CITY OF SAN BERNARDINO
COMMUNITY DEVELOPMENT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

CITY OF SAN BERNARDINO
INITIAL STUDY FOR

Olympic Holdings Inland Center Warehouse Project

PROJECT DESCRIPTION/LOCATION:

This Initial Study/Mitigated Negative Declaration is for the Olympic Holdings Inland Center Warehouse Project in the City of San Bernardino. The 5.25-acre Project site is made up of four contiguous parcels, used at one time for light industrial storage. The site is vacant and not currently used for light industrial storage. The Project includes the construction of a warehouse building intended for light industrial uses, as well as associated parking and landscaping improvements. The proposed building will be a total of 101,464 square feet in size, approximately 6,000 square feet of which will be designated for office use. The Project site is located on the southeast side of Inland Center Drive between Riverwalk Drive and South 1st Street, San Bernardino, California 92410. Assessor's Parcel Numbers 0141-201-02-0000, 0141-201-05-0000, 0141-201-10-0000 and 0141-201-12-0000.

DATE:

October 8, 2019

PREPARED FOR

Olympic Real Estate Holdings, Inc.
9444 Abraham Way
Santee, California 92701

PREPARED BY

MIG, Inc.
1500 Iowa Avenue, Suite 110
Riverside, California 92507
951-787-9222

REVIEWED BY

Independently reviewed, analyzed and exercised judgment in making the determination, by the Development/Environmental Review Committee on _____, pursuant to Section 21082 of the California Environmental Quality Act (CEQA).

CITY OF SAN BERNARDINO
COMMUNITY DEVELOPMENT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

The California Environmental Quality Act (CEQA) requires the preparation of an Initial Study when a proposal must obtain discretionary approval from a governmental agency and is not exempt from CEQA. The purpose of the Initial Study is to determine whether a project qualifies for a Negative Declaration or whether an Environmental Impact Report (EIR) must be prepared.

1. **Project Title:** **Olympic Holdings Inland Center Warehouse Project**

2. **Lead Agency Name:** City of San Bernardino
   Address: 201 North E Street
   San Bernardino, California 92401

3. **Contact Person:** Chantal Power, Associate Planner
   Phone Number: 909-384-7272 x3328

4. **Project Location (Address/Nearest cross-streets):** The Project site is located on the southeast side of Inland Center Drive between Riverwalk Drive and South 1st Street, San Bernardino, California 92410 (see Exhibit 1, Regional Context Map).

5. **Project Sponsor:** Olympic Real Estate Holdings, Inc.
   Address: 9444 Abraham Way
   Santee, California 92701

6. **General Plan Designation:** Industrial (I)

   Zoning: IL-Industrial Light

7. **Description of Project (Describe the whole action involved, including, but not limited to, later phases of the project and any secondary, support, or off-site feature necessary for its implementation. Attach additional sheets, if necessary):**

   The Project includes construction of a warehouse building totaling 101,464 square feet of floor space, along with associated landscaping, streetscape and concrete parking improvements. Approximately 6,000 square feet of the total floor space of the proposed building would be designated for office use. The Project site encompasses four contiguous parcels totaling 5.25 acres (APN: 0141-201-02; 0141-201-05; 0141-201-10; and 0141-201-12) (see Exhibit 2, Project Vicinity Map). The proposed concrete tilt-up building is designed for warehouse and office use, although no tenant has been identified at this time.

   The Project site will be accessed via two 30-foot driveways on Inland Center Drive (See Exhibit 3, Site Plan). The driveways will provide access to both passenger vehicles and trucks. Each driveway access point will meet the minimum width and turning radii requirement for fire access as required by the City. Circulation within the proposed development will be provided via private drives that will also act as emergency access into the interior of the site. The Project proposes a total of 89 parking spaces, including 85 standard spaces and 4 Americans with Disabilities Act (ADA) parking spaces. The passenger vehicle parking spaces will be located along the western, southern, and eastern edges of the proposed building. The Project includes a total of 11 high-dock doors situated along the northern side of the building. The Project will include a total of 34,275 square feet of on-site landscaping, providing for a total coverage area of 15% of the overall site (See Exhibit 4, Landscaping Plan). The proposed warehouse will have a finished height of 38 feet, with parapets extending to 40 feet 7 inches. The Project will also include an 8-foot screen wall along the southern boundary of the site to provide screening and noise attenuation for residential uses to the south. The Project includes applications for a Tentative Parcel Map to consolidate the four parcels into a single parcel, Architectural/Site Plan Review, and Development Permit for operation of the light industrial warehouse.

Stormwater will be captured on-site and collected in an underground infiltration chamber system located on the north-central portion of the site before being discharged into a proposed new 24-inch storm drain that will be located within the existing Inland Center Drive roadway and right-of-way (See Exhibit 5, Drainage Plan). The proposed Reinforced Concrete Pipe (RCP) storm drain will connect to the Project site and continue in a southwesterly direction along Inland Center Drive for approximately 1,100 feet until it outlets to the lined Lytle Creek Channel within the San Bernardino County Flood Control right-of-way in the City of San Bernardino. Construction of the proposed storm drain will require excavation of an approximately 20-foot wide and 5- to 10-foot deep trench next to the Lytle Creek Channel in order to install the RCP storm drain. The area of disturbance within the San Bernardino County Flood Control right-of-way would be less than one acre and the duration of the construction of the storm drain is estimated to take approximately 20 days. The Project will maintain proper communication and consultation with San Bernardino County Flood Control, the City, and other Responsible Agencies during the course of construction and operation. The Project will be required to obtain the following regulatory permits: Clean Water Act (CWA) Section 404 Nationwide Permit (NWP) from the United States Army Corps of Engineers (USACE), Section 401 Water Quality Certification from the Santa Ana Regional Water Quality Control Board (RWQCB), and Section 1602 Lake and Streambed Alteration Agreement (LSAA) from the California Department of Fish and Wildlife (CDFW).

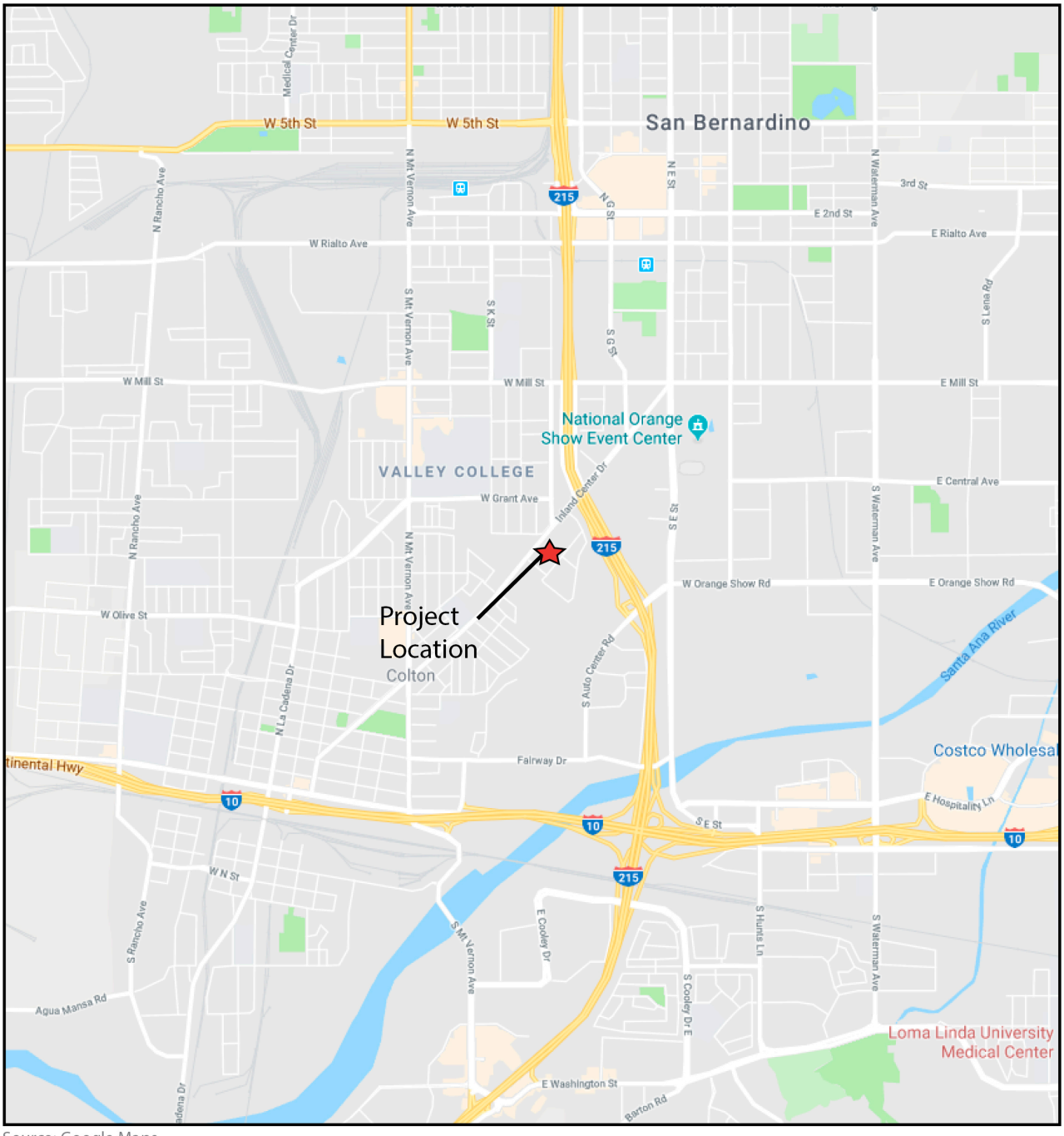
8. Surrounding Land Uses and Setting:

There are single-family homes to the southeast of the Project site; commercial uses to the north; commercial uses and single-family homes to the northeast; single-family homes to the east and south; trailer homes to the southwest; and vacant land to the west. The Project site is covered mostly with dirt and gravel and is currently used for industrial storage. There is very little vegetation (consisting of weeds and shrubs) and no trees on the Project site. The area adjacent to the Lytle Creek Channel where the RCP storm drain connection will be constructed consists of gravel and is currently used as an access road for maintenance of the Channel. A portion of Inland Center Drive will also be excavated in order to connect the storm drain to the Lytle Creek Channel.

Direction	General Plan Designation	Zoning District	Existing Land Use
Project Site	Industrial (I)	IL-Industrial Light	Vacant Land
Northwest	Single-Family Residential (SFR)	RS-Residential Suburban	Single-Family Homes; Vacant Land
North	Commercial General (CG)	CG-1-Commercial General	Gas Station
Northeast	Commercial General (CG)/ Multi-Family Residential (MFR)	CG-1-Commercial General/ RM-Residential Medium	Auto Repair/ South Bay Foundry/ Single-Family Homes
East	Single-Family Residential (SFR)	RS-Residential Suburban	Single-Family Homes
South	Single-Family Residential (SFR)	RS-Residential Suburban	Single-Family Homes
Southwest	Multi-Family Residential (MFR)	RM-Residential Medium	Trailer Homes
West	Single-Family Residential (SFR)	RU-Residential Urban	Vacant Land

9. Other agencies whose approval is required (e.g., permits, finance approval, or participation agreement):

- Santa Ana Regional Water Quality Control Board
- California Department of Fish and Wildlife
- United States Army Corps of Engineers
- San Bernardino County Flood Control District

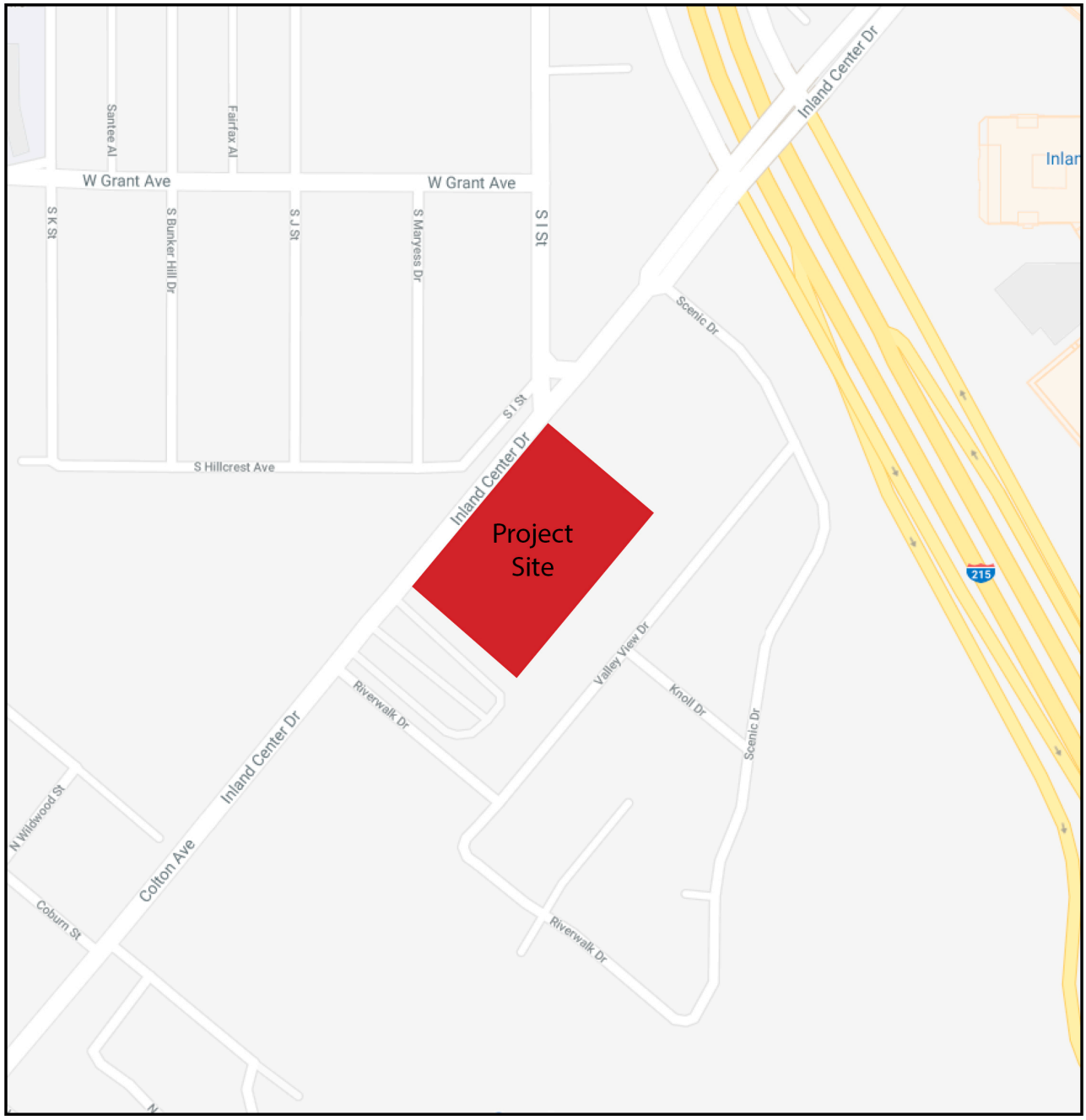


Source: Google Maps

Not to Scale

Exhibit 1 Regional Context Map

Olympic Holdings Inland Center Warehouse Project
San Bernardino, California



Source: Google Maps

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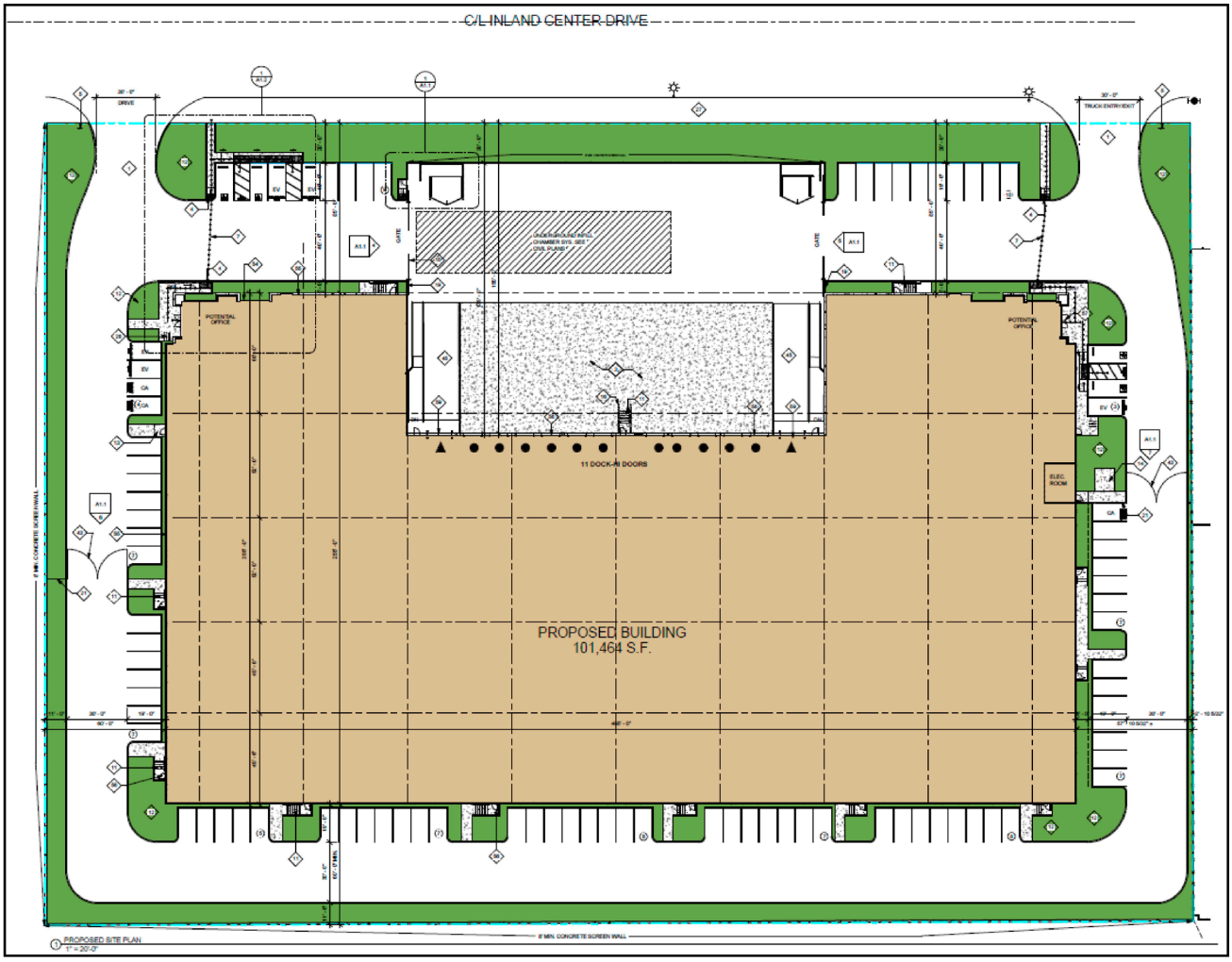
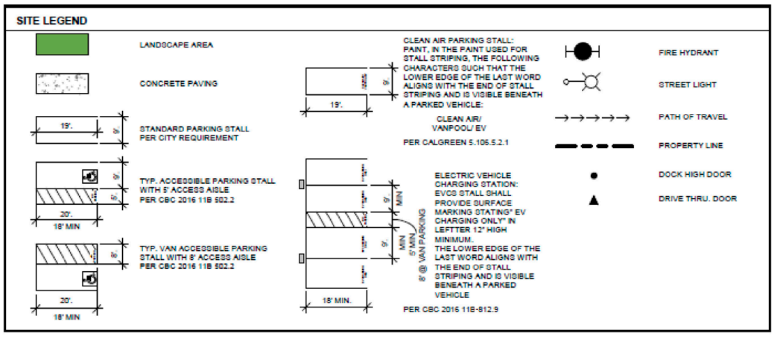
Exhibit 2 Project Vicinity Map

Olympic Holdings Inland Center Warehouse Project
San Bernardino, California



Source: Herdman Architecture Design

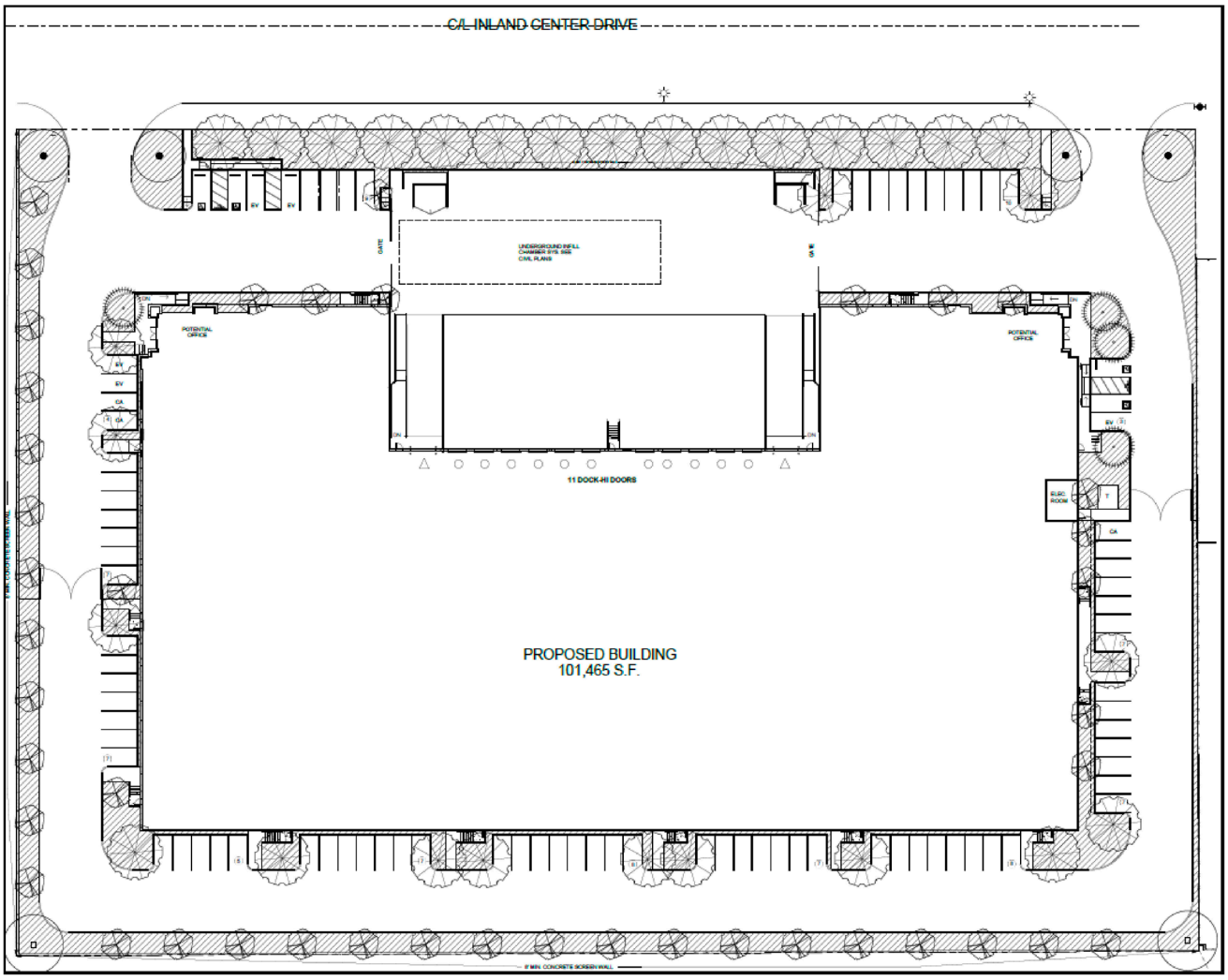


A17-2042 SCHEME 12			05.08.2019
GROSS SITE AREA	5.25 AC	228,510 SF	
TOTAL BUILDING AREA		101,464 SF	
FOOTPRINT		101,464 SF	
	WAREHOUSE	95,464	
	OFFICE	6,000	
NET COVERAGE		44.40%	
LANDSCAPE PROVIDED		15.1%	34,558
LANDSCAPE REQUIRED		15%	
PARKING REQUIRED			
WAREHOUSE @ 1/1250 SF		82	
TOTAL REQUIRED		82 STALLS	
PARKING PROVIDED		89 STALLS	
	STANDARD	85	
	ADA	4	
	ACCESSIBLE EVC	2 STALLS	
	EVC	3 STALLS	
	CA	3 STALLS	

Not to Scale

Exhibit 3 Site Plan

Olympic Holdings Inland Center Warehouse Project
San Bernardino, California



PLANTING LEGEND

TREES

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	W/C/OLS	REMARKS
	Cercidium 'Desert Museum' Blue Palo Verde	48" Box 36 Box	7 MIN	L	Multi
	Chilopsis linearis Desert Willow	48" Box	4	L	Multi
	Chitalpa tashkentensis Chitalpa	24" Box	30	L	Standard
	Rhus lancea African Sumac	36" Box	2	L	Standard
	Tristania conferta Brisbane Box	15 Gal	43	M	Standard

SHRUBS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	W/C/OLS	REMARKS
	Ligustrum j. 'Texanum' Texas Privet	5 Gal		L	
	Feijoa sellowiana Pineapple Guava	5 Gal		L	
	Arbutus unedo Strewberry Tree	5 Gal		L	
	Calliandra californica Baja Fairy Duster	5 Gal		L	
	Lavandula 'Goodwin Creek Grey' Lavender	1 Gal		L	
	Callistemon v. 'Little John' Dwarf Bottlebrush	5 Gal		L	
	Leucophyllum f. 'Green Cloud' Texas Ranger	5 Gal		L	
	Rhamnus californica Coffeeberry	5 Gal		L	
	Salvia greggii Autumn Sage	5 Gal		L	
	Senna aderniioides Feathery Cassia	5 Gal		L	
	Westringia fruticosa Coast Rosemary	5 Gal		L	

ACCENTS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	W/C/OLS	REMARKS
	Agave vilmoriniana Agave	15 Gal		L	
	Agave americana Century Plant	15 Gal		L	
	Hesperaloe parviflora Red Yucca	15 Gal		L	

GROUNDCOVER

SYMBOL	BOTANICAL/COMMON NAME	SIZE	SPACING	W/C/OLS	REMARKS
	Acacia redolens 'Low Boy' Trailing Acacia	1 Gal	6' O.C.	L	
	Rosmarinus o. 'Huntington Carpet' Huntington Carpet Rosemary	1 Gal	36" O.C.	L	
	Muhlenbergia capillaris Pink Muhly	1 Gal	36" O.C.	L	
	Trachelospermum jasminoides Star Jasmine	1 Gal	36" O.C.	M	
	Rosa x 'Flower Carpet Red' Red Groundcover Rose	2 Gal	30" O.C.	M	

NOTES:
1. ALL TREES WITHIN 5' OF HARDSCAPE SHALL BE IN A SHAWTOWN OR EQUAL ROOTBARRIER.
2. CONTRACTOR TO INSTALL CONCRETE MOW CURB BETWEEN PLANTERS AND TURF AREAS. SEE PLANTING DETAIL SHEET.
3. ALL PLANTER AREAS TO RECEIVE A 3" LAYER OF MEDIUM WALK ON BARK (3/4" - 1/2").

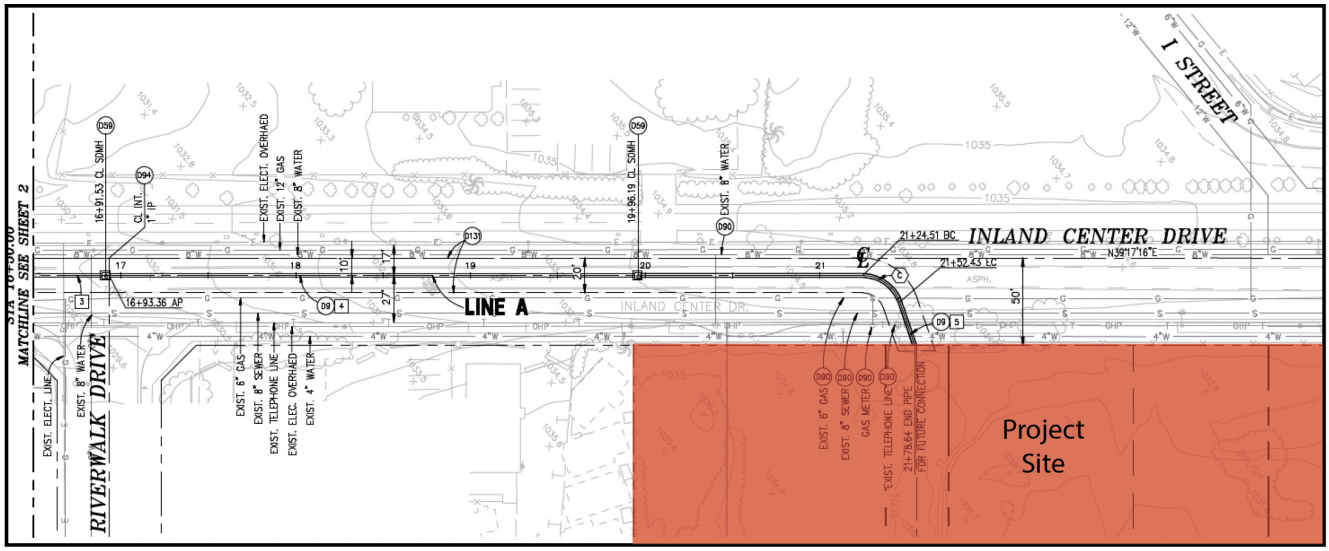
THE ROOTBALL OF ANY PLANT SHALL NOT BE PLANTED AN CLOSER THAN 2' FROM ANY HARDSCAPE, BUILDING OR WALL.

Source: Hunter Landscape

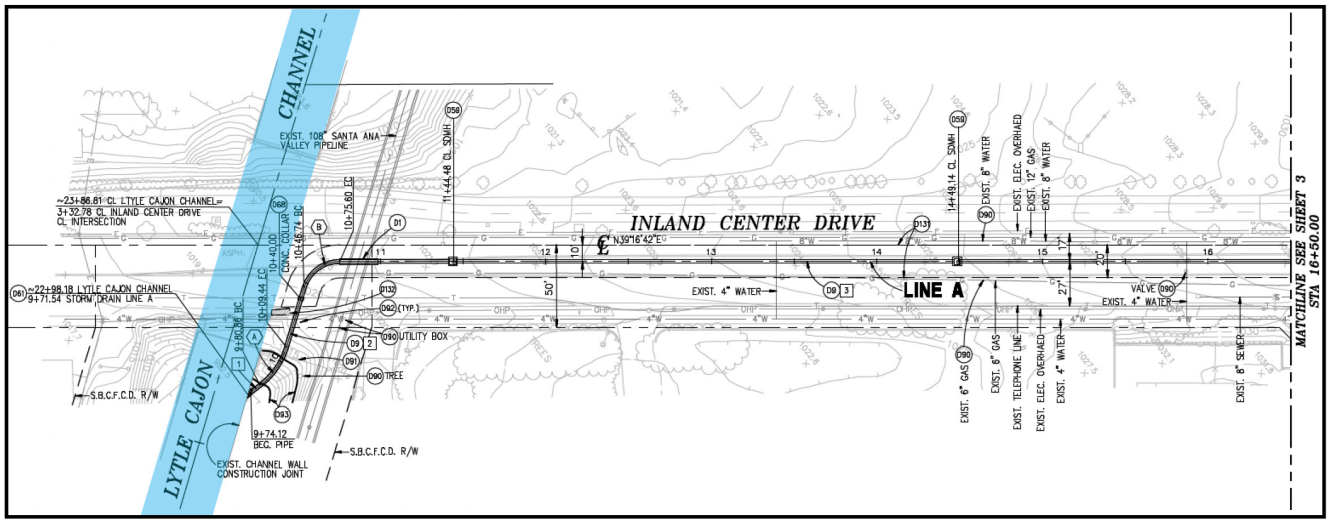
Not to Scale

Exhibit 4 Landscape Plan

Olympic Holdings Inland Center Warehouse Project
San Bernardino, California



East Section



Source: Herdman Architecture Design

West Section

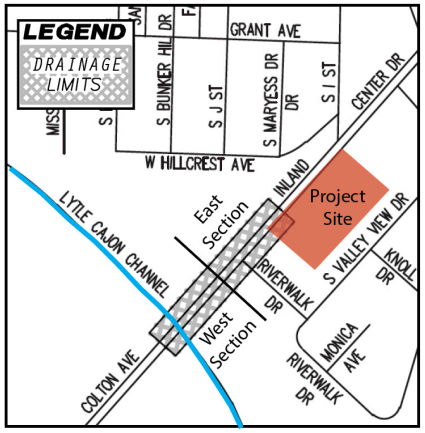


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Exhibit 5 Drainage Plan

Olympic Holdings Inland Center Warehouse Project
San Bernardino, California

CITY OF SAN BERNARDINO
COMMUNITY DEVELOPMENT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

On the basis of this Initial Study, the City of San Bernardino Environmental Review Committee finds:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____
Signature Date

_____ _____
Printed Name For

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista as identified in the City's General Plan?	☐	☐	☒	☐
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character of quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime view in the area?	☐	☐	☒	☐

Discussion:

I. a) **Less than Significant Impact**. Scenic vistas can generally be defined as natural landscapes that form views of unique flora, geologic, or other natural features that are generally free from urban intrusions. Typical scenic vistas include views of mountains and hills, large, uninterrupted open spaces, and waterbodies. Scenic vistas generally play a large role in the way a community defines itself and also effects development patterns as projects are designed to take advantage of viewsheds. Scenic vistas can be impacted by development in two ways. Indirectly, a structure may be constructed where it blocks the view of a vista. Directly, a scenic vista itself may be altered (i.e., development on a scenic hillside).

In the City of San Bernardino, the major scenic vista is of the San Bernardino Mountains to the north. Development in the City has the potential to block views of the mountains if building heights are too high. However, the City's zoning regulations restrict building heights which helps to maintain viewsheds of the mountains. The significant height of the San Bernardino Mountains also ensures that they will remain a scenic backdrop to San Bernardino without detriment from development in the City.[1] The Project site is zoned Industrial Light (IL). According to the city's General Plan land use designations, the Industrial Light (IL) designation allows for a variety of light industrial uses, including warehousing/distribution, assembly, light manufacturing, research and development, mini storage, and repair facilities conducted within enclosed structures as well as supporting retail and personal uses.[2] The project vicinity is comprised of residential, commercial and light industrial uses. The proposed warehouse will have a finished height of 37 feet with parapets up to 40.7 feet. The project will adhere to maximum height requirements for light industrial uses. Due to the relatively low height of the warehouse and the distance to the mountains, impacts to scenic vistas would be less than significant.

I. b) **No Impact**. The Project site is not adjacent to a designated state scenic highway as identified on the California Scenic Highway Mapping System[3]. While scenic vistas form a complete viewshed, scenic resources are isolated occurrences of aesthetically pleasing forms. Typical examples of natural scenic resources include rock outcroppings, trees, and prominent ridgelines. Scenic resources can also be man-made, such as

architecturally distinctive or historic buildings. The project is not expected to significantly impact scenic resources. No impacts will occur.

I. c) **Less than Significant Impact**. Development of the Project would have a significant impact if it substantially degraded the existing visual character or quality of the site and its surroundings. Degradation of visual character or quality is defined by substantial changes to the existing site appearance through construction of structures such that they are poorly designed or conflict with the site's existing use. The Project site is completely surrounded by similar industrial and commercial uses as well as residential uses and vacant land. The site is zoned Light Industrial. The Project includes construction of the proposed warehouse building, totaling 101,464 square feet of floor space, along with associated landscaping, and parking improvements. The proposed light industrial building has been designed according to City design guidelines, including requirements for architectural quality, landscaping, and screening, and will be consistent in character and quality with surrounding developments. The Project will not substantially degrade the existing visual character or quality of the site and its surroundings. Less than significant impacts will occur.

I. d) **Less than Significant Impact.** Excessive or inappropriately directed lighting can adversely impact night-time views by reducing the ability to see the night sky and stars. Glare can be caused from unshielded or misdirected lighting sources. Reflective surfaces (i.e., polished metal) can also cause glare. Impacts associated with glare range from simple nuisance to potentially dangerous situations (i.e., if glare is directed into the eyes of motorists).

Development of the parking improvements, and related lighting, will be undertaken according to City Development Code Property Development Standards for light (19.20-14) and glare (19.20-11). Glare is not expected to result from the increase in paving. Adherence to City Development Code Standards, which requires review and approval of lighting plans, will ensure that impacts related to excessive or inappropriately directed lighting will be less than significant.

Cumulative Impacts
The potential aesthetic impacts related to views and aesthetics are generally site specific. As discussed above, Project-related impacts would be less than significant. Lighting and sources of glare, while not always site-specific, would be consistent with the majority of the surrounding urban area and would be used during similar hours as surrounding uses. While the Project plus cumulative development would change the appearance of the site and surrounding area, all development Projects would be expected to be conditioned to follow applicable local planning and design guidelines as specified in Section 19.20 of the City's Municipal Code. Therefore, aesthetic impacts are not expected to be cumulatively considerable and no adverse impacts would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agriculture use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?	☐	☐	☐	☒
d) Result in loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion:

II a) **No Impact**. The map of Important Farmland in California (2010) prepared by the Department of Conservation for San Bernardino County does not identify the Project site as being prime farmland, unique farmland, or farmland of Statewide Importance.[4] In addition, the City of San Bernardino General Plan does not identify any areas for agricultural use. Therefore, there will be no conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to a non-agricultural use as a result of this project.

II b) **No Impact**. The Map of San Bernardino County Williamson Act Lands (2004) identifies the Project site as being on non-enrolled land.[5] In addition the Project site is currently zoned Industrial Light (IL) which does not allow for agricultural uses. Therefore, there will be no conflict with existing zoning for agricultural use or a Williamson Act contract.

II c) **No Impact**. Public Resources Code Section 12220(g) identifies forest land as *land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits*. The Project site and surrounding properties are not currently being managed or used for forest land as identified in Public Resources Code Section 12220(g). The California Department of Forestry and Fire

Protection vegetation maps for the Project site identify it as *non-forest* type, indicating that is not capable of growing industrial wood tree species.[6] The Project site is zoned for industrial uses. Development of the Project will have no impact to any timberland zoning.

II d) **No Impact**. As indicated in II c), the area is designated as non-forest land; thus, there will be no loss of forest land or conversion of forest land to non-forest use as a result of the Project.

II e) **No Impact**. The Project site is currently undeveloped, and was previously used for light industrial storage. The Project is surrounded by other similar uses as well as commercial and residential development. None of the surrounding sites contain existing agriculture or forest uses. Development of the Project will not change the existing environment in a manner that will result in the conversion of farmland to non-agriculture use or forest land to a non-forest use.

Cumulative Impacts
The Project would have a less than significant impact on agricultural and forestry resources. Development of the Project would not preclude or hinder existing or future agricultural operations in the surrounding area. Therefore, the Project would not contribute to a cumulatively considerable impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan? (South Coast Air Basin)	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation based on the thresholds in the SCAQMD's "CEQA Air Quality Handbook?"	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people based on the information contained in Project Description Form?	☐	☐	☒	☐

Discussion:

The California Emissions Estimator Model (CalEEMod; V 2016.3.2) was used to analyze Air Quality and Greenhouse Gas Emissions. Air Quality modeling data can be found in Appendix A of this report. It should be noted that the CalEEMod modeling was conducted for an earlier iteration of the Project that included 102,375 total square feet of building area, 22,984 square feet of landscaping, 14 dock doors, and 105 standard parking stalls. The final proposed Project includes 101,464 total square feet of building area, 34,275 square feet of landscaping, 11 dock doors, and 89 standard parking stalls. Given the decrease in building square footage, dock doors, and parking, and the negligible increase in landscaping, the modeling analyzed a more impact-intensive Project than the final proposed Project.

III a) **Less than Significant Impact.** A project that conflicts with or obstructs the implementation of the South Coast Air Quality Management District's (SCAQMD) South Coast Air Basin 2016 Air Quality Management Plan (AQMP) could hinder implementation of the AQMP, delay efforts to meet attainment deadlines, and/or interfere with SCAQMD efforts to maintain compliance with, and attainment of, applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency with the AQMP is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP. As explained in more detail in Section III b), the Project's potential short-term construction and long-term operational emissions would not exceed SCAQMD-recommended CEQA thresholds of significance and, therefore, would not increase the frequency or severity of an air quality

standard violation. Regarding a project's potential consistency with the growth assumptions contained in the AQMP, the SCAQMD *CEQA Air Quality Handbook* states that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and "significant projects," which are defined to include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities. The Project would not change or substantially alter the existing land use designation of the Project site, would not result in new housing or other population growth, and is not a significant project as defined by the SCAQMD AQMP. The Project, therefore, is considered to be consistent with the growth assumptions contained in the AQMP. For the reasons presented above, the Project would not conflict with the AQMP. [7, 8]

III b) **Less than Significant Impact.** A project may have a significant impact if project related emissions would exceed federal, state, or regional standards or thresholds, or if project-related emissions would substantially contribute to existing or projected air quality violations. The Project is located within the South Coast Air Basin (Basin), where efforts to attain state and federal air quality standards are governed by the SCAQMD. Both the State of California (State) and the Federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as *criteria pollutants*). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM^{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The state has also established AAQS for additional pollutants. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the state and federal standards differ, California AAQS are more stringent than the national AAQS.

The U.S. EPA, CARB, and the SCAQMD assess the air quality of an area by measuring and monitoring the amount of pollutants in the ambient air and comparing pollutant levels against NAAQS and CAAQS. Based on these comparisons, regions are classified into one of the following categories:

- **Attainment.** A region is "in attainment" if monitoring shows ambient concentrations of a specific pollutant are less than or equal to NAAQS or CAAQS. In addition, an area that has been re-designated from nonattainment to attainment is classified as a "maintenance area" for 10 years to ensure that the air quality improvements are sustained.

- **Nonattainment.** If the NAAQS or CAAQS are exceeded for a pollutant, the region is designated as nonattainment for that pollutant. It is important to note that some NAAQS and CAAQS require multiple exceedances of the standard in order for a region to be classified as nonattainment. Federal and state laws require nonattainment areas to develop strategies, plans, and control measures to reduce pollutant concentrations to levels that meet, or attain, standards.

- **Unclassified.** An area is unclassified if the ambient air monitoring data are incomplete and do not support a designation of attainment or nonattainment.

Air pollution levels are measured at monitoring stations located throughout the air basin. Table 1 (South Coast Air Basin Attainment Status) summarizes the attainment status in the Basin for the criteria pollutants. [9]

Table 1
South Coast Air Basin Attainment Status

Pollutant	Federal	State
O_3 (1-hr)	Nonattainment	Nonattainment
O_3 (8-hr)	Nonattainment	Nonattainment
PM_{10} (24-hr and Annual)	Attainment	Nonattainment
$PM_{2.5}$ (24-hr)	Nonattainment	--
$PM_{2.5}$ (Annual)	Nonattainment	Nonattainment
CO	Attainment (Maintenance)	Attainment
NO_2 (1-hr)	Attainment	Attainment
NO_2 (Annual)	Attainment (Maintenance)	Attainment
SO_2	Attainment	Attainment
Lead	Partial Nonattainment	Attainment
Visibility Reducing Particles	--	Unclassified
SO_4	--	Attainment
H_2S	--	Attainment
Source: SCAQMD, 2018 (see endnote 9)		

The Project would generate both short-term construction emissions and long-term operational emissions. The Project's potential emissions were estimated using CalEEMod, Version (V.) 2016.3.2. As described in more detail below, the Project would not generate short-term or long-term emissions that exceed SCAQMD-recommended pollutant thresholds.

Construction Emissions

The Project involves the construction of a 101,464 square-foot industrial building. Construction activities would disturb a total of approximately 5.25 acres and include site preparation, grading, construction, paving, and architectural coating work. The Project's construction activities, duration, and typical equipment usage was generated using default assumptions contained within CalEEMod, V. 2016.3.2, as modified to reflect project-specific activities (e.g., adding a trenching phase for the proposed stormwater channel activities). The Project's modeled construction activities, duration, and typical equipment use is summarized in Table 2 (Construction Activity, Duration, and Typical Equipment). Construction activities were presumed to start in January 2019 and last approximately 14 months.

Table 2
Construction Activity, Duration, and Typical Equipment

Construction Activity	Duration (Days)(A)	Typical Equipment Used
Trenching	10	Excavator, Concrete Saw, Dozer
Site Preparation	10	Tractor/Loader/Backhoe, Dozer
Grading	20	Excavator, Dozer, Grader, Tractor/Loader/Backhoe
Building Construction	230	Crane, Forklift, Generator, Tractor/Loader/Backhoe, Welder
Paving	20	Cement Mixer, Paver, Roller
Architectural Coating	20	Air Compressor
Source: MIG, 2018 (see Appendix A) (A) Days refers to total work days in the construction phase. (B) The typical equipment list does not reflect all equipment that would be used during the construction phase. Not all equipment would operate eight hours per day each work day.		

The Project's maximum daily mitigated construction emissions are shown in Table 3 (Mitigated Maximum Daily Construction Emissions (lbs/day)). Please refer to Appendix A for CalEEMod output files and detailed construction emissions assumptions. As shown in Table 3, the Project's maximum daily mitigated construction emissions would be below the SCAQMD's regional pollutant thresholds for all pollutants. Therefore, the Project's potential short-term regional impacts would be less than significant.

Table 3
Mitigated Maximum Daily Construction Emissions (lbs/day)

Year	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer 2019	4.42	45.63	22.87	0.05	8.74	5.56
Winter 2020	49.53	23.37	21.67	0.05	2.44	1.43
Winter 2019	4.43	45.64	22.80	0.05	8.74	5.56
Winter 2020	49.54	23.40	21.41	0.05	2.44	1.43
SCAQMD Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
Source: MIG, 2018 (see Appendix A)						

In addition to establishing thresholds of significance for emissions of criteria air pollutants on a regional level, the SCAQMD has also developed Local Significance Thresholds (LSTs) that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standards, which would result in significant adverse localized air quality impacts.[10] The LST methodology takes into account a number of factors, including (1) existing ambient air quality in each Source Receptor Area (SRA); (2) how many acres the Project would disturb in a day; and (3) how far project construction and operational activities would take place from the nearest sensitive receptor. Unlike the SCAQMD's regional emission significance thresholds presented in Table 3, LSTs have only been developed for NOx, CO, PM_{10} and $PM_{2.5}$.

The Project's maximum daily construction emissions are compared against the SCAQMD's-recommended LSTs thresholds in Table 5 (Construction Emissions Localized Significance Threshold Analysis). Consistent with the SCAQMD's LST methodology, the emissions included in the construction LST analysis are on-site emissions only, and the LST thresholds against which these on-site emissions are compared are based on the Project size, in acres, as determined using the specific equipment list generated by the CalEEMod project file and the SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*.[11] According to the SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*, the maximum number of acres disturbed on the peak day of use per crawler tractor, grader, and rubber tired dozer is 0.5 acres per 8 hour day, while the maximum number of acres disturbed on the peak day of use per scraper is 1 acre per 8 hour day. The 3.5-acre project size used in this LST analysis is based on the use of 3 rubber-tired dozers and 4 tractor/loader/backhoes during the Project's site preparation phase. Based on this fact sheet, the Project's on-site construction emissions were compared against LST thresholds for a 3.5-acre project size.

The LST thresholds are for SRA 34 (Central San Bernardino Valley), the SRA in which the Project is located, and are based on a receptor distance of 25 meters (82 feet), the closest LST receptor distance threshold recommended for use by the SCAQMD. As shown in Table 5, emissions from construction activities will not exceed the SCAQMD's-recommended LSTs for SRA 34. Therefore, the Project's potential short-term localized impacts would be less than significant. The emissions presented in Table 5 incorporate certain best available control measures the Project would be subject to pursuant to SCAQMD Rule 403, Fugitive Dust. Specifically, the CalEEMod project file applies a 61% total reduction in PM_{10} and $PM_{2.5}$ fugitive dust emissions through site watering (three times daily). These estimated reductions, which are not mitigation measures (since the Project would need to comply with Rule 403), are consistent with the reductions realized by the numerous best available control measures contained in SCAQMD Rule 403.

Table 4
Construction Emissions Localized Significance Thresholds Analysis

Construction Phase[B]	Maximum On-Site Pollutant Emissions (lbs/day)[A]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation	45.57	22.06	8.54	5.50
Grading	28.35	16.29	7.70	4.63
Trenching	35.78	22.06	1.79	1.67
Building Construction – 2019	21.08	17.16	1.29	1.21
Building Construction 2020	19.19	16.85	1.12	1.05
Paving	14.07	14.65	0.75	0.69
Architectural Coating	1.68	1.83	0.11	0.11
SCAQMD LST Threshold	186.5	1,331	10.4	6.0
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: MIG, 2018 (see Appendix A) and SCAQMD 2008, 2016.
(A) Emissions estimated using CalEEMod V. 2016.3.2. Estimates are based on default model assumptions unless otherwise noted in this document.
(B) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. In general, due to rounding, there is no difference between summer and winter emissions levels for the purposes of this table.

Operational Emissions
Once constructed, the Project would generate emissions of regulated air pollutants from area, energy, mobile, and off-road sources as described below.

- **Area sources.** The Project would generate emissions from small "area" sources including gasoline-powered landscaping equipment and the use of consumer products such as paints, cleaners, and fertilizers that result in the evaporation of chemicals to the atmosphere during product use.[1]

- **Energy use and consumption:** The Project would generate emissions from natural gas consumption associated with building operations such as lighting, water heating, and space heating. The CalEEMod default estimate of natural gas consumption for the Project is 31,520 therms of natural gas annually.[2]

- **Mobile sources.** The Project would generate emissions from vehicles and trucks travelling to and from the Project site. According to the Traffic Impact Assessment (TIA) prepared for the Project by RK Engineering Group, the Project would generate 3.90 non-truck trips per thousand square feet (KSF) of building space and 1.06 truck tips per KSF. At the proposed square footage of 101,464, this equates to average daily trip volumes of 109 trucks and 399 passenger vehicles. The modeling is based on a 25 mile trip length for all trip types (truck and non-truck).

  The TIA prepared for the Project further breaks down total truck trips by 2-, 3-, and 4-axle trucks. For the purposes of estimating emissions, truck trips were assumed to consist of medium duty vehicles and light heavy-duty trucks (MDV and LHDT1/2, consisting of 2-axle trucks), medium heavy-duty trucks (MHDT, consisting of 3-axle trucks), and heavy-heavy duty trucks (HHDT, consisting of 4-axle trucks). According to the TIA, the Project would generate 41 total LHDT truck trips per day, 20 MHDT truck trips per day, and 48 HHDT truck trips per day.

[1] Area sources are sources that are individually small but numerous in operation throughout an area.
[2] One therm is equal to 99,996.1 British thermal units (BTUs), or approximately 99.99 thousand British thermal units (kBTUs). 106,815 therms is equivalent to 10,618,500 kBTU. A BTU equals the amount of heat needed to raise one pound of water by one degree Fahrenheit.

- **Off-road equipment:** The Project was presumed to include the operation of a forklift for cargo loading/unloading purposes. Due to the fabrication / manufacturing nature of the Project, off-road equipment was presumed to compressed natural gas powered equipment that would operate primarily inside manufacturing buildings (i.e., moving pallets between work areas, loading/unloading deliveries for interior distribution.

- **Stationary sources.** The Project does not include any stationary sources of emissions such as a back-up generator or fire pump.

The Project's maximum daily unmitigated operational emissions, as estimated using CalEEMod, are shown in Table 5 (Maximum Daily Operational Emissions Estimates (lbs/day)). The emissions presented are for the Project's first full year of operation, which is presumed to be 2020. As shown in Table 5, the Project's maximum daily unmitigated operational emissions would be below the SCAQMD's regional pollutant thresholds for all pollutants. Therefore, the Project's potential long-term regional impacts would be less than significant.

Table 5
Maximum Daily Operational Emissions Estimates (lbs/day)

Source	Maximum Daily Pollutant Emissions (Pounds Per Day)[A]					
	ROG	**NO_X**	**CO**	**SO_2**	**PM^{10}**	**$PM^{2.5}$**
Area[B]	2.34	<0.01	0.10	<0.01	<0.01	<0.01
Energy[B]	0.09	0.85	0.71	0.01	0.06	0.06
Mobile[C]	1.79	19.30	29.45	0.13	9.31	2.60
Off-Road[C]	0.09	0.85	0.71	0.01	0.06	0.06
Total Project Emissions[D]	0.14	1.30	1.19	<0.01	0.10	0.09
SCAQMD CEQA Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: MIG, 2018 (see Appendix A)

(A) Emissions estimated using CalEEMod, V 2016.3.2. Estimates are based on default model assumptions unless otherwise noted.

(B) There is no difference between summer and winter emissions estimates.

(C) Maximum daily ROG, CO, SO_X emissions occur during the summer. Maximum daily NO_X, PM_{10}, and $PM_{2.5}$ emissions occur during the winter.

(D) Totals may not equal due to rounding.

The Project's maximum daily operational emissions are compared against the SCAQMD's-recommended LSTs in Table 6. The LSTs are for SRA 34 (Central San Bernardino Valley) in which the Project is located. The operational emissions from on-site area, mobile and off-road emissions sources were estimated against the SCAQMD's thresholds for a 5-acre project size. A receptor distance of 25 meters from the property line was used to evaluate impacts at sensitive receptor locations for construction activities. As shown in Table 6, emissions from operational activities will not exceed the SCAQMD's-recommended LSTs for SRA 34. Therefore, the Project's potential long-term localized impacts would be less than significant.

Table 6
Operational Emissions Localized Significance Thresholds Analysis

Operational Emission Source[B]	Maximum On-Site Pollutant Emissions (lbs/day)[A]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area[B]	<0.01	0.02	<0.01	<0.01
Energy[B]	0.85	0.71	0.06	0.06
Mobile[C]	3.86	5.89	1.86	0.52
Off-Road[C]	1.30	1.18	0.01	0.09
Total Project Emissions[D]	6.02	7.80	1.94	0.68
SCAQMD CEQA Threshold	**270**	**1,746**	**4**	**2**
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: MIG, 2018 (See Appendix A) and SCAQMD 2008, 2016.
(A) Emissions estimated using CalEEMod V. 2016.3.2. Estimates are based on default model assumptions unless otherwise noted in this document.
(B) Emissions presented are worst-case emissions and may reflect summer or winter emissions levels. In general, due to rounding, there is no difference between summer and winter emissions levels for the purposes of this table.
(C) On-site mobile emissions account for 20% of total mobile emissions from Table 5, accounting for on-site travel and idling.

III c) **Less than Significant Impact.** The Basin is currently designated non-attainment for State and/or federal standards for ozone, $PM_{10,}$ and $PM_{2.5}$ (see Table 1). As discussed in Section III b), the Project would not result in construction or operational emissions of criteria air pollutants that exceed SCAQMD thresholds of significance. In developing its CEQA significance thresholds, the SCAQMD considered the emission levels at which a project's individual emissions would be cumulatively considerable.[12] The SCAQMD considers projects that result in emissions that exceed its CEQA significance thresholds to result in individual impacts that are cumulatively considerable and significant. Since the Project would not individually exceed any SCAQMD CEQA significance thresholds it would result in less than significant cumulative air quality impacts.

III d) **Less than Significant Impact.** Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive air quality receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The sensitive air quality receptors adjacent or in close proximity to the perimeter of the Project include residential properties located approximately 148 feet (0.03 miles) north of the Project site (on the opposite side of Inland Center Drive on South Hillcrest Avenue), and residential properties located immediately adjacent to the south and west of the site on Valley View Drive and Riverwalk Drive, respectively. The nearest schools to the Project site are Urbita Elementary School, located approximately 0.14 miles to the north, San Bernardino Valley College, located approximately 0.30 miles to the northwest, and Alice Birney Elementary School, located approximately 0.39 miles to the southwest.

Sensitive air quality receptors could be impacted by substantial pollutant concentrations associated with project emissions. As described under Section III b) above, the Project's on-site emissions would not exceed SCAQMD LST thresholds for NO_X, CO, PM_{10}, or $PM_{2.5}$ (see Table 4 and Table 6) and thus would not result in on-site emissions that exceed AAQS.

In addition to criteria air pollutants such as the NO_X (an ozone precursor), CO, PM_{10}, and$PM_{2.5}$, the U.S. EPA and CARB have classified certain pollutants as hazardous air pollutants (HAPs) or toxic air contaminants (TACs), respectively. These pollutants can cause severe health effects at very low

concentrations, and many are suspected or confirmed carcinogens. The U.S. EPA has identified 187 HAPs, including such substances as arsenic and chlorine; CARB considers all U.S. EPA designated HAPS, as well as particulate emissions from diesel-fueled engines (DPM) and other substances, to be a TAC.

The Project's potential to generate concentrations of DPM from long-term operational activities that may adversely affect the health of nearby sensitive receptors is evaluated below. The operational HRA was conducted consistent with the guidance and recommendations contained in the SCAQMD's California Environmental Quality Act (CEQA) Air Quality Handbook, as amended and supplemented, SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, and the California Office of Environmental Health Hazard Assessment's (OEHHA) Air Toxics Hot Spots Program Guidance Manual.[13,14,15] The results of the HRA indicate the Project would not generate DPM concentrations that result in significant carcinogenic or non-carcinogenic health risks to the maximum exposed resident or worker. Please refer to Appendix B for detailed dispersion model inputs and outputs as well as HRA calculations.

In addition, the Project's potential to generate off-site emissions of CO that exceed AAQS is also evaluated below. The analysis concludes the Project would not generate emission of CO that could exceed an AAQS.

Operational HRA

The Project would result in on- and off-site diesel truck travel and on-site diesel-truck idling activities that would emit DPM. The SCAQMD has established thresholds for emissions of TACs. TAC emissions from a project are considered potentially significant if the maximum incremental cancer risk is greater than ten persons in 1,000,000 (1E-05).

Hazard Identification

DPM is the exhaust from diesel engines. It includes hundreds of different gaseous and particulate components, many of which are toxic. Many of the toxic compounds adhere to the particles, and because diesel particles are very small (less than 2.5 microns in diameter), they can penetrate deeply into the lungs. The California Air Resources Board designated DPM a toxic air contaminant in 1998 because of its potential to cause cancer, premature deaths, and other health problems. The potential health hazards associated with DPM are especially concerning for children because their lungs are still developing, and the elderly, who may have other serious health problems that can be exacerbated by DPM. Health risks from DPM occur exclusively through the inhalation pathway.

Hourly Emission Rates

The Project's sole source of DPM emissions is presumed to be diesel truck traffic; the Project does not involve the use of outdoor, diesel-powered yard/cargo handling equipment, or any non-emergency station sources of equipment that would combust diesel fuel. According to the Traffic Impact Assessment (TIA) prepared for the Project by RK Engineering, Inc., the Project would generate 3.90 passenger car trips per thousand square feet (KSF) of building space and 1.06 total truck tips per KSF.[3] At the proposed square footage of 101,464, this equates to average daily trip volumes of 109 truck trips (21.4% of total trips) and 399 passenger vehicle trips (78.6% of total trips), equal to 508 total daily vehicle trips.

The TIA prepared for the Project further breaks down total truck trips by 2-, 3-, and 4-axle trucks. For the purposes of estimating emissions, truck trips were assumed to consist of light heavy-duty trucks (LHDT1/2, consisting of 2-axle trucks), medium heavy-duty trucks (MHDT, consisting of 3-axle trucks), and heavy-heavy

[3] The TIA prepared by RK Engineering analyzed a previous iteration of the Project that included 102,375 square feet of building area, 22,984 square feet of landscaping, 14 dock doors, and 105 standard parking stalls. The final proposed Project includes 101,464 total square feet of building area, 34,275 square feet of landscaping, 11 dock doors, and 89 standard parking stalls. Given the decrease in building square footage, dock doors, and parking, and the negligible increase in landscaping, the modeling analyzed a more impact-intensive Project than the final proposed Project. Similarly, the difference in building area would not change the average daily trip rates and volumes.

duty trucks (HHDT, consisting of 4-axle trucks). According to the TIA, the Project would generate approximately 41 total LHDT truck trips per day, 20 MHDT truck trips per day, and 48 HHDT truck trips per day. The Project's truck trip generation rates are summarized in Table 7.

Table 7
Project Truck Trip Generation Rates

Truck Type(A)	Project Traffic (%)	Daily Trips	Hourly Trips
Light-Heavy Duty Trucks (LHDT1)	4.0%	20.3	0.85
Light-Heavy Duty Trucks (LHDT2)	4.0%	20.3	0.85
Medium-Heavy Duty Trucks (MHDT)	3.9%	19.8	0.83
Heavy-Heavy Duty Trucks (HHDT)	9.5%	48.2	2.01
TOTAL	21.4%	108.7	4.53
Source: RK Engineering, Inc., 2018 (A) Values in parentheses represent corresponding EMFAC2007 vehicle classification.			

Off-site truck travel DPM emissions and on-site truck travel and idling emissions were estimated using CARB's **Em**ission **Fac**tors model (EMFAC2017, V1.0.2) and project-specific truck travel and idling activities. LHDT1/2, MHDT, and HHDT running and idling PM10 emission factors for Year 2020 (the Project's first year of operation) were generated using EMFAC2017.[4] The EMFAC emissions database combines aggregate emissions for multiple model years as a repository for emission rates estimated through the year 2050. In actuality, emissions will decrease in the future due to the regular vehicle turn over and improvements in emissions technologies. If the construction and operation of the Project were to be delayed, the emissions factors included in this evaluation would provide a worst-case scenario as emissions rates improve as newer model years become available. EMFAC2017 was run at 10 and 40 miles per hour (MPH) using an aggregate of model years to generate the emissions factors for on-site and off-site truck travel, respectively. Similarly, truck idling emission rates were also aggregated over multiple model years. The EMFAC-generated emission factors were then weighted by the truck trip percentages identified in the TIA prepared for the Project to yield a single, weighted average composite emission factor for on-site truck travel, on-site truck idling, and off-site truck travel. The composite emission factors used to estimate the Project's DPM emissions are shown in Table 8.

Table 8
Composite PM_{10} Emission Factors

Truck Type	Project Traffic (%)	Idling Rate (grams/hour)	10 MPH Rate (grams/mile)	40 MPH Rate (grams/mile)
LHDT1	0.04	0.793125	0.060404211	0.019780212
LHDT2	0.04	0.8014	0.055081669	0.018665627
MHDT	0.04	0.256611	0.19604667	0.069383574
HHDT	0.10	0.029628	0.116210027	0.047898917
COMPOSITE FACTOR	0.21	0.35796	0.108902841	0.041094346
Source: EMFAC2017				

As shown in Table 8, 10 MPH and 40 MPH running emission factors for truck travel are presented in terms of grams / mile of truck travel. Running emission factors were multiplied by the total travel distance associated with each truck trip passing through the modeled source (based on the truck trip distribution percentages contained in the TIA prepared for the Project). The composite emission factor for idling trucks is presented in terms of grams/hour of idling activity. Although state law limits idling to five minutes per

[4] The EMFAC model analyzed a previous iteration of the Project that included 102,375 square feet of building area, 22,984 square feet of landscaping, 14 dock doors, and 105 standard parking stalls. The final proposed Project includes 101,464 total square feet of building area, 34,275 square feet of landscaping, 11 dock doors, and 89 standard parking stalls. Given the decrease in building square footage, dock doors, and parking, and the negligible increase in landscaping, the modeling analyzed a more impact-intensive Project than the final proposed Project. Additionally, the decrease in dock doors would result in reductions of the of trucks operating at the facility at a given time.

location, total idling emission were estimated presuming 15 minutes of total on-site idling time per truck. The distribution of truck trips and truck idling used to estimate the Project's DPM emissions are shown in Table 9.

Table 9
Truck Distribution

Truck Distribution	Truck Trip Distribution %	Total Truck Trips / Hour	Total Idling Trucks / Hour
On-Site Truck Travel and Idling			
Inbound South Access	100	2.26	1.13
Outbound South Access	50	1.13	0.66
Inbound North Access	0	0	0
Outbound South Access	50	1.13	0.66
Off-Site truck Travel			
Inland Center Drive			
Between I-215 and I-Street	100	4.53	--
Between I –Street and North Access Drive	100	4.53	--
South of North Access Drive	75	3.40	--
Source: RK Engineering, Inc., 2018 (Appendix F) and MIG, 2018 (Appendix B)			

The total activity, annual DPM emissions, and average DPM emission rate (in grams/second) for each on- and off-site source is summarized in Table 10 and Table 11.

Table 10
On-Site Idling Source Activity, Annual Emissions, and Emissions Rate

Description (Source ID)	Annual Trucks Idling	Total Annual Idle-Hours	DPM (Annual Grams)	DPM (Grams/Second)
Building 01 (VOL12)	9,916	2479	8.9E+02	2.814E-05
Building 01 (VOL13)	9,916	2479	8.9E+02	2.814E-05
Source: MIG, 2018 (Appendix B)				

Table 11
Truck Travel Source Activity, Annual Emissions, and Emissions Rate

Description (Source ID)	Annual Truck Trips	Miles Per Trip	Total Annual VMT	DPM (Annual Grams)	DPM (Grams/Second)[(A)]
On-Site Truck Travel (Drive Aisles)					
South Access (VOL01-VOL06)	29,747	0.011	318	3.462E+01	1.098E-06
North Access (VOL07-VOL11)	9,916	0.011	106	1.154E+01	3.659E-07
Off-Site Truck Travel (Public Roads)					
Inland Center Drive, Between I-215 and I Street					
AREA01	39,663	0.14	5,741	2.359E+02	1.76E-09
Inland Center Drive, Between I St. and North Access Driveway					
AREA02	39,663	0.03	1,281	5.265E+01	1.76E-09
Inland Center Drive, South of North Access Driveway					
AREA03	29,747	0.09	2,772	1.139E+02	1.32E-09
Source: MIG, 2018 (See Appendix B) (A) DPM emission rate is in grams/second for volume sources and grams/second/m^2 for area sources.					

Source Location and Type

The UTM coordinates for the Project's emissions sources are shown in Table 12. Consistent with SCAQMD Guidance, the Project's emissions sources were modeled as either a volume (on-site travel and idling) or area (off-site travel) source type.

Table 12
Modeled Emissions Source Location

Source ID	Description	UTM Coordinates (Zone 11N)(A)	
		Easting	Northing
On-Site Truck Idling			
VOL12	Building Truck Docks (1 - 7)	471987.01	3771294.91
VOL13	Building Truck Docks (8 - 14)	472010.51	3771324.11
On-Site Truck Travel			
VOL01	South Site Driveway	471936.32	3771266.87
VOL02	South Dock Access	471948.08	3771272.70
VOL03	South Dock Access	471954.02	3771285.01
VOL04	South Dock Access	471963.92	3771297.11
VOL05	South Dock Access	471974.47	3771308.77
VOL06	South Dock Access	471984.81	3771321.52
VO0L7	North Dock Access	471994.93	3771333.40
VOL08	North Dock Access	472004.16	3771345.27
VOL09	North Dock Access	472014.72	3771357.59
VOL10	North Dock Access	472026.34	3771367.04
VOL11	North Site Driveway	472029.42	3771379.35
Off-Site Truck Travel			
AREA01	Industrial Center Drive	472201.97	3771603.29
AREA02	Industrial Center Drive	472039.29	3771435.15
AREA03	Industrial Center Drive	472006.89	3771395.26

Source: MIG, 2018 (Appendix B)
(A) Coordinates are for the southwest corner of the source.

On-site idling and truck travel emissions were treated as a series of adjacent volume sources. Idling emissions were presumed to be an elevated source located next to a building, while travel emissions were presumed to be a surface based emission. Off-site truck travel emissions were treated as a series of area sources. The release height for all modeled sources was set to 4.12 meters, the approximate height of a truck exhaust. The dimensions of the modeled volume and area sources are shown in Table 13. For surface based volume sources, the initial lateral and vertical dimensions was computed by dividing the length of the side and the source release height, respectively, by 4.3; the initial vertical dimension of elevated volumes sources was computed by dividing the adjacent building height (37 feet) by 2.15.

Table 13
Modeled Emissions Source Dimensions

Source ID	Description	Length (m)	Width (m)
On-Site Truck Idling			
VOL12	Building Truck Docks (1 - 7)	28.0	28.0
VOL13	Building Truck Docks (8 - 14)	28.0	28.0
On-Site Truck Travel			
VOL01	South Site Driveway	11.5	11.5
VOL02	South Dock Access	11.5	11.5
VOL03	South Dock Access	11.5	11.5
VOL04	South Dock Access	11.5	11.5
VOL05	South Dock Access	11.5	11.5

Source ID	Description	Length (m)	Width (m)
VOL06	South Dock Access	11.5	11.5
VO0L7	North Dock Access	11.5	11.5
VOL08	North Dock Access	11.5	11.5
VOL09	North Dock Access	11.5	11.5
VOL10	North Dock Access	11.5	11.5
VOL11	North Site Driveway	11.5	11.5
Off-Site Truck Travel			
AREA01	Industrial Center Drive	233.0	18.29
AREA02	Industrial Center Drive	52.0	18.29
AREA03	Industrial Center Drive	150.0	18.29
Source: MIG, 2018 (Appendix B)			

Dispersion Model Inputs

The US EPA's AERMOD dispersion model was used to predict DPM concentrations at existing sensitive receptors near the Project site.[5] The AERMOD dispersion model is the US EPA- and SCAQMD-approved a model for simulating the dispersion of pollutant emissions and estimating ground level concentrations of pollutants at specified receptor locations. AERMOD requires the user to input information on the source(s) of pollutants being modeled, the receptors where pollutant concentrations are modeled, and the meteorology, terrain, and other factors that affect the potential dispersion of pollutants. These variables are described below and shown in detail in Appendix B.

- Meteorological Data Inputs: AERMOD requires meteorological data as an input into the model. The meteorological data is processed using AERMET, a pre-processor to AERMOD. AERMET requires surface meteorological data, upper air meteorological data, and surface parameter data such as albedo (reflectivity) and surface roughness. For the Project, pre-processed surface data from the SCAQMD was obtained for the Fontana meteorological station, the closest meteorological station to the Project site. Five complete years of meteorological data from 2011 to 2013 and 2015 to 2016 were utilized. Emissions were presumed to be generated 24-hours per day.
- Terrain Inputs: Terrain was incorporated by using AERMAP (an AERMOD pre-processer) to import the elevation of the Project site using data from the National Elevation Dataset with a resolution of 1/3 arcsecond.
- Modeled Receptors: Modeled receptors were placed along the Project boundary (i.e., fenceline) every 10 meters. In addition, modeled receptors were placed in a multi-tier fenceline grid. Tier 1 consisted of 5-meter spacing from the fenceline to 50 meters from the fenceline. Tier 2 consisted of 25-meter spacing from 50 meters to 150 meters from the fenceline. Tier 3 consisted of 100-meter spacing from 150 meters to 500 meters from the fenceline. All receptors were converted to discrete receptors, yielding 3,987 discrete receptors. Flagpole receptors were not used in the modeling.

Cancer Risk Results

Cancer risk and non-cancer health risks to sensitive receptors within one-quarter mile of on-site sources were estimated using the U.S. EPA's AERMOD dispersion model and recommendations contained in the SCAQMD's *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions* white paper and *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics Hot Spots Information and Assessment Act,* as well as the OEHHA *Air Toxics Hot Spots Program Guidance Manual.*

[5] The AERMOD model analyzed a previous iteration of the Project that included 102,375 square feet of building area, 22,984 square feet of landscaping, 14 dock doors, and 105 standard parking stalls. The final proposed Project includes 101,464 total square feet of building area, 34,275 square feet of landscaping, 11 dock doors, and 89 standard parking stalls. Given the decrease in building square footage, dock doors, and parking, and the negligible increase in landscaping, the modeling analyzed a more impact-intensive Project than the final proposed Project. Additionally, the decrease in dock doors would result in overall reductions of DPM concentrations.

The SCAQMD has established thresholds for emissions of TACs. TAC emissions from a project are considered potentially significant if the maximum incremental cancer risk is greater than ten persons in 1,000,000 (1E-05).

Cancer risk is the calculated, pollutant-specific estimated probability of developing cancer based upon the dose and exposure to the TAC. Cancer risk is determined by calculating the combinatory effects of the cancer potency factor (CPF) when inhaling the toxic, the daily inhalation dose, the age group the receptor is cohort to, the duration of exposure over a lifetime (70 years), and other factors such as age sensitivity and the amount of time spent at the location of exposure. For the Project, risks were assessed for the inhalation pathway (i.e., breathing) for both residential and worker receptors. Additionally, residential receptors were assessed under a 70-year exposure duration to further detail potential risk to those under lifetime exposure. Cancer risk equations for residential and worker receptors are summarized in Table 14, Table 15, and Table 16.

Table 14
Cancer Risk Equations

Equation 1 - Residential Risk:	$RISK_{INH.RES} = DOSE_{AIR.RES} \times CPF \times ASF \times \frac{ED}{AT} \times FAH$
Equation 2 - Worker Risk:	$RISK_{INH.WORK} = DOSE_{AIR.WORK} \times CPF \times ASF \times \frac{ED}{AT}$
Where:	
$DOSE_{AIR}$ =	Daily Inhalation Dose (mg/kg-day). See Table 15, Inhalation Dose Equations
CPF =	Cancer Potency Factor for Inhalants (mg/kg-day). CPF is expressed as the 95th percent upper confidence limit of the slope of the dose response curve under continuous lifetime exposure conditions. The CPF for diesel exhaust is 1.1 mg/kg-day.
ASF =	Age Sensitivity Factor. ASF is a protective coefficient intended to take into account increased susceptibility to long-term health effects from early-life exposure to TACs. The recommended ASFs are 10 for the third-trimester to birth and two-year age bins, three for the two-year to nine-year and 16-year age bins, and one for receptors over 16 years of age.
ED =	Exposure Duration (years). Exposure duration characterizes the length of residency (30 Years) or employment (25 Years) of the receptor.
AT =	Averaging Time (years). A 70-year (lifetime) averaging time is used to characterize to total risk as a factor of average risk over a typical lifespan.
FAH =	Fraction at Home. FAH is the percentage of time the receptor is physically at the receptor location. The recommended percentages are 85 percent for the third-trimester to birth and two-year age bins, 72 percent for the two-year to nine-year and 16-year age bins, and 73 for receptors over 16 years of age.

Table 15
Inhalation Dose Equations

Residential Dose	$DOSE_{AIR,RES} = C_{Air} \times \frac{BR}{BW} \times A \times EF \times 10^{-6}$
Worker Dose	$DOSE_{AIR,WORK} = C_{Air} \times WAF \times \frac{BR}{BW} \times A \times EF \times 10^{-6}$
Where:	
C_{AIR} =	Concentration of TAC in air (µg/m³). Concentration of toxic in micrograms per one cubic meter of air. The AERMOD program is used in the study to determine concentrations of diesel particulate matter at surrounding discrete and grid receptor points.
BR/BW =	Breathing Rate ÷ Body Weight (L/kg/day). Daily breathing rate normalized to body weight. The 95th percentile breathing rate to body weight ratios are used in this study with a recommended 361 L/kg/day for the third-trimester to birth age bin, 1,090 L/kg/day for the birth to two-years age bin, 861 L/kg/day for the two-years to nine-years age bin, 745 for the two-years to 16-years age bin, 335 L/kg/day for the 16-years to 30-years age bin, and 290 L/kg/day for the 16-years to 70-years age bin.
A =	Inhalation Absorption Factor. Is a coefficient that reflects the fraction of chemical absorbed in studies used in the development of CPF and Reference Exposure Levels (RELs). An absorption factor of one is recommended for all chemicals.
EF =	Exposure Frequency. EF is the ratio of days in a year that a receptor is receiving the dose. The recommended EF is 0.96 characterizing an assumed 350 days a year that a residential receptor is home for some portion of the day.
WAF =	Worker Air Concentration Adjustment Factor. The WAF is a coefficient designed to characterize the overlap of offsite worker schedules with the operations of a land use under study. See Table 16, Worker Adjustment Equation.

Table 16
Worker Adjustment Equation

Worker Adjustment Factor:	$WAF = \frac{H_{RES}}{H_{SOURCE}} \times \frac{D_{RES}}{D_{SOURCE}} \times DF$
Where:	
H_{RES} =	Residential Hours. Daily Hours by that the Annual Average Residential Air Concentration is Calculated
H_{SOURCE} =	Source Operational Hours. For this study it was assumed that the facilities will operate 24 hours a day.
D_{RES} =	Residential Days. Weekly Days by that the Annual Average Residential Air Concentration is Calculated.
D_{SOURCE} =	Weekly Operational Days of the Source. For this study it was assumed that the facilities will operate seven days a week.
DF=	Discount Factor. Coefficient for Partial Overlap of Work Schedule and Source Operations. No discount factor was applied in this study.

Cancer risk was assessed for the maximally exposed individual resident (MEIR) over a 30-year exposure duration (that characterizes the maximum residency tendency in California) and the maximally exposed individual worker (MEIW) over a 25-year exposure duration (characterizing the maximum job tenure tendency in California). Residential risk calculations account for presumed sensitivity to carcinogens and differences in intake rates for the third-trimester to birth, birth to two-years, two-years to nine-years, two-years to nine-years, two-years to 16-years, 16-year to 30-years, and 16-years to 70 years age bins.

Concentrations were modeled using AERMOD and then input into CARB's Hot Spots and Reporting Program (HARP) Health Risk Assessment Standalone Tool (RAST) to calculate cancer risk based on the methods and recommendations found in the OEHHA HRA Guidelines.[6] The RAST intake rate percentile was set to the 95th percentile, the FAH factor was not applied to age bins less than 16 years, and no worker adjustments were input into RAST. The intake percentile, FHA, and worker adjustment parameters provide a conservative (i.e., likely to overestimate) assessment of health risks at the MEIR and MEIW receptors. The resulting annual average DPM concentration and corresponding excess cancer risk at the PMI, MEIR, and MEIW are summarized in Table 17. The PMI is located off-site, adjacent to a public roadway (Inland Center Drive) that would not be occupied by either a worker or residential receptors; cancer risks at this location, therefore, were not estimated. The MEIR is located at the residence at the Crestview Mobile Park at 1020 Inland Center Drive, which borders the Project site to the south (the MEIR is the northern most residential unit closest to Inland Center Drive and the Project's south driveway access). The incremental increase in cancer risk at this location is 8.89 in one million. The MEIW is located just north of the proposed site at South Bay Foundry, Inc. (895 Inland Center Drive). The incremental increase in cancer risk at this business is 0.63 in one million. The nearest school to the project site, Urbita Elementary School, is located approximately 700-730 feet from the PMI, MEIR and MEIW, and therefore less than significant impacts would occur at this location. These MEIR and MEIW risk values do not exceed SCAQMD-recommended cancer risk thresholds of 10 in one million and thus represent a less than significant impact.

Table 17
Estimated Cancer Risk at PMI, MEIR, and MEIW

Receptor	UTM Location		Annual Average DPM Concentration (µg/m^3)	Excess Cancer Risk (per million population)
	Easting	Northing		
PMI(A)	471972.84	3771325.49	0.02784	--
MEIR(B)	471929.81	3771258.63	0.01027	8.89
MEIW(C)	472035.42	3771389.43	0.01019	0.63

Source: MIG, 2018 (see Appendix B)
(A) The PMI is located in a public roadway and is not an occupied receptor location.
(B) The MEIR is located immediately south of the project site within Crestview Mobile Park. The MEIR is the northern most residential unit adjacent to the site and Inland Center Drive.
(C) The MEIW is located immediately north of the project site at the South Bay Foundry, Inc.

Cancer Burden

Cancer burden is the product of public cancer risk and the population exposed to the carcinogen. There are 292 residential properties and structures (including individual mobile homes) located within ¼-mile of the Project site. Census data indicates that the average owner-occupied household size in the city for the 2012 to 2016 time period is 3.56 persons per household, thus, an estimated population of 1,039 persons lives within one-quarter mile of the Project site. The maximum residential cancer risk based on the lifetime exposure

[6] The HARP and RAST tools analyzed a previous iteration of the Project that included 102,375 square feet of building area, 22,984 square feet of landscaping, 14 dock doors, and 105 standard parking stalls. The final proposed Project includes 101,464 total square feet of building area, 34,275 square feet of landscaping, 11 dock doors, and 89 standard parking stalls. Given the decrease in building square footage, dock doors, and parking, and the negligible increase in landscaping, the modeling analyzed a more impact-intensive Project than the final proposed Project. Additionally, the decrease in square footage and dock doors would result in reductions of overall cancer risk.

scenario (70 years) is 2.86E-06 (approximately 2.86 cases per million people). The product of cancer risk and the estimated population is 0.0030 and does not exceed the SCAQMD threshold of 0.5 excess cancer cases.

Non-Carcinogenic Risk Results

The chronic non-cancer hazard quotient is the calculated pollutant-specific indicator for risk of developing an adverse health effect on specific organ system(s) targeted by the identified TAC, in this DPM. The potential for exposure to result in chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration to the chemical-specific, non-cancer chronic RELs. The REL is a concentration below which there is assumed to be no observable adverse health impact to a target organ system. When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient. To evaluate the potential for adverse chronic non-cancer health effects from simultaneous exposure to multiple chemicals, the hazard quotients for all chemicals are summed, yielding a hazard index. The chronic REL for DPM was established by OEHHA as 5 $\mu g/m^3$. For an acute hazard quotient, the one-hour maximum concentration is divided by the acute REL for the substance; however, there is no acute REL for DPM.

Chronic non-cancer risks are considered significant if a project's TAC emissions result in a hazard index greater than or equal to one. Non-cancer risk equations are summarized in Table 18.

Table 18
Non-Cