 125 | 57 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 33 | 206 | 17 | 63 | 279 | 62 | 73 | 126 | 38 | 7 | 125 | 57 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 33 | 206 | 17 | 63 | 279 | 62 | 73 | 126 | 38 | 7 | 125 | 57 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 33 | 206 | 17 | 63 | 279 | 62 | 73 | 126 | 38 | 7 | 125 | 57 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.13 | 0.80 | 0.07 | 0.16 | 0.69 | 0.15 | 0.37 | 0.63 | 1.00 | 0.05 | 0.95 | 1.00 |
| Final Sat.: | 208 | 1284 | 108 | 249 | 1106 | 245 | 586 | 1014 | 1600 | 86 | 1514 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.02 | 0.16 | 0.16 | 0.04 | 0.25 | 0.25 | 0.05 | 0.12 | 0.02 | 0.00 | 0.08 | 0.04 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Wickham/Honolulu

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap.(X): | 0.507 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 11.7 |
| Optimal Cycle: | 0 | Level Of Service: | B |

| Street Name: | Wickham Way | | | | | | Honolulu Ave | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 370 | 8 | 30 | 330 | 16 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 25 | 10 | 11 | 13 | 11 | 17 | 4 | 375 | 8 | 30 | 334 | 16 |
| Added Vol: | 2 | 0 | 11 | 0 | 0 | 0 | 0 | 3 | 0 | 5 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 27 | 10 | 22 | 13 | 11 | 17 | 4 | 378 | 8 | 35 | 334 | 16 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 27 | 10 | 22 | 13 | 11 | 17 | 4 | 378 | 8 | 35 | 334 | 16 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 27 | 10 | 22 | 13 | 11 | 17 | 4 | 378 | 8 | 35 | 334 | 16 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 27 | 10 | 22 | 13 | 11 | 17 | 4 | 378 | 8 | 35 | 334 | 16 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.46 | 0.17 | 0.37 | 0.32 | 0.27 | 0.41 | 0.01 | 0.97 | 0.02 | 0.09 | 0.87 | 0.04 |
| Final Sat.: | 266 | 99 | 216 | 183 | 155 | 239 | 8 | 745 | 16 | 70 | 665 | 32 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.10 | 0.10 | 0.07 | 0.07 | 0.07 | 0.51 | 0.51 | 0.51 | 0.50 | 0.50 | 0.50 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |
| Delay/Veh: | 9.0 | 9.0 | 9.0 | 8.9 | 8.9 | 8.9 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 9.0 | 9.0 | 9.0 | 8.9 | 8.9 | 8.9 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 |
| LOS by Move: | A | A | A | A | A | A | B | B | B | B | B | B |
| ApproachDel: | 9.0 | | | 8.9 | | | 12.0 | | | 12.0 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 9.0 | | | 8.9 | | | 12.0 | | | 12.0 | | |
| LOS by Appr: | A | | | A | | | B | | | B | | |
| AllWayAvgQ: | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.0 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 |

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
1994 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 Wickham/Broadview

| | | | |
|---|---|---|---|
| Cycle (sec): | 1 | Critical Vol./Cap.(X): | 0.176 |
| Loss Time (sec): | 0 | Average Delay (sec/veh): | 1.9 |
| Optimal Cycle: | 0 | Level Of Service: | A |

| Street Name: | Wickham Way | | | | | | Broadview Dr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 1! 0 0 | | | 0 0 1! 0 0 | | | 0 1 0 0 0 | | | 0 0 0 1 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 128 | 0 | 0 | 99 | 8 |
| Growth Adj: | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 |
| Initial Bse: | 0 | 0 | 0 | 4 | 0 | 17 | 22 | 130 | 0 | 0 | 100 | 8 |
| Added Vol: | 0 | 0 | 0 | 13 | 0 | 1 | 2 | 2 | 0 | 0 | 1 | 1 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 17 | 0 | 18 | 24 | 132 | 0 | 0 | 101 | 9 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 17 | 0 | 18 | 24 | 132 | 0 | 0 | 101 | 9 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 17 | 0 | 18 | 24 | 132 | 0 | 0 | 101 | 9 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0 | 0 | 0 | 17 | 0 | 18 | 24 | 132 | 0 | 0 | 101 | 9 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 122 | 122 | 122 | 200 | 200 | 200 | 898 | 898 | 898 | 789 | 789 | 789 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 1.00 | 0.00 | 0.48 | 0.00 | 0.52 | 0.16 | 0.84 | 0.00 | 0.00 | 0.92 | 0.08 |
| Final Sat.: | 0 | 122 | 0 | 97 | 0 | 103 | 140 | 758 | 0 | 0 | 724 | 65 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.18 | 0.17 | 0.17 | 0.00 | 0.00 | 0.14 | 0.14 |
| Crit Moves: | | | **** | | | **** | | **** | | | | **** |
| ApproachV/S: | 0.00 | | | 0.18 | | | 0.17 | | | 0.14 | | |
| Delay/Veh: | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 2.0 | 1.9 | 1.9 | 0.0 | 0.0 | 1.7 | 1.7 |
| Delay Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh: | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 2.0 | 1.9 | 1.9 | 0.0 | 0.0 | 1.7 | 1.7 |
| LOS by Move: | * | * | * | A | * | A | A | A | * | * | A | A |
| ApproachDel: | 1.0 | | | 2.0 | | | 1.9 | | | 1.7 | | |
| Delay Adj: | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | | |
| ApprAdjDel: | 1.0 | | | 2.0 | | | 1.9 | | | 1.7 | | |
| LOS by Appr: | A | | | A | | | A | | | A | | |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 274 | 20 | 12 | 209 | 6 | 20 | 12 | 8 | 6 | 2 | 18 |
| Future Vol, veh/h | 2 | 274 | 20 | 12 | 209 | 6 | 20 | 12 | 8 | 6 | 2 | 18 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 298 | 22 | 13 | 227 | 7 | 22 | 13 | 9 | 7 | 2 | 20 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 10.1 | 9.4 | 8.6 | 8.1 |
| HCM LOS | B | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 50% | 1% | 5% | 23% |
| Vol Thru, % | 30% | 93% | 92% | 8% |
| Vol Right, % | 20% | 7% | 3% | 69% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 40 | 296 | 227 | 26 |
| LT Vol | 20 | 2 | 12 | 6 |
| Through Vol | 12 | 274 | 209 | 2 |
| RT Vol | 8 | 20 | 6 | 18 |
| Lane Flow Rate | 43 | 322 | 247 | 28 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.063 | 0.388 | 0.305 | 0.038 |
| Departure Headway (Hd) | 5.197 | 4.338 | 4.443 | 4.872 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 688 | 830 | 809 | 733 |
| Service Time | 3.238 | 2.359 | 2.466 | 2.916 |
| HCM Lane V/C Ratio | 0.063 | 0.388 | 0.305 | 0.038 |
| HCM Control Delay | 8.6 | 10.1 | 9.4 | 8.1 |
| HCM Lane LOS | A | B | A | A |
| HCM 95th-tile Q | 0.2 | 1.8 | 1.3 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 87 | 165 | 4 | 2 | 6 |
| Future Vol, veh/h | 4 | 87 | 165 | 4 | 2 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 95 | 179 | 4 | 2 | 7 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 183 | 0 | - | 0 | 284 | 181 |
| Stage 1 | - | - | - | - | 181 | - |
| Stage 2 | - | - | - | - | 103 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1392 | - | - | - | 706 | 862 |
| Stage 1 | - | - | - | - | 850 | - |
| Stage 2 | - | - | - | - | 921 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1392 | - | - | - | 704 | 862 |
| Mov Cap-2 Maneuver | - | - | - | - | 704 | - |
| Stage 1 | - | - | - | - | 847 | - |
| Stage 2 | - | - | - | - | 921 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 9.5 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1392 | - | - | - | 816 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.011 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 9.5 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.5 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 370 | 8 | 30 | 330 | 16 | 25 | 10 | 11 | 13 | 11 | 17 |
| Future Vol, veh/h | 4 | 370 | 8 | 30 | 330 | 16 | 25 | 10 | 11 | 13 | 11 | 17 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 402 | 9 | 33 | 359 | 17 | 27 | 11 | 12 | 14 | 12 | 18 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 13 | 12.8 | 9.4 | 9.2 |
| HCM LOS | B | B | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 54% | 1% | 8% | 32% |
| Vol Thru, % | 22% | 97% | 88% | 27% |
| Vol Right, % | 24% | 2% | 4% | 41% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 46 | 382 | 376 | 41 |
| LT Vol | 25 | 4 | 30 | 13 |
| Through Vol | 10 | 370 | 330 | 11 |
| RT Vol | 11 | 8 | 16 | 17 |
| Lane Flow Rate | 50 | 415 | 409 | 45 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.082 | 0.535 | 0.528 | 0.071 |
| Departure Headway (Hd) | 5.899 | 4.64 | 4.648 | 5.761 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 611 | 772 | 772 | 625 |
| Service Time | 3.899 | 2.697 | 2.705 | 3.763 |
| HCM Lane V/C Ratio | 0.082 | 0.538 | 0.53 | 0.072 |
| HCM Control Delay | 9.4 | 13 | 12.8 | 9.2 |
| HCM Lane LOS | A | B | B | A |
| HCM 95th-tile Q | 0.3 | 3.2 | 3.1 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 370 | 99 | 8 | 4 | 17 |
| Future Vol, veh/h | 4 | 370 | 99 | 8 | 4 | 17 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 402 | 108 | 9 | 4 | 18 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 117 | 0 | - | 0 | 523 | 113 |
| Stage 1 | - | - | - | - | 113 | - |
| Stage 2 | - | - | - | - | 410 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1471 | - | - | - | 514 | 940 |
| Stage 1 | - | - | - | - | 912 | - |
| Stage 2 | - | - | - | - | 670 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1471 | - | - | - | 512 | 940 |
| Mov Cap-2 Maneuver | - | - | - | - | 512 | - |
| Stage 1 | - | - | - | - | 908 | - |
| Stage 2 | - | - | - | - | 670 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1471 | - | - | - | 811 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.028 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 9.6 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 24 | 1143 | 1407 | 68 | 1 | 7 |
| Future Vol, veh/h | 24 | 1143 | 1407 | 68 | 1 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 26 | 1242 | 1529 | 74 | 1 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1603 | 0 | - | 0 | 2239 | 802 |
| Stage 1 | - | - | - | - | 1566 | - |
| Stage 2 | - | - | - | - | 673 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 198 | - | - | - | 50 | 281 |
| Stage 1 | - | - | - | - | 109 | - |
| Stage 2 | - | - | - | - | 455 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 198 | - | - | - | 43 | 281 |
| Mov Cap-2 Maneuver | - | - | - | - | 43 | - |
| Stage 1 | - | - | - | - | 95 | - |
| Stage 2 | - | - | - | - | 455 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 27.9 |
| HCM LOS | | | D |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 198 | - | - | - | 166 |
| HCM Lane V/C Ratio | 0.132 | - | - | - | 0.052 |
| HCM Control Delay (s) | 25.9 | - | - | - | 27.9 |
| HCM Lane LOS | D | - | - | - | D |
| HCM 95th %tile Q(veh) | 0.4 | - | - | - | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 0 | 547 | 0 | 0 | 877 |
| Future Vol, veh/h | 1 | 0 | 547 | 0 | 0 | 877 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 0 | 595 | 0 | 0 | 953 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1072 | 298 | 0 | - | - | - |
| Stage 1 | 595 | - | - | - | - | - |
| Stage 2 | 477 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 215 | 698 | - | 0 | 0 | - |
| Stage 1 | 514 | - | - | 0 | 0 | - |
| Stage 2 | 590 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 215 | 698 | - | - | - | - |
| Mov Cap-2 Maneuver | 215 | - | - | - | - | - |
| Stage 1 | 514 | - | - | - | - | - |
| Stage 2 | 590 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 21.8 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 215 | - | - |
| HCM Lane V/C Ratio | - | 0.005 | - | - |
| HCM Control Delay (s) | - | 21.8 | 0 | - |
| HCM Lane LOS | - | C | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 938 | 1141 | 9 | 20 | 15 |
| Future Vol, veh/h | 10 | 938 | 1141 | 9 | 20 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 100 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 1020 | 1240 | 10 | 22 | 16 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1250 | 0 | - | 0 | 1777 | 625 |
| Stage 1 | - | - | - | - | 1245 | - |
| Stage 2 | - | - | - | - | 532 | - |
| Critical Hdwy | 5.34 | - | - | - | 6.29 | 7.14 |
| Critical Hdwy Stg 1 | - | - | - | - | 6.64 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 | - |
| Follow-up Hdwy | 3.12 | - | - | - | 3.67 | 3.92 |
| Pot Cap-1 Maneuver | 296 | - | - | - | 95 | 367 |
| Stage 1 | - | - | - | - | 174 | - |
| Stage 2 | - | - | - | - | 536 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 296 | - | - | - | 91 | 367 |
| Mov Cap-2 Maneuver | - | - | - | - | 91 | - |
| Stage 1 | - | - | - | - | 168 | - |
| Stage 2 | - | - | - | - | 536 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 42.2 |
| HCM LOS | | | E |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 296 | - | - | - | 134 |
| HCM Lane V/C Ratio | 0.037 | - | - | - | 0.284 |
| HCM Control Delay (s) | 17.6 | - | - | - | 42.2 |
| HCM Lane LOS | C | - | - | - | E |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 1.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 12 | 15 | 783 | 0 | 0 | 610 |
| Future Vol, veh/h | 12 | 15 | 783 | 0 | 0 | 610 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 50 | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 16 | 851 | 0 | 0 | 663 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1183 | 426 | 0 | - | - | - |
| Stage 1 | 851 | - | - | - | - | - |
| Stage 2 | 332 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | - | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | - | - |
| Pot Cap-1 Maneuver | 182 | 577 | - | 0 | 0 | - |
| Stage 1 | 379 | - | - | 0 | 0 | - |
| Stage 2 | 699 | - | - | 0 | 0 | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 182 | 577 | - | - | - | - |
| Mov Cap-2 Maneuver | 182 | - | - | - | - | - |
| Stage 1 | 379 | - | - | - | - | - |
| Stage 2 | 699 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 18 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | WBLn1 | WBLn2 | SBT |
|---|---|---|---|---|
| Capacity (veh/h) | - | 182 | 577 | - |
| HCM Lane V/C Ratio | - | 0.072 | 0.028 | - |
| HCM Control Delay (s) | - | 26.3 | 11.4 | - |
| HCM Lane LOS | - | D | B | - |
| HCM 95th %tile Q(veh) | - | 0.2 | 0.1 | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.7 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 278 | 20 | 12 | 212 | 6 | 20 | 12 | 8 | 6 | 2 | 18 |
| Future Vol, veh/h | 2 | 278 | 20 | 12 | 212 | 6 | 20 | 12 | 8 | 6 | 2 | 18 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 302 | 22 | 13 | 230 | 7 | 22 | 13 | 9 | 7 | 2 | 20 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 10.2 | 9.5 | 8.6 | 8.1 |
| HCM LOS | B | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 50% | 1% | 5% | 23% |
| Vol Thru, % | 30% | 93% | 92% | 8% |
| Vol Right, % | 20% | 7% | 3% | 69% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 40 | 300 | 230 | 26 |
| LT Vol | 20 | 2 | 12 | 6 |
| Through Vol | 12 | 278 | 212 | 2 |
| RT Vol | 8 | 20 | 6 | 18 |
| Lane Flow Rate | 43 | 326 | 250 | 28 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.063 | 0.393 | 0.309 | 0.038 |
| Departure Headway (Hd) | 5.213 | 4.342 | 4.447 | 4.888 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 686 | 832 | 810 | 730 |
| Service Time | 3.254 | 2.363 | 2.471 | 2.932 |
| HCM Lane V/C Ratio | 0.063 | 0.392 | 0.309 | 0.038 |
| HCM Control Delay | 8.6 | 10.2 | 9.5 | 8.1 |
| HCM Lane LOS | A | B | A | A |
| HCM 95th-tile Q | 0.2 | 1.9 | 1.3 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 88 | 167 | 4 | 2 | 6 |
| Future Vol, veh/h | 4 | 88 | 167 | 4 | 2 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 96 | 182 | 4 | 2 | 7 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 186 | 0 | - | 0 | 288 | 184 |
| Stage 1 | - | - | - | - | 184 | - |
| Stage 2 | - | - | - | - | 104 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1388 | - | - | - | 702 | 858 |
| Stage 1 | - | - | - | - | 848 | - |
| Stage 2 | - | - | - | - | 920 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1388 | - | - | - | 700 | 858 |
| Mov Cap-2 Maneuver | - | - | - | - | 700 | - |
| Stage 1 | - | - | - | - | 845 | - |
| Stage 2 | - | - | - | - | 920 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 9.5 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1388 | - | - | - | 812 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.011 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 9.5 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.7 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 375 | 8 | 30 | 334 | 16 | 25 | 10 | 11 | 13 | 11 | 17 |
| Future Vol, veh/h | 4 | 375 | 8 | 30 | 334 | 16 | 25 | 10 | 11 | 13 | 11 | 17 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 408 | 9 | 33 | 363 | 17 | 27 | 11 | 12 | 14 | 12 | 18 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 13.2 | 13 | 9.5 | 9.2 |
| HCM LOS | B | B | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 54% | 1% | 8% | 32% |
| Vol Thru, % | 22% | 97% | 88% | 27% |
| Vol Right, % | 24% | 2% | 4% | 41% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 46 | 387 | 380 | 41 |
| LT Vol | 25 | 4 | 30 | 13 |
| Through Vol | 10 | 375 | 334 | 11 |
| RT Vol | 11 | 8 | 16 | 17 |
| Lane Flow Rate | 50 | 421 | 413 | 45 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.082 | 0.543 | 0.534 | 0.072 |
| Departure Headway (Hd) | 5.921 | 4.645 | 4.654 | 5.785 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 609 | 770 | 768 | 623 |
| Service Time | 3.924 | 2.705 | 2.714 | 3.786 |
| HCM Lane V/C Ratio | 0.082 | 0.547 | 0.538 | 0.072 |
| HCM Control Delay | 9.5 | 13.2 | 13 | 9.2 |
| HCM Lane LOS | A | B | B | A |
| HCM 95th-tile Q | 0.3 | 3.3 | 3.2 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 375 | 100 | 8 | 4 | 17 |
| Future Vol, veh/h | 4 | 375 | 100 | 8 | 4 | 17 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 408 | 109 | 9 | 4 | 18 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 118 | 0 | - | 0 | 530 | 114 |
| Stage 1 | - | - | - | - | 114 | - |
| Stage 2 | - | - | - | - | 416 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1470 | - | - | - | 510 | 939 |
| Stage 1 | - | - | - | - | 911 | - |
| Stage 2 | - | - | - | - | 666 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1470 | - | - | - | 508 | 939 |
| Mov Cap-2 Maneuver | - | - | - | - | 508 | - |
| Stage 1 | - | - | - | - | 907 | - |
| Stage 2 | - | - | - | - | 666 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1470 | - | - | - | 808 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.028 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 9.6 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 18.4 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 283 | 278 | 20 | 19 | 212 | 6 | 21 | 12 | 14 | 6 | 2 | 18 |
| Future Vol, veh/h | 283 | 278 | 20 | 19 | 212 | 6 | 21 | 12 | 14 | 6 | 2 | 18 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 308 | 302 | 22 | 21 | 230 | 7 | 23 | 13 | 15 | 7 | 2 | 20 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 22.7 | 10.5 | 9.5 | 9 |
| HCM LOS | C | B | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 45% | 49% | 8% | 23% |
| Vol Thru, % | 26% | 48% | 89% | 8% |
| Vol Right, % | 30% | 3% | 3% | 69% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 47 | 581 | 237 | 26 |
| LT Vol | 21 | 283 | 19 | 6 |
| Through Vol | 12 | 278 | 212 | 2 |
| RT Vol | 14 | 20 | 6 | 18 |
| Lane Flow Rate | 51 | 632 | 258 | 28 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.083 | 0.794 | 0.346 | 0.044 |
| Departure Headway (Hd) | 5.866 | 4.525 | 4.836 | 5.637 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 605 | 796 | 739 | 628 |
| Service Time | 3.958 | 2.566 | 2.889 | 3.735 |
| HCM Lane V/C Ratio | 0.084 | 0.794 | 0.349 | 0.045 |
| HCM Control Delay | 9.5 | 22.7 | 10.5 | 9 |
| HCM Lane LOS | A | C | B | A |
| HCM 95th-tile Q | 0.3 | 8.2 | 1.5 | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 6 | 90 | 168 | 5 | 12 | 7 |
| Future Vol, veh/h | 6 | 90 | 168 | 5 | 12 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 7 | 98 | 183 | 5 | 13 | 8 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 188 | 0 | - | 0 | 298 | 186 |
| Stage 1 | - | - | - | - | 186 | - |
| Stage 2 | - | - | - | - | 112 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1386 | - | - | - | 693 | 856 |
| Stage 1 | - | - | - | - | 846 | - |
| Stage 2 | - | - | - | - | 913 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1386 | - | - | - | 690 | 856 |
| Mov Cap-2 Maneuver | - | - | - | - | 690 | - |
| Stage 1 | - | - | - | - | 842 | - |
| Stage 2 | - | - | - | - | 913 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 10 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1386 | - | - | - | 743 |
| HCM Lane V/C Ratio | 0.005 | - | - | - | 0.028 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 10 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 13 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 378 | 8 | 35 | 334 | 16 | 27 | 10 | 22 | 13 | 11 | 17 |
| Future Vol, veh/h | 4 | 378 | 8 | 35 | 334 | 16 | 27 | 10 | 22 | 13 | 11 | 17 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 411 | 9 | 38 | 363 | 17 | 29 | 11 | 24 | 14 | 12 | 18 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 13.5 | 13.4 | 9.5 | 9.3 |
| HCM LOS | B | B | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 46% | 1% | 9% | 32% |
| Vol Thru, % | 17% | 97% | 87% | 27% |
| Vol Right, % | 37% | 2% | 4% | 41% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 59 | 390 | 385 | 41 |
| LT Vol | 27 | 4 | 35 | 13 |
| Through Vol | 10 | 378 | 334 | 11 |
| RT Vol | 22 | 8 | 16 | 17 |
| Lane Flow Rate | 64 | 424 | 418 | 45 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.104 | 0.553 | 0.547 | 0.072 |
| Departure Headway (Hd) | 5.861 | 4.696 | 4.705 | 5.856 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 615 | 763 | 762 | 615 |
| Service Time | 3.863 | 2.765 | 2.774 | 3.86 |
| HCM Lane V/C Ratio | 0.104 | 0.556 | 0.549 | 0.073 |
| HCM Control Delay | 9.5 | 13.5 | 13.4 | 9.3 |
| HCM Lane LOS | A | B | B | A |
| HCM 95th-tile Q | 0.3 | 3.4 | 3.4 | 0.2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 6 | 337 | 101 | 9 | 17 | 18 |
| Future Vol, veh/h | 6 | 337 | 101 | 9 | 17 | 18 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 7 | 366 | 110 | 10 | 18 | 20 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 120 | 0 | - | 0 | 495 | 115 |
| Stage 1 | - | - | - | - | 115 | - |
| Stage 2 | - | - | - | - | 380 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1468 | - | - | - | 534 | 937 |
| Stage 1 | - | - | - | - | 910 | - |
| Stage 2 | - | - | - | - | 691 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1468 | - | - | - | 531 | 937 |
| Mov Cap-2 Maneuver | - | - | - | - | 531 | - |
| Stage 1 | - | - | - | - | 905 | - |
| Stage 2 | - | - | - | - | 691 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0 | 10.6 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1468 | - | - | - | 683 |
| HCM Lane V/C Ratio | 0.004 | - | - | - | 0.056 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 10.6 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

# **Appendix D:** Air Model Construction Trips

The construction trip estimates are based on the Air Model (CalEEMod) for the GCCD Facilities Master Plan.

The following are the construction daily trips that would be generated by each phase of construction at each campus.

- Worker trips are automobiles
- Haul Truck trips are classified as Heavy Heavy Duty Trucks (4+ axle)
- Vendor Truck trips are classified as ½ Medium Heavy Duty Trucks (3-axle) and ½ Heavy Heavy Duty Trucks (4+ axle)

| **Verdugo Campus Construction Trips per Day** | | | |
|---|---|---|---|
| **Phase** | Worker | Vendor Trucks | Haul Trucks |
| **I** | 15 | 6 | 39.7 |
| **II** | 20 | 6 | 0 |
| **III** | 264 | 103 | 0 |
| **IV** | 15 | 0 | 0 |
| **V** | 53 | 0 | 0 |

| **Garfield Campus Construction Trips per Day** | | | |
|---|---|---|---|
| **Phase** | Worker | Vendor Trucks | Haul Trucks |
| **I** | 13 | 6 | 18.6 |
| **II** | 10 | 6 | 0 |
| **III** | 55 | 22 | 0 |
| **IV** | 15 | 0 | 0 |
| **V** | 11 | 0 | 0 |

| **Montrose Campus Construction Trips per Day** | | | |
|---|---|---|---|
| **Phase** | Worker | Vendor Trucks | Haul Trucks |
| **I** | 13 | 6 | 10.4 |
| **II** | 8 | 6 | 0 |
| **III** | 35 | 14 | 0 |
| **IV** | 13 | 0 | 0 |
| **V** | 7 | 0 | 0 |

*Source: Vista Environmental*

# Appendix E: Cumulative Projects

# Environmental Review

## Amendment to FY 2019-2020 Community Development Block Grant

- NOTICE OF INTENT TO ADOPT A SUBSEQUENT NEGATIVE DECLARATION
- PROPOSED SUBSEQUENT NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

Action Plan amendment prepared by the City of Glendale Community Services and Parks Department for the fiscal year 2019-2020 Community Development Block Grant (CDBG), Emergency Shelter Grant (ESG), and HOME programs to include the CARES Act 2020 Action Plan.

Proposed Negative Declaration Comment Period: **May 15, 2020 to June 4, 2020**.

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## 1248 Corona Drive

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- Report of Geotechnical Investigation(prepared by Applied Earth Sciences, April 1, 2019)
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter

**PROJECT DESCRIPTION**

The applicant is requesting approval of the Design Review Board for the construction of a new two-story, 2,299 square-foot single-family dwelling with an attached 545 square-foot two-car garage on a 8,889 square-foot lot, zoned R1R (FAR District III) with an average current slope of approximately 70%. As proposed, the development will involve a total export of 1,058 cubic yards of soil.

Proposed Mitigated Negative Declaration Comment Period: **May 1, 2020 to May 21, 2020**

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## Community Development Block Grant

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
City of Glendale Community Services and Parks Department's Fiscal Year 2020-2021 Action Plan for Community Development Block Grant (CDBG), Emergency Shelter Grant (ESG) and HOME Programs for the City of Glendale.

Proposed Negative Declaration Comment Period: **April 20, 2020 to May 11, 2020**.

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## 6231- 6325 San Fernando Road

- Notice of Intent to Adopt a Mitigated Negative Declaration

- Proposed Mitigated Negative Declaration
- Traffic Impact Study
- Geotechnical Investigation and Infiltration Study
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter

**PROJECT DESCRIPTION**

The proposed Project is to construct a 6,200 square-foot addition to an existing one-story, 6,087 square-foot, commercial/industrial building (6325 San Fernando Road, constructed in 1968), located in the C3 I (Commercial Services) zone, Height District I; construction of a 2,780 square-foot ground level addition and 4,832 square-foot mezzanine addition within an existing 6,648 square-foot, commercial/industrial building (6311 San Fernando Road, constructed in 1972); the demolition of 848 square-feet and façade improvement to an existing 52,848 square-foot commercial/industrial building (6265 San Fernando Road, constructed in 1953); and the construction of a 7,789 square-foot addition to an existing one-story, 2,211 square-foot commercial/industrial building (6231 San Fernando Road, constructed in 1921). The project site is approximately 187,440 square-feet (4.3 acres) in size, located in the IMU (Industrial/Commercial Mixed Use) Zone. The Project will function as general commercial offices. The existing parking spaces at the Project site will be reconfigured with a code compliant amount of 263 parking spaces and 23 non-code compliant tandem parking spaces. The proposed project requires approval from the Design Review Board.

The Project site is generally located mid-block of San Fernando Road, between Sonora Avenue and Grandview Avenue. Surrounding the Project site are commercial businesses (retail, restaurants, auto repair, etc.) to the west (across San Fernando Road) located in the IMU (Industrial/Commercial Mixed Use) zone, office and retail to the north located within the C3-I (Commercial Service-Height District I) zone, auto repair to the south located in the IMU (Industrial/Commercial Mixed Use) zone, and the Southern Pacific Railroad right-of-way to the south located in the T (Transportation) zone.

Construction of the project will occur over a single phase, which will take place over a period of approximately 60 weeks or 14 months. The amount of soil import to the site will be approximately 574 cubic yards (426 cubic yards cut; 1,000 cubic yards fill). Based on this estimate, the excavation material would require approximately 56 truck trips, assuming 16 cubic yards per truck. Due to the nature of the project, excavation would not occur over the entire 60 week construction period, but would be concentrated over approximately two weeks within the first five weeks of construction. The maximum number of haul truck trips per eight-hour work day is anticipated to be 8. The primary inbound haul route to the Project site would be from the Western Avenue exit of the Interstate 5 Freeway, then right onto San Fernando Road ending at the Project site. The same route is anticipated to be used for outbound trucks. The project site is approximately 4.3 acres allowing for staging areas and construction worker parking to take place onsite.

Proposed Negative Declaration Comment Period: **December 16, 2019 – January 6, 2020**

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**All for Health, Health for All - 517 E. Broadway**

**COMBINED STAGE I AND II DESIGN REVIEW CASE NO. PDR 1902176**

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- 3074_517EBroadway_TIA_Sept2019
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) – Annual

- California Emissions Estimator Module (CalEEMod version 2016.3.2) – Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) – Winter

**PROJECT DESCRIPTION**

The proposed project site is approximately 12,086 square feet and currently developed with a one-story medical office building (built in 1948) and adjacent private surface parking lot. The site is located on the northwest corner of Broadway and Isabel Street, in the DSP/EB (Downtown Specific Plan/East Broadway District) District, described as Portions of Lots 21, 22, 23 and 24, Tract No. 6356.

The applicant is proposing to demolish the existing medical-office building and adjacent parking lot and construct a 5-story, 32,500 square-foot commercial building containing medical/general offices and retail uses on the ground level and on-site parking within a multi-level underground parking structure providing 71 parking spaces.

Proposed Mitigated Negative Declaration Comment Period: **December 2, 2019 - December 23, 2019**

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**Holy Family Campus Master Plan – 214 E. Elk Ave., 209 E. Lomita Ave., 400 E. Lomita Ave., and 404 S. Louise St.**

- Notice of Intent to Adopt a Negative Declaration
- Proposed Negative Declaration
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) – Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) – Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) – Winter

**PROJECT DESCRIPTION**

The proposed project encompasses the expansion of and improvements to the Holy Family Campus ("Campus") in conjunction with the proposed "Master Plan" for Holy Family. The Campus is located in the R-1650 multi-family residential zone on three corner properties and includes the Holy Family Elementary School located at 404 South Louise Street, Holy Family Church located at 214 East Elk Avenue and the Parish Office/Rectory at 209 East Lomita Avenue, and Holy Family High School located at 400 East Lomita Avenue. The proposed expansion of and improvements to the existing private school (Holy Family High School) and the existing church (Holy Family Church) will occur over two phases as described below. No changes to the elementary school are proposed as part of the Master Plan.

Holy Family High School (400 East Lomita Avenue) – The expansion of the existing private high school includes the development of two new buildings on the 124,338 square-foot site: a 12,600 square-foot, two-story building (Parish Center) and a 2,900 square-foot, one-story building. The high school project site is located on the south-east corner of Lomita Avenue and South Louise Street, and is currently developed with three buildings, as well as associated playground areas for the students and parking for the Holy Family Campus. The current student capacity for the all-girls High School will remain at 280 students, and the proposal does not include expanding the enrollment capacity. The existing high school building was built in 1950 and will remain; no changes are proposed to the high school building. The proposed project will require demolition of the other two buildings on-site that include the existing Parish Hall (originally built in 1923) and an existing, ancillary storage building (St. Anthony's, built in 1964). Development of the site also includes improvements to the existing playground areas and reconfiguration of the on-site parking. The applicant is requesting the following discretionary approvals: a parking reduction to provide a total of 162 stalls for the private school and new buildings, where 287 parking spaces are required; a conditional use permit to allow the expansion of the existing private school; and a setback and

standards variance to allow the construction of a new fence in the street-front and street-side setback areas and to provide less landscaping than required by code.

Holy Family Church (214 East Elk Avenue and 209 East Lomita Avenue) – The proposal is to demolish an existing two-story, 3,055 square-foot office building (209 East Lomita Avenue) to provide 22 on-site parking spaces on the 19,450 square-foot project site. The site is currently developed with two buildings that include the Holy Family Church and Parish Office/Rectory. The existing church located at 214 East Elk Avenue was built in 1921 and will remain; no changes are proposed to the church building. The existing parish office building located at 209 East Lomita Avenue (west of the church) was built in 1977 and will be replaced with a surface parking lot for the church. A lot line adjustment application and a demolition clearance application have been submitted for this portion of the project.

The proposed "Master Plan" for the Holy Family Campus will be implemented over two phases as follows:

- Phase 1 – This phase involves improvements to the church and high school that will be completed in three sub-phases that include the following:
- Phase 2 – This phase deals with the high school site only:

Discretionary Permits:

Development of the high school portion of the project will require approval by the Planning Hearing Officer for the Parking Reduction Permit, Conditional Use Permit, and Variances. The project will also have to obtain approval from the Design Review Board for the new construction.

Development of the parking lot adjacent to the church will require approval by the Director of Community Development for a Lot Line Adjustment and a Demolition Clearance application.

The applicant is also requesting a development agreement to maintain all discretionary approvals for a maximum of ten (10 years); the development agreement will require recommendation by the Planning Commission and approval by City Council.

Proposed Negative Declaration Comment Period: **October 17, 2019 – November 6, 2019**

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## 1809 Verdugo Boulevard

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Traffic Analysis Memorandum
- Construction Noise Study
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter
- City of Glendale, Fire Prevention Project Comment
- City of Glendale, Police Department Project Comment

**PROJECT DESCRIPTION**

The proposed project includes the development of a new three-story 35,000 square-foot residential congregate living/medical facility with 79-beds, a 32 space semi-subterranean parking garage (below new building), and a new 36,780 square-foot parking garage (one level subterranean and two levels above grade) with 110 spaces on a 64,495 square-foot site consisting of three lots, located in the C2-I (Community Commercial-Height District I) Zone (Project). The Project site is currently developed with a four-story 35,980 square-foot medical office building (constructed in 1984) and with surface parking spaces and minimal landscaping. There are no protected

indigenous trees species on or within 20 feet of the site. The new residential congregate living facility/medical building will function as a residential use for persons in need of on-site assistance with activities of daily living and on-site assistance with medical care. The new 36,780 square-foot parking garage with 110 parking spaces will replace the existing surface parking spaces currently servicing the existing four-story 35,980 square-foot medical office building. The existing medical office building and the 36 parking spaces within the building at the ground level will remain. The proposed project requires approval from the Design Review Board.

The Project site is located at the northwest corner of Verdugo Boulevard and La Tour Way. Surrounding the Project site are the State Route 2 (SR2)/Interstate 210 (I-210) freeway interchange to the north and west, City of La Cañada Flintridge developed with single-family residences to the east and across La Tour Way, commercial development in City of La Cañada Flintridge further west beyond the SR2/I-210 interchange, and the USC Verdugo Hills Hospital located within the C3-III (Commercial Service-Height District III) and PPD (Precise Plan of Development) zone.

Construction of the project will occur over three phases as follows:

- Phase I - Improve the site with a new driveway accessed from Verdugo Boulevard and located west of the existing four-story medical office building;
- Phase II – Demolish portions of the existing surface parking lot located at the northeast portion of the Project site (behind the existing four-story approximate 35,980 square-foot medical office building) and construct a 110 space parking structure; and
- Phase III - Demolish the remaining portions of the surface parking lot located at the western portion of the Project site and construct the proposed three-story, 35,000 square-foot, residential congregate living/medical facility with a 32 space semi-subterranean garage.

The project's three phases will take place over a period of approximate 103 weeks or 8.5 months. The amount of soil export from the site will be approximately 8,000 cubic yards during Phase II and approximately 6,110 cubic yards during Phase III (14,110 cubic yards total). Based on this estimate, the excavation material would require approximately 500 truck trips during Phase II and approximately 382 truck trips during Phase III, assuming 16 cubic yards per truck for a total of 882 truck trips. Due to the nature of the project, excavation would not occur over the entire 103 week period, but would be concentrated over approximately three weeks within the first eight weeks of both Phases II and III. The maximum number of haul truck trips per eight-hour work day is anticipated to be 33. The primary inbound haul route to the Project site is projected to be from the Verdugo Boulevard exit of the SR2 Freeway, then right onto Verdugo, and the route would end at the Project site via the new driveway to be constructed at Phase I. The same route would be used for outbound trucks. The north side (west bound) Verdugo Boulevard would be used as the staging area and parking during the construction period.

Proposed Negative Declaration Comment Period: **July 8, 2019 – July 29, 2019**

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## 1100 South Brand Boulevard

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter

**PROJECT DESCRIPTION**

The proposed project involves the demolition of the existing surface parking lot located on the northern portion of the subject site to accommodate the construction of a new three story, approximately 64,000 square-foot parking structure with roof top parking on an approximately 98,700 square-foot site. No changes to the existing dealership

building, aside from the construction of ramps between the existing building and the new parking structure, are proposed. The new structure will be three stories and approximately 40 feet in height. Aside from four new service bays proposed to be located on the ground floor, the remainder of the structure will be used for parking vehicles.

Vehicular access to the site will remain as it currently exists with driveways from South Brand Boulevard, West Chevy Chase Drive and Palmer Avenue.

**ENVIRONMENTAL RECOMMENDATION**

The Community Development Department, after having conducted an Initial Study, has prepared a Mitigated Negative Declaration for the project. The Mitigated Negative Declaration and all documents referenced therein are available for review in the Community Development Department, Planning Division office, Room 103 of the Municipal Services Building, 633 East Broadway, Glendale, CA 91206 or on the Planning Division website: http://www.glendaleca.gov/environmental

Written comments may be submitted to the Community Development Department, Planning Division office, at the address listed above for a period of twenty (20) days after publication of this notice.

Proposed Negative Declaration Comment Period: **July 5, 2019 to July 25, 2019**

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## 129 - 133 Los Feliz Road

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter

**PROJECT DESCRIPTION**

An application to construct an approximately 57,350 square-foot, five story medical congregate care facility on an approximately 17,700 square-foot site. The first level includes a lobby, dining room, kitchen, pharmacy and administrative areas. The second through fifth floors mimic each other and include 18 rooms and common sitting areas. A roof deck is also proposed. A ramp leading to the subterranean garage is located off of the driveway in the western portion of the site.

Proposed Negative Declaration Comment Period: **May 29, 2019 – June 19, 2019**

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## 534 and 538 North Kenwood Street

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- Rehabilitation Plan
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter

**PROJECT DESCRIPTION**

The proposed project involves demolition of an existing one-story Colonial Craftsman style single-family residence (built in 1922 and altered in 1928) located at 538 North Kenwood Street, preservation and rehabilitation of an existing two-story Aeroplane Craftsman Style single-family residence (built in 1913) located at 534 North Kenwood Street, and construction of a new 11-unit, three-story residential building, for a total of 12 residential units on two adjoining lots totaling 15,000 square feet in area (0.34 acres), in the R-1250 (High Density Residential) zone. The project provides 26 parking spaces in a new one-level subterranean parking garage, and one unenclosed parking with access from the public alley along the east boundary of the project site. The applicant has requested the approval of an Administrative Exception to exceed the allowable lot coverage by 2.48 percent (the maximum allowed lot coverage is 50 percent). The project also requires approval from the Design Review Board for the design

Proposed Negative Declaration Comment Period: **May 10, 2019 – May 30, 2019**

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## 727 Sonora Avenue

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter
- Geotechnical Investigation Report
- Addendum 1 - Geotechnical Investigation Report

**PROJECT DESCRIPTION**

The proposed project is to demolish a 7,641 square-foot and a 3,800 square-foot industrial building (constructed in 1945 and 1946, respectively), and to construct a four-story, 33,053 square-foot, general office building with a three-level,91-space, subterranean garage across two lots totaling 12,482 square-feet, located in the IND (Industrial) Zone.

Proposed Negative Declaration Comment Period: **April 3, 2019 – April 24, 2019**

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## Community Development Block Grant

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
City of Glendale Community Services and Parks Department's Fiscal Year 2019-2020 Action Plan for Community Development Block Grant (CDBG), Emergency Shelter Grant (ESG) and HOME Programs for the City of Glendale.

Proposed Negative Declaration Comment Period: March 25, 2019 to April 15, 2019.

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## 601-603 Bohlig Road

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration

- Plans
- Tree Report
- Soils Report

**PROJECT DESCRIPTION**

The proposed project involves a parcel map application to re-subdivide five existing parcels, totaling 23,866 square feet in size, into two parcels. The proposed project includes the demolition of an existing house (built in 1953) and the construction of a new three-story, 4,152 square-foot single-family house and an attached three-car garage on Parcel 1 (601 Bohlig Road) and a new 3-story, 2,529 square-foot single-family house with an attached two-car garage on Parcel 2 (603 Bohlig Road).

Proposed Negative Declaration Comment Period: **March 11, 2019 – April 1, 2019**

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## 1304-1310 South Brand Boulevard and 110-116 East Cypress Street

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter

**PROJECT DESCRIPTION**

The proposed project involves the demolition demolish a 7,641 square-foot and a 3,800 square-foot industrial building (constructed in 1945 and 1946, respectively), and to construct a four-story, 33,053 square-foot, general office building with a three-level,91-space, subterranean garage across two lots totaling 12,482 square-feet, located in the IND (Industrial) Zone.

Proposed Negative Declaration Comment Period: **February 13, 2019 – March 5, 2019**

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## 3600 Marengo Drive

- Notice of Intent to Adopt a Negative Declaration
- Proposed Negative Declaration
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter

**PROJECT DESCRIPTION**

Standards variance and conditional use permit applications to construct two new broadcast towers at 140 feet and 160 feet in height, and to construct a new 1,750 square foot, 15-foot high unstaffed communications building at an existing transmission facility located on a 23.4 acre lot within a primary ridgeline, zoned ROS (Residential Open Space).

Proposed Negative Declaration Comment Period: **February 7, 2019 – February 27, 2019**

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## 620 West Elk Avenue

- Notice of Intent to Adopt a Negative Declaration
- Proposed Negative Declaration
- Plans
- Parking Analysis
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter

**PROJECT DESCRIPTION**

The proposed project includes the development of a three-story mini-storage facility, approximately 48 feet in height, on an 81,875 square-foot through lot. The project site consists of four contiguous parcels, located mid-block with frontage on West Elk Avenue to the north and Vine Street to the south. The proposed storage building will be 214,745 square feet in size featuring storage units ranging in size from 25 square feet to 330 square feet on all three levels, and an office on the ground floor. The applicant is requesting a parking reduction to provide 40 parking spaces, including one handicapped parking space, where 214 parking spaces and eight loading spaces are required for the proposed personal storage facility use. All existing buildings on the project site will be demolished.

Proposed Negative Declaration Comment Period: **November 13, 2018 – December 3, 2018**

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## 1809 Verdugo Boulevard

- Notice of Intent to Adopt a Negative Declaration
- Proposed Negative Declaration
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Annual
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Summer
- California Emissions Estimator Module (CalEEMod version 2016.3.2) - Winter
- Traffic Analysis Memorandum (prepared by Jano Baghdanian & Associates, September 17, 2017)

**PROJECT DESCRIPTION**

To construct a new, three-story, 79-bed, 35,000 square-foot, residential congregate living/ medical facility with a 34 space, semi-subterranean garage, and a new 36,783 square-foot, three-level (one level subterranean and two levels above grade), 105 space parking garage on a 64,495 square-foot site consisting of three lots. The site is currently developed with a 35,981 square-foot, three-story, medical office building with 36 parking spaces at the first level of the building (constructed in 1984), located in the C2-I Zone. The existing medical office building and the 36 parking spaces within the building will remain. As proposed, the development will involve a total export of 14,106 cubic yards of soil. The proposed residential congregate living/ medical facility will require approval from the Design Review Board.

Proposed Negative Declaration Comment Period: **October 22, 2018 to November 11, 2018.**

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## 206-220 North Kenwood Street and 223-241 North Jackson Street

- Final SCEA
- Notice of Intent to Adopt a Sustainable Communities Environmental Assessment (SCEA)
- Proposed SCEA

- Attachment A - Air Quality CalEEMod Output Sheets
- Attachment B - Historic Assessment
- Attachment C - Cultural Resource Inventory
- Attachment D - Environmental Site Assessment Report
- Attachment E - Geotechnical Study
- Attachment F - Noise Monitoring Output Sheets
- Attachment G - Traffic Study
- Plans

**PROJECT DESCRIPTION**

The proposed project involves removal of the existing GUSD Headquarters building to allow for a 207 unit affordable housing project. The proposed project consists of a new 4-story (plus mezzanine) multi-family residential building containing 192 units, six new residential units proposed as an adaptive re-use on the second floor of the existing office building (231 N. Jackson Street), and the rehabilitation of 9 existing dwelling units (241 N. Jackson Street ). Parking will be provided in a multi-level above and below ground parking garage consisting of a minimum of 244 parking spaces wrapped by the new 192 unit structure. The project will provide 17 affordable units to very-low income households. As part of the density bonus application, the applicant is requesting two concessions and five waivers from the development standards. The project qualifies for reduced parking of 0.5 spaces per bedroom inclusive of guest and handicapped spaces under the State Density Bonus Law.

Proposed Sustainable Communities Environmental Assessment Comment Period: **October 11, 2018 to November 9, 2018**.

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## 501 South Central Street

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans

**PROJECT DESCRIPTION**

An application to construct a 17,826 square-foot, 3-story office/retail building (over a one-level 8,325 square-foot subterranean parking garage) on a 8,400 square-foot lot. Development of the project will require the demolition of the existing 720 square-foot counter service restaurant located at 501 South Central Avenue (built in 1948) and the existing 918 square-foot house located at 308 West Lomita (built in 1921). The applicant is asking to provide 30 on-site, accessible parking spaces, four tandem parking spaces, and 17 lift spaces (51 total) where 49 on-site, accessible parking spaces are required in the C3-1 Zone, described as a Portion of Lot 14, Palmetto Tract.

Proposed Mitigated Negative Declaration Comment Period: **September 20, 2018 to October 9, 2018**.

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## 401-409 Hawthorne Street

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- Historic Building Assessment
- Preservation Plan
- California Emissions Estimator Module - Annual
- California Emissions Estimator Module - Summer
- California Emissions Estimator Module - Winter

**PROJECT DESCRIPTION**

The applicant is requesting approval of an affordable housing project pursuant to GMC Chapter 30.36 and the State Density Bonus law, to construct a new, 5-story, 23-unit multi-family residential development, and maintain two of the five existing units on-site (401 Hawthorne Street and 141 South Columbus Avenue), for a total of 25 residential dwelling units. Five of the units will be reserved as affordable to very low income tenants. As part of the density bonus application, the applicant is requesting three concessions in regards to floor area ratio, height, and additional outdoor space. The project site consists of three lots totaling 18,750 square-feet in area and is located in the R-1250 (High Density Residential) Zone. The proposal includes a total of 39 parking spaces with 37 parking spaces in a new two level subterranean parking garage, and two parking spaces within the existing detached garage for use by the two existing units (addressed as 401 Hawthorne Street and 141 South Columbus Avenue). The project involves the demolition of three existing residential units (405 Hawthorne Street – a duplex and a detached garage; 409 Hawthorne Street – one single family residence and detached garage). Development of the project requires approval by the Director of Community Development for the Density Bonus Review, and Design Review Board approval for the design.

Proposed Mitigated Negative Declaration Comment Period: **September 7, 2018 to September 27, 2018**.

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## 3506-3514 North Verdugo Road

- Notice of Intent to Adopt a Negative Declaration
- Proposed Negative Declaration
- Plans
- California Emissions Estimator Module - Annual
- California Emissions Estimator Module - Summer
- California Emissions Estimator Module - Winter
- Phase I Report
- Soils Report

**PROJECT DESCRIPTION**

To demolish the existing buildings and to construct a new three-story (with mezzanine) mixed use project, which consists of 14 residential dwelling (three two-bedroom units, seven three-bedroom units, and four four-bedroom units) in the upper two floors, 2,762 square feet of retail/office space on the ground floor, and a total of 49 parking spaces located within two levels (ground floor and subterranean level), on an 18,000 square-foot (0.41 acre) lot, zoned C3 (Height District I). Per GMC 30.12.020, multiple residential dwelling units are permitted in the C3 zone in compliance with the R-1250 development standards; as proposed, the project requires approval of Standard Variances to allow additional lot coverage greater than 50% on the ground floor and additional floor area greater than 1.2, and a reduction in the minimum 20-foot street front setback to allow residential private patios and landscape planters on the second floor deck above the ground floor retail/office space.

Proposed Negative Declaration Comment Period: **June 14, 2018 to July 5, 2018.**

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## Glendale 2018 Wastewater Change Petition

**PROJECT LOCATION**

The proposed project site includes the Glendale Water & Power (GWP) and Pasadena Water & Power (PWP) service areas within the Cities of Glendale and Pasadena, as well as adjacent portions of the City of San Marino, City of Los Angeles, City of La Canada-Flintridge, and unincorporated community of Altadena, and is generally

bounded by the San Gabriel Mountains to the north; the City of Sierra Madre to the east; the State Route (SR) 134 (Ventura Freeway), SR-2 (Glendale Freeway), and the Los Angeles River to the south; and the City of Burbank, Griffith Park, and Verdugo Hills to the west.

- Final IS/MND
- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration

**PROJECT DESCRIPTION**

The City of Glendale proposes to gradually decrease the volume of treated wastewater discharged from the Los Angeles-Glendale Water Reclamation Plant (LAGWRP) to the Los Angeles River (River) in order to increase the delivery of recycled water to various users within the GWP and PWP service areas, as well construction and operation of new recycled water distribution facilities to serve new customers within the GWP service area.

Proposed Mitigated Negative Declaration Comment Period: **June 7, 2018 to July 6, 2018**.

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## 1633 Victory Boulevard

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- California Emissions Estimator Module (CalEEMod version 2016.3.2) Report
- ESA Phase I
- ESA Phase II

**PROJECT DESCRIPTION**

To demolish the existing one-story, 3,537 square-foot, commercial building and associated shade structures (constructed in 1966), and to construct a new three-story, 37,858 square-foot 64 room hotel with a two-level subterranean garage with 65 parking spaces on a 21,647 square-foot lot, located in the C3 (Height District I) Zone. As proposed, the development will involve a total export of 12,348 cubic yards of soil. The proposed hotel will require approval from the Design Review Board.

Proposed Mitigated Negative Declaration Comment Period: **May 3, 2018 to May 23, 2018.**

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## 1829 Kirkby Road

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION
- Plans
- Historic Resource Assessment Report
- Geotechnical Investigation Report
- Indigenous Tree Report
- California Emissions Estimator Module (CalEEMod version 2016.3.2) Report

**PROJECT DESCRIPTION**

To construct a new two-story, 4,114 square-foot single-family dwelling with an attached 648 square-foot, three-car garage on an approximately 15,880 square-foot lot, zoned R1R (FAR District II). The project includes demolition of the two (2) existing residential structures: a single-family dwelling and accessory living quarters (built circa 1911 and 1924). As proposed, the development will involve grading with a total export of 196 cubic yards of soil. There

are a total of fourteen protected indigenous trees (Coast Live Oaks) located on or within twenty feet of the property (eleven located on the project site). Additionally, a portion of the lot is located in a Liquefaction Zone. The proposed single-family dwelling will require approval from the Design Review Board.

Proposed Mitigated Negative Declaration Comment Period: **March 29, 2018 to April 17, 2018.**

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## Community Development Block Grant

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

1829 Kirkby Road
**PROJECT DESCRIPTION**
City of Glendale Community Services and Parks Department's Fiscal Year 2018-2019 Action Plan for Community Development Block Grant, Emergency Shelter Grant and HOME Programs.

Proposed Negative Declaration Comment Period: **March 16, 2018 to April 5, 2018.**

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## GWP Grayson Repowering Project

- Proposed Grayson Repowering Project Website
- Final Environmental Impact Report (EIR)
- Draft Environmental Impact Report (EIR)

**PROJECT DESCRIPTION**

The City of Glendale, Department of Water and Power is proposing to repower the Grayson Power Plant, located in an industrial area of the City of Glendale at 800 Air Way, Glendale, California 91201, just northeast of the Interstate 5 and Highway 134 interchange. A majority of the facilities located at the Grayson Power Plant, with the exception of Unit 9 (a simple cycle peaking plant built in 2003), were completed between 1941 and 1977, and are proposed to be replaced with more reliable, efficient, flexible, and cleaner units and related facilities and infrastructure.

The Draft Environmental Impact Report was available for public review for a period of 45 days on and after September 18, 2017. The City issued an extension for public comments for an additional 17 days until November 20, 2017.

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## South Glendale Community Plan

- Draft EIR

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## 1248 Corona Drive

- Notice of Intent to Adopt a Mitigated Negative Declaration
- Proposed Mitigated Negative Declaration
- Plans
- Preliminary Geologic and Soils Engineering Investigation Report
- California Emissions Estimator Module (CalEEMod version 2016.3.2) Report

**PROJECT DESCRIPTION**

The applicant is requesting approval of the Design Review Board for the construction of a new two-story, 2,566 square-foot single-family dwelling with an attached 495 square-foot two-car garage on a vacant, 8,889 square-foot lot, zoned R1R (FAR District III) with an average current slope of approximately 70%. As proposed, the development will involve a total of 987 cubic yards of grading (all export).

Proposed Negative Declaration Comment Period: **January 24, 2018 to February 15, 2018**

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## 1112-1118 N. Columbus

- Notice of Intent to Adopt a Negative Declaration
- Proposed Negative Declaration
- Historic Assessment
- Plans
- Air Quality Model

**PROJECT DESCRIPTION**

The applicant is requesting approval of the Design Review Board for the construction of a new 3-story, 11-unit multi-family apartment building above a semi-subterranean garage with 25 parking spaces on a 11,490 SF project site, zoned R-1250 (High Density Residential). The project includes demolition of the three (3), existing residential units and all other structures on site. The project includes common open space, private open space and landscaping.

Proposed Negative Declaration Comment Period: **December 7, 2017 to December 27, 2017**

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## 206 N. Kenwood St., 223-241 and 247 N. Jackson St.

- Notice of Intent
- Proposed MND
- Zone Change Map
- Plans
- Appendices
  - A – Air Quality
  - B – Historic Assessment
  - C – Environmental Site Assessment Report
  - D – Noise
  - E – Traffic

**PROJECT DESCRIPTION**

The proposed GUSD Apartments ("Development Project") involves the demolition of the existing GUSD Headquarters office and associated buildings, two modular buildings, a multi-family residential building and respective parking lots. The new development involves constructing a five-story (with mezzanine), 286-unit residential development wrapped around a multi-level parking structure with 394 parking spaces located on a 113,289 square-foot lot (2.60 acres).

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## 361-365 Myrtle Street

- INITIAL STUDY
- PLANS

**PROJECT DESCRIPTION**

The proposed project involves the demolition of two existing residential units (a single family home and detached garage on two combined lots) and the construction of a new three-story, 12-unit multi-family residential development on two lots with a combined square-footage of 13,514 square feet with a total of 29 parking spaces in a one-level semi-subterranean garage.

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## Comment Period Further Extended: November 9, 2017

## 3001 Scholl Canyon Rd. (vehicular access via 7721 N Figueroa St, Los Angeles, CA 90041)

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED BIOGAS RENEWABLE GENERATION PROJECT WEBSITE

**PROJECT DESCRIPTION**

The Biogas Renewable Generation Project consists of the construction and operation of a 12-megawatt power generation facility. The project includes the installation of a new 60,000-gallon water storage tank for fire protection, and a 10,000-gallon domestic water storage tank along with on-site water pipeline and fill line. A three-inch diameter natural gas pipeline, 0.67 miles long, and a 12-inch diameter water pipeline, one-mile long are also included in the proposed project. Beneficial use of the land fill gas generated and collected at the Scholl Canyon Landfill will be used as fuel for the proposed power generation facility. The project is located at Scholl Canyon Landfill (SCLF). The landfill site occupies approximately 535 acres with portions owned by the City of Glendale, Los Angeles County and by Southern California Edison Company.

Proposed Negative Declaration Comment Period: August 31, 2017 to November 9, 2017.

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## 2942 and 2950 Oak Glen Road

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

Applications to subdivide an existing 269,200 square foot lot (a portion of which is a secondary ridgeline) into four lots for constructing three new single-family dwellings, maintaining the single-family dwelling at 2950 Oak Glen (built in 1947), and demolishing a single-family dwelling at 2942 Oak Glen Road (built in 1944) with a shared driveway for two lots and less than the required lot width for three lots.

Proposed Mitigated Negative Declaration Comment Period: October 12, 2017 - November 1, 2017.

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Downtown Specific Plan Environmental Impact Report

- Downtown Specific Plan Environmental Impact Report

**PROJECT DESCRIPTION**

The purpose of the Glendale Downtown Specific Plan (DSP or "proposed project") is to guide development and design within the approximately 220 acres located in the center of the City of Glendale. The DSP consists of a comprehensive set of incentives, standards, and requirements that will implement the vision for the future development in Downtown Glendale. The DSP will act as the planning tool to guide and direct new development, economic development; streetscape improvements; transportation development; parking; pedestrian amenities; open space and land use; preservation of cultural resources; and art space. This is an urban design oriented plan, which sets the physical standards and guidelines as well as land use regulations for activities within the DSP area. In order to achieve these goals the DSP proposes General Plan Amendments (GPA's), Zoning Changes (ZC), and District Design Standards.

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## 348-350 Salem Street

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

The proposed project involves the demolition of the existing residential units (348 Salem Street – one single family residence and detached garage; 350 & 352 Salem Street - three residential buildings divided into five residential units and a detached garage) and the construction of a new three-story, 12-unit multi-family residential development on a 13,955 SF lot with a total of 28 parking spaces in a one-level subterranean garage. The project includes common open space, private open space and landscaping. Development of the project requires Design Review Board approval for the design. No variances are proposed.

Proposed Negative Declaration Comment Period: June 28, 2017 to July 17, 2017

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## 206 West Chevy Chase Drive

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

Proposed 25,705 sq.ft., five-story commercial building consisting of retail (585 sq.ft.) at the first (ground) level, medical office (4,750 sq.ft.) on the second level, and general offices (20,370 sq.ft.) on the third, fourth and fifth levels. The proposal includes 81 parking spaces located on the first and second levels and four levels below ground. The 11,002 sq.ft. property is zoned CA (Commercial Auto). The proposal will require approval from the Design Review Board.

Proposed Negative Declaration Comment Period: April 7, 2017 to April 27, 2017

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## 2942 and 2950 Oak Glen Road

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION
- INITIAL STUDY ATTACHMENTS

**PROJECT DESCRIPTION**

Applications to subdivide an existing lot (a portion of which is a secondary ridgeline) of 269,200 square feet into four lots for constructing three new single-family dwellings, maintaining the single-family dwelling at 2950 Oak Glen (built in 1947), and demolishing a single-family dwelling at 2942 Oak Glen Road (built in 1944).

Proposed Negative Declaration Comment Period: March 30, 2017 to April 18, 2017

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## 1820 South Brand Boulevard

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

The applicant is requesting the approval of a six-story, 26-unit live/work development. The proposal will include a total of 103 parking spaces, including 46 in a tandem arrangement. The applicant is requesting a variance to allow development of the live/work units less than the required minimum size and a parking exception to allow less than the minimum number of parking spaces required for the development.

Proposed Negative Declaration Comment Period: March 8, 2017 to March 28, 2017

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## Community Development Block Grant

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
City of Glendale Community Services and Parks Department's Fiscal Year 2017-2018 Action Plan for Community Development Block Grant, Emergency Solutions Grant and HOME Programs.

Proposed Negative Declaration Comment Period: March 14, 2017 to April 4, 2017.

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## 311 South Adams Street and 1012-1028 East Colorado Street

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

A zone change to allow the construction of a three level parking structure (on the southeastern portion of a 34,176 square-foot site) for use by the existing banquet facility, commercial, and office uses on Colorado Street. Development requires the demolition of the existing surface parking lot. No changes are proposed to the existing commercial uses. The request includes changing the southern portion of the site from R-2250 zoning to C3-I zoning (the northern portion is currently zoned C3-I), and adding a Precise Plan of Design (PPD) overlay zone on the southeastern portion of the site, where the three level parking structure is proposed. The project's architectural design was reviewed by the Design Review Board on November 10, 2016. The Board recommended approval of the project with conditions to the Planning Commission and City Council. The proposed project site also includes a lot line adjustment application consistent with the proposed PPD overlay zone.

Proposed Negative Declaration Comment Period: March 2, 2017 to March 22, 2017

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## 600 East Colorado Street and 533 and 539 East Elk Avenue

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

A zone change (zoning map amendment) to allow a change to the existing Precise Plan of Design (PPD) overlay zone placed on the property located at 533 and 539 East Elk Avenue . The existing on-site development does not include access to East Elk Avenue . The amendment to the existing PPD proposes to change the site plan to provide "Right turn only" egress from the subject site onto East Elk Avenue . The proposed egress would result in a two-space reduction of parking spaces in the existing on-site parking lot, relocation of the accessibility ramp and a slight increase in the amount of landscaping.

Proposed Mitigated Negative Declaration Comment Period: November 17, 2016 to December 7, 2016

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## 510-512 West Doran Street

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION
- HISTORIC STRUCTURE EVALUATION
- STAFF MEMORANDUM DATED JULY 14, 2016
- PROPOSED PROJECT PLANS

**PROJECT DESCRIPTION**

The proposed project involves the modification and relocation of the existing single-family dwelling unit (addressed as 512 W. Doran Street) to the north-east portion of the 14,225 square-foot lot, and the construction of three new residential dwelling units (one detached unit and two attached units), for a total of four residential units on the project site (one existing and three new). The project will provide a total of 8 parking spaces in private, attached garages and one unenclosed guest parking space. The project includes common open space, private open space and landscaping.

Proposed Mitigated Negative Declaration Comment Period: October 27, 2016 to November 18, 2016

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## 126, 128 and 132 South Kenwood Street

- FINAL ENVIRONMENTAL IMPACT REPORT
- NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**PROJECT DESCRIPTION**
The Project includes the demolition of the existing residential structures and the construction of a new 44-unit, five-story multi-family residential development in a “podium” type design (“Project”) with a building height of 69’-6”feet (74’-6” to the stair tower). The proposal features one, two, and three-bedroom units that surround a central courtyard open towards the north. The Project is providing the code-required 89 parking spaces (one space for one-bedroom units, two spaces for two or more bedroom units, and one guest space for every 10 units) within a two-level subterranean parking garage. One vehicular access point to the garage is proposed from the alley at the rear of the Project Site; no driveway is proposed on Kenwood Street. In conformance with DSP Section 7.2.4

Public Open Space, the Project is providing additional publicly accessible open space in order to obtain the maximum number of stories and FAR in the DSP East Broadway District (maximum of up to five stories, 80' of height, and 2.75 FAR); the Project is offering an additional 563 square feet of publicly accessible open space over the minimum 1,125 SF of open space required by Code.

The Draft Environmental Impact Report is available for public comment October 20, 2016 to November 21, 2016.

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Appendix 6.0 CalEEMod Air Quality and Greenhouse Gas Emissions Files

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## 1749-1761 Gardena Avenue
## Glendale Beeline Bus Maintenance Facility

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

Glendale Beeline Bus Maintenance Facility, including administrative and operational office uses, and incidental storage. A total of approximately 25,500 gross square feet (gsf) would be constructed at the new facility, including maintenance, administration, operations, and storage uses together in a single two-story building, along with an approximately 2,000 gsf outdoor bus wash and an approximately 100 gsf trash enclosure. The site is approximately two acres in size and is currently vacant.

Proposed Mitigated Negative Declaration Comment Period: October 6, 2016 to November 6, 2016

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## 3160 Linda Vista Road

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION
- PROTECTED INDIGENOUS TREE REPORT
- BIOLOGICAL REPORT
- URBEMIS 2007 SUMMARY REPORT

**PROJECT DESCRIPTION**

To construct a new two-story, 2,606 square-foot single-family dwelling with an attached 411 square-foot two-car garage on a 14,468 square-foot lot, zoned R1R (FAR District II). The site was previously developed with a single-

family residential structure that sustained major damage by a fire in 2011 requiring its demolition. A total of nine protected indigenous trees (nine Coastal Live Oaks; two California Sycamores) and a Blue-Line stream are located on the site. The project will require approval from the Planning Hearing Officer to allow the proposed single-family dwelling to be located in the required interior setback and to maintain the existing driveway that exceeds the maximum slope. Approval from the Design Review Board is also required.

Proposed Mitigated Negative Declaration Comment Period: September 15, 2016 to October 3, 2016

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## 1712 South Glendale Avenue

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION
- PROTECTED INDIGENOUS TREE REPORT
- BIOLOGICAL ASSESSMENT

**PROJECT DESCRIPTION**

To construct approximately 10,000 square feet of non-occupiable floor area for wall crypts, columbaria and walkways through a new garden area, and install approximately 21,000 square feet of new landscaping (approximately 31,000 square feet combined) at a 0.70 acre area located at the northwest portion of an approximately 305 acre existing cemetery (Forest Lawn Memorial-Park) that is located partially within the City of Glendale and the City of Los Angeles. The portion of the cemetery that is located in the City of Glendale is zoned CEM (Cemetery). The proposal will require approval from the Design Review Board.

Proposed Mitigated Negative Declaration Comment Period: August 30, 2016 to September 19, 2016

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## 2612 Honolulu Avenue

- FINAL NEGATIVE DECLARATION
- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION
- Appendix A - Air Quality Modeling
- Appendix B - Phase I Environmental Site Assessment
- Appendix C - Traffic Study

**PROJECT DESCRIPTION**
A zone change (zoning map amendment) to amend the zoning map designation for the property located at 2612 Honolulu Avenue (2635 Sycamore Avenue) from C2-I and R1-II Zone to C2-I – PPD and R1-II – PPD (Precise Plan of Design) Zone and to allow the construction of a two- and three-story, 28-unit multi-family residential development. The three-story portion of the project includes two-stories of residential over a parking garage that is considered a story due to site slope conditions. Development requires the demolition of a vacant restaurant/bar and surface parking lot.

Proposed Negative Declaration Comment Period: June 30, 2016 to July 1, 2016

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## 1100 North Brand Boulevard

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION
- TRAFFIC ANALYSIS

**PROJECT DESCRIPTION**
Design Review application to demolish the existing buildings and construct a new six-story hotel project consisting of 85 hotel rooms and 85 parking spaces on a 15,500 square foot lot, zoned C3 (Height District III). No variances are required.

Proposed Negative Declaration Comment Period: April 7, 2016 to April 27, 2016

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## Community Development Block Grant

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
City of Glendale Community Services and Parks Department's Fiscal Year 2016-2017 Action Plan for Community Development Block Grant, Emergency Shelter Grant and HOME Programs.

Proposed Negative Declaration Comment Period: March 14, 2016 to April 4, 2016.

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## 2331 Ramsay Drive

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION
- Arborist Reports
- Plans

**PROJECT DESCRIPTION**

To construct a new 4,268 square-foot, two-story residence and a attached 667 square-foot, three-car garage on a vacant 21,128 square-foot lot located within the R1R (Restricted Residential) Zone, Floor Area Ratio District II.

The Proposed Negative Declaration for the Project is available for public comment from **December 22, 2015 to January 12, 2016.**

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## 707 North Pacific Avenue

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

To demolish the existing, vacant restaurant building and to construct a new 12,900 SF (plus 1,661 SF mezzanine) drugstore on a 1.18 acre (51,440 SF) lot, zoned C2 (Height District II). The project includes a drive-thru pharmacy.

The Proposed Negative Declaration for the Project is available for public comment from **September 28 to October 17, 2015**.

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## 1100-1108 North Brand Boulevard

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

Application for variances to allow for the construction of a new five-story mixed use project consisting of eighteen (18) residential dwelling units (seven 2-bedroom and 11 3-bedroom units), 3,000 SF of restaurant space on the ground floor, and 81 on-site parking spaces on a 15,500 SF corner lot, zoned C3. Per GMC 30.12.020, multiple residential dwelling units are permitted in the C3 zone in compliance with the R-1250 development standards; the project requires approval of variances to allow for an increase in height, number of stories, density, floor area ratio, and lot coverage, and a reduction in setbacks and additional open space for the residential portion of the project.

The Proposed Negative Declaration for the Project is available for public comment from June 3, 2015 to June 22, 2015.

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## 330-334 Salem Street

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

To construct a new three-story, 12-unit multi-family residential building with one level of semi-subterranean parking garage with 29 parking spaces on two adjoining properties, located within the R-1250 (High Density Residential) Zone. The existing buildings will be demolished.

The Proposed Negative Declaration for the Project is available for public comment from May 29, 2015 to June 17, 2015.

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## 129-133 West Los Feliz Road

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

New 24,600 sq.ft., three-story medical office building with two levels of parking (one at grade and one below grade, with a total of 65 parking spaces) on a vacant, 17,650 SF lot. The project requires approval of an Administrative Exception for a reduced interior setback at the rear, as well as Design Review.

The Proposed Negative Declaration for the Project is available for public comment from May 6, 2015 to May 26, 2015.

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## 1680 Valley View Road

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

The project is to construct a new single-family dwelling with an attached three-car garage. The applicant is requesting approval of a variance to allow the use of an existing driveway that is not completely located on the same lot as the required garage.

The Proposed Negative Declaration for the Project is available for public comment from April 23, 2015 to May 12, 2015.

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## 1225 Reynolds Drive - Parcel Map GLN No. 1629

- NOTICE OF INTENT AND PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

Parcel map application to subdivide an existing lot of 20,071 square feet developed with a single-family dwelling into three lots for the construction of two additional single-family dwellings.

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## 3067 East Chevy Chase Drive - Chevy Chase Country Club

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION
- PROPOSED CHANGES TO THE MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

A Zoning Map Amendment and SR Zone Development Review to amend the zoning map designation for the property located at 3067 E. Chevy Chase Drive from Special Recreation (SR) Zone to Special Recreation – Precise Plan of Design (SR PPD) Zone and to allow development in the Special Recreation Zone. The project includes a 20,795 square-foot expansion to the existing 11,520 square-foot clubhouse, reconfiguration of the parking lots/spaces and expansion of pool, new landscaping around the periphery of the building and parking lots, and four new tennis courts above the city-owned reservoir.

The Proposed Negative Declaration for the Project is available for public comment from February 4, 2015 to February 24, 2015.

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## 1407 West Glenoaks Boulevard

- NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION APPENDICES

**PROJECT DESCRIPTION**
The Project includes the development of a 4-story mixed-use building with 76 multifamily residential units, including 4 studio units, 24 one-bedroom apartment units, 48 two-bedroom apartment units, and 12,900 square feet of ground level commercial space, along with a 5,400 square foot public mini-park. The Project site is 52,239 square feet in size and consists of one parcel near the southeast corner of Glenoaks Boulevard and Sonora Avenue. The proposed mixed use building would be 203,831 square feet in size and the mixed use building would include 199 standard parking spaces.

The Proposed Negative Declaration for the Project is available for public comment from October 15, 2014 to November 3, 2014.

## 515 West Broadway

- Final Environmental Impact Report
- NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**PROJECT DESCRIPTION**
The proposed 515 W. Broadway Mixed-Use Project ("Project") is located on a 1.78 acre site consisting of nine continuous parcels bounded by W. Broadway to the south, Pacific Avenue to the east, and Kenilworth Avenue to the west. A mix of multi-family and single-family development borders the subject site on the north. The site is currently developed with a 1-story retail store (Office Depot), a large surface parking lot, a 2-story apartment building, and a garage facing Kenilworth Avenue. The Project includes the development of a 5-story mixed-use building with 180 multi-family residential dwelling units and 18,200 square feet of ground-floor commercial space. The Project would include three studio units, 117 one-bedroom apartment units, and 60 two-bedroom apartment units. Of the 180 units, nine units will be provided for very-low income households.

A total of 331 parking spaces would be located within a single subterranean-level parking garage and at grade. Specifically, 212 parking spaces would be located within the subterranean parking area reserved for residents; the remaining 119 parking spaces would be at grade.

The Draft Environmental Impact Report is available for public comment October 15, 2014 to November 14, 2014.

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## 509 and 525 West Elk Avenue Enclave Multifamily Residential Project

- Final Environmental Impact Report
- Appendices

- NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**PROJECT DESCRIPTION**
The proposed Enclave Multifamily Residential Project ("Project") is located on a 0.72 acre parcel consisting of two continuous parcels of land located north of W. Elk Avenue between San Fernando Road and S. Pacific Avenue and is currently developed with a 1-story concrete block building occupied by a wholesale auto parts business and a parking lot. The addresses are 509 W. Elk Avenue and 525 W. Elk Avenue. The project site is bound on the south by W. Elk Avenue, on the west by the 5-story ICIS apartment complex, on the north by auto repair and medical office uses, and on the east by a 2-story apartment building. The Project includes the development of a 5-story apartment building with 71 multi-family residential dwelling units, recreation and open space amenities, and 161 parking spaces provided in a two-level subterranean garage. The Project would include one studio unit, 18 one-bedroom apartment units, and 52 two-bedroom apartment units.

The Draft Environmental Impact Report is available for public comment October 8, 2014 to November 7, 2014.

Draft Environmental Impact Report
Appendix 1.0 - Notice of Preparation
Appendix 4.2 - Air Quality
Appendix 4.4 Noise Calculations
Appendix 5.0 - Alternative Calculations
Appendix 6.0 - Traffic Memo

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## 330 Wonderview

- PUBLIC NOTICE OF GLENDALE AND NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
To demolish the existing house and to construct a new two-story, 7,314 SF single family dwelling with an attached four-car garage on a 2.3 acre (101,364.12 SF) hillside lot, zoned R--1--R (FAR District II) and featuring an average current slope of 45%. The project includes a swimming pool constructed on a lower level below the house. Site improvements will involve 1,590 CY of cut and 215 CY of fill.

Proposed Negative Declaration Comment Period: September 18, 2014 to October 7, 2014.

- A-1 Site Plan
- A-1.1 Partial Site Plan
- A-1.2 Colored Site Plan
- A-2 Basement Plan & Site Sections
- A-3 First Floor
- A-4 Second Floor
- A-5 Roof
- A-6 South & West Elevations
- A-6.1 Colored South & West Elevations
- A-7 North & East Elevations
- A-7.1 Colored North & East Elevations
- A-8 Sections

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## Precise Plan of Design Overlay Zone

- PUBLIC NOTICE OF GLENDALE AND NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**

Amendments to the Zoning Code concerning the Precise Plan of Design Overlay Zone. Chiefly, the amendments would introduce flexibility in zoning standards for a specific project, while the overall intent and goals of the Zoning Code are met.

The Proposed Negative Declaration for the Project is available for public comment from August 6 to August 26, 2014.

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## Scholl Canyon Landfill Expansion

- NOTICE EXTENDING THE PUBLIC COMMENT PERIOD FOR DRAFT EIR UNTIL AUGUST 29, 2014
- NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**PROJECT DESCRIPTION**

The City of Glendale will be the Lead Agency and has prepared a Draft Environmental Impact Report (DEIR) for this project:

The Sanitation Districts has identified two variations for the proposed project, which include a vertical expansion only (Variation 1) and a vertical and horizontal expansion (Variation 2). Variation 1 will provide approximately 11.5 million cubic yards of additional capacity and will extend the life of the landfill by 13 years (assuming a continued baseline disposal rate of 1,400 tons per day). Variation 2 will provide approximately 16.5 million cubic yards of additional capacity and will extend the life of the landfill by 19 years (assuming a continued baseline disposal rate of 1,400 tons per day). The proposed project will increase the capacity of the project site and therefore increase the life of the landfill to provide long-term disposal for the wastershed. Neither variation would change current operations at the Scholl Canyon Landfill. The proposed project will provide waste diversion programs and disposal capacity to help meet the solid waste management needs of the City and other landfill users. The proposed project would also include the continued recovery of materials such as green waste, asphalt, soil, tires, metals, and other economically recoverable commodities through ongoing landfill waste diversion programs, which help jurisdictions to comply with state-mandated diversion goals. In addition, the proposed project would extend the recovery and beneficial use of landfill gas and thereby help meet California's renewable energy goals.

The Draft Environmental Impact Report public comment period has been extended to August 29, 2014.

**Draft Environmental Impact Report**
**Volume 1**
Cover - Volume 1
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1.0 - Executive Summary
2.0 - Introduction
3.0 - Existing Facilities and Operations
4.0 - Project Description
5.0 - Effects Not Significant
6.1 - Aesthetics
6.2 - Air Quality
6.3 - Biological Resources
6.4 - Cultural Resources
6.5 - Geology and Soils-Hydrogeology

6.6 - Greenhouse Gas Emissions
6.7 - Hazards and Hazardous Materials
6.8 - Surface Water Hydrology
6.9 - Water Quality
6.10 - Noise
6.11 - Transportation and Traffic
7.0 - Cumulative Impacts
8.0 - Unavoidable
9.0 - Growth Inducing

**Volume 1 Appendices**

10.0 - Significant Irreversible Environmental Changes
11.0 - Project Alternatives
12.0 - Inventory of Mitigation Measures
13.0 - List of Preparers
14.0 - References
15.0 - Glossary of Acronyms

**Volume 2**

Cover - Volume 2
Table of Contents
Appendix A - NOP - Initial Study
Appendix B - NOP - Initial Study Distribution List
Appendix C - NOP - Comment Letters & Summary of Comments in Response to the NOP
Appendix D - NOP - Public Notice & Attendance List
Appendix E - NOP - Consistency with SCAG Policy Documents
Appendix F - Air Quality and Climate Change Tech Report
Appendix G - Biological Resources Data Collection
Appendix H - Archaeological Inventory of a Portion of the SCLF
Appendix I - Geotechnical Report
Appendix J - Hydrology Calculations and Backup Data
Appendix K - Water Quality Backup Data
Appendix L - Noise Assessment for Scholl Canyon Landfill Expansion, City of Glendale
Appendix M - Traffic Data Collection and Calculations

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## 1400 West Kenneth Road

- PUBLIC NOTICE OF GLENDALE AND NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
Proposed wireless telecommunication facility consisting of 12 antennas on 3 arrays mounted on a proposed 50 foot tall mono palm in the C1 (Neighborhood Commercial) Zone.

The Proposed Negative Declaration for the Project is available for public comment from July 8, 2014 to July 28, 2014.

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## 366 - 372 Burchett Street

- PUBLIC NOTICE OF GLENDALE
- NOTICE OF AVAILABILITY OF A PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
To construct a new three-story, 18-unit multi-family residential building with one level of semi-subterranean parking garage with 45 parking spaces on two adjoining properties, located within the R-1250 (High Density Residential) Zone. The existing buildings will be demolished.

The Proposed Negative Declaration for the Project is available for public comment from July 3, 2014 to July 23, 2014.

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## 830 Harrington Road

- PUBLIC NOTICE OF GLENDALE
- NOTICE OF AVAILABILITY OF A PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
To construct a new 3,440 square-foot, two-story single-family residence and attached two-car garage on a 9,470 square-foot vacant undeveloped lot. An outdoor deck and swimming pool is included with the proposal. The average current slope of the lot is 64%. As proposed, development of the subject site requires 120 cubic yards of grading.

The Proposed Negative Declaration for the Project is available for public comment from June 30, 2014 to July 14, 2014.

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## 2566 East Chevy Chase Drive

- PUBLIC NOTICE CITY OF GLENDALE
- NOTICE OF AVAILABILITY OF A PROPOSED NEGATIVE DECLARATION

PROJECT DESCRIPTION

To construct a new 3,072 square-foot, three-story single-family residence on a 17,948 square-foot undeveloped lot with an average current slope of 48 percent. Development of the subject site includes 1,985 cubic yards of grading (cut).

The Proposed Negative Declaration for the Project is available for public comment from May 22, 2014 to June 11, 2014

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## 1229 Vista Superba Drive

- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
The proposed project site includes two lots: 619 South Pacific Avenue (vacant lot) and 627 South Pacific Avenue (one single-family residence to be demolished). A five-story, 27-unit multi-family residential project ("Project") with two levels of underground parking is proposed on the 15,000 SF project site, located in the IMU-R (Industrial/Commercial-Residential Mixed Use) Zone.

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## 619-627 South Pacific Avenue

- NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT
- PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
The proposed project site includes two lots: 619 South Pacific Avenue (vacant lot) and 627 South Pacific Avenue (one single-family residence to be demolished). A five-story, 27-unit multi-family residential project ("Project") with two levels of underground parking is proposed on the 15,000 SF project site, located in the IMU-R (Industrial/Commercial-Residential Mixed Use) Zone.

Proposed Negative Declaration Comment Period: April 10, 2014 through April 30, 2014.

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## Chamlian School - 4444 Lowell Avenue

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
The applicant is requesting to increase the student enrollment at Chamlian School from 500 to 700 students, which requires the modification of conditions in existing approvals (Use Variance PVAR 2010-023, Standards Variance PVAR 2010-028 and Parking Reduction Permit PPR 2010-008) that limited enrollment to 500 students. The proposed increase in student enrollment will be accommodated within existing buildings. No increase in total building area is proposed.

Proposed Negative Declaration Comment Period: Mar. 26, 2014 to Apr. 16, 2014.

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## Community Development Block Grant

- NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION
- PROPOSED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
City of Glendale Community Services and Parks Department's Fiscal Year 2014-2015 Action Plan for Community Development Block Grant, Emergency Shelter Grant and HOME Programs.

Proposed Negative Declaration Comment Period: Jan. 3, 2014 to Jan. 22, 2014.

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## 507-525 West Colorado Street

- PUBLIC NOTICE CITY OF GLENDALE
  NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**PROJECT DESCRIPTION**
The City of Glendale will be the Lead Agency and has prepared a Draft Environmental Impact Report (DEIR) for this project:

The proposed mixed use project is located on a 0.99 acre parcel on the north side of West Colorado Street and west of South Pacific Avenue at 507-525 West Colorado Street, Glendale, CA 91204. The proposed project includes 90 multi-family residential units; 18,000 square feet of medical office space, 1,000 square feet of restaurant, counter service with limited seating, 1,200 square feet of activity room, and outdoor amenities. A total of 246 parking spaces will be provided within a two-level subterranean parking garage.

The Draft Environmental Impact Report for the Project is available for public comment from February 7, 2014 to March 10, 2014

Draft Environmental Impact Report
Appendices

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## 2512 E. Chevy Chase Dr.

- PUBLIC NOTICE
- MITIGATED NEGATIVE DECLARATION

**PROJECT DESCRIPTION**
The Community Development Department, after having conducted an Initial Study, has prepared a Proposed Mitigated Negative Declaration for the following project: An application for a Conditional Use Permit (PCUP 1322910) for a proposed 4,143 square-foot, 2-story single-family residence with an attached 3-car garage on a vacant lot having an average current slope of 56%.

Proposed Negative Declaration Comment Period: Jan. 3, 2014 to Jan. 22, 2014.

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## Tropico Apartments - 435 W. Los Feliz Road

- PUBLIC NOTICE CITY OF GLENDALE
- NOTICE OF AVAILABILITY OF A DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

**PROJECT DESCRIPTION**
The City of Glendale will be the Lead Agency and has prepared a Draft Subsequent Environmental Impact Report (DSEIR) for this project:

The proposed Tropico Apartments project ("project") is located on a 2.25 acre parcel on the northwest corner of the intersection of Los Feliz Road and Gardena Avenue at 435 West Los Feliz Road. The proposed project includes 225 multi-family residential units and a 6-story parking structure for 330 parking spaces and 14,698 square feet of amenities.

The Draft Environmental Impact Report for the Project is available for public comment from November 12, 2013, to December 12, 2013.

Draft Environmental Impact Report
**Appendices**

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## 2920 Greenwich

- PROPOSED NEGATIVE DECLARATION
- PUBLIC NOTICE CITY OF GLENDALE

**PROJECT DESCRIPTION**
The Community Development Department, after having conducted an Initial Study, has prepared a Proposed Negative Declaration for the following project:

The proposed project includes the construction of a new 3,028 square-foot, three-story single family residence on a 10, 903 square foot, vacant, undeveloped lot. The subject site has an average current slope exceeding 50% and more than 1,500 cubic yards of grading is proposed. Approval of a conditional use permit (CUP) is required to allow the construction of a new house on a site with an average current slope of 70 percent and grading (cut and fill) 2,530 cubic yards. Also, the proposed residence will require approval from the Design Review Board .

Proposed Negative Declaration Comment Period: November 7 to November 27, 2013.

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## 5500 San Fernando Road

- PROPOSED NEGATIVE DECLARATION

- PUBLIC NOTICE CITY OF GLENDALE

**PROJECT DESCRIPTION**
The Community Development Department, after having conducted an Initial Study, has prepared a Proposed Negative Declaration for the following project:

The proposed project includes the development of a four-story, mini-storage facility approximately 50 feet in height. The project site is 60,593 square feet in size and consists of five contiguous parcels at the southeast corner of San Fernando Road and Doran Street. The proposed storage building would be 174,266 square feet in size and the facility would include 33 standard and 2 handicapped parking spaces (35 parking spaces total) and three loading spaces.

Proposed Negative Declaration Comment Period: October 9, 2013 to October 31, 2013.

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## 342-344 Myrtle Street

- PROPOSED NEGATIVE DECLARATION
- PUBLIC NOTICE CITY OF GLENDALE

**PROJECT DESCRIPTION**
The Community Development Department, after having conducted an Initial Study, has prepared a Proposed Negative Declaration for the following project:

The proposed project includes the demolition of two single-family homes and the construction of a 3-story, 11 unit multi-family condominium project. Thirty parking spaces are to be provided in a single level semi-subterranean garage accessed from Myrtle Street. The project site is located on two adjoining lots totaling 13,750 square feet in size in the R-1250 High Density Residential Zone.

Proposed Negative Declaration Comment Period: September 24, 2013 to October 14, 2013.

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## Glendale Link Project - 3901-3915 San Fernando Road

- PUBLIC NOTICE CITY OF GLENDALE HEARING AND FEIR
- NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**PROJECT DESCRIPTION**
The City of Glendale will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for this project:

The proposed Glendale Link project ("project") is located on a 1.05 acre parcel on the northwest corner of the intersection of San Fernando Road and Central Avenue at 3901-3915 San Fernando Road. The proposed project includes 142 multi-family residential units; approximately 11,600 square feet of commercial floor area, 5,000 square feet of commercial studio space, 1,500 square feet of lobby/leasing area, supporting parking facilities, and recreation and open space amenities. A total of 244 parking spaces would be provided on the ground floor and within a two-level subterranean parking garage.

The Draft Environmental Impact Report for the Project is available for public comment through October 14, 2013.

**Final Environmental Impact Report**
Final EIR

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## North Central Apartments Project

- PUBLIC NOTICE
- NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

**PROJECT DESCRIPTION**
The City of Glendale will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for this project:

The proposed N. Central Ave. Apartments project ("Project") includes two sites: Site A and Site B. Site A is located at 607-633 N. Central Ave., 317-321 W. Doran St. and 314-324 Pioneer Dr. The 105,703 square foot Site A is currently developed with medical office and residential uses and is located on Central Ave. between Doran St. and Pioneer Dr. The Project on Site A is a 5-story apartment building with 315 apartment units and 456 parking spaces.

Site B is located at 526-540 N. Central Ave., 200-214 W. Doran St. and 527-531 N. Orange St. The 88,139 square foot Site B is currently developed with medical office uses and is located on east side of Central Ave. at the corner of Central Ave. and Doran St. The Project on Site B is a 5-story apartment building with 192 apartment units and 275 parking spaces.

The Draft Environmental Impact Report for the Project is available for public comment through September 26, 2013.

**Final Environmental Impact Report**

- Final EIR
- Appendices

**Final Environmental Impact Report**
Final EIR

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## North Central Apartments Project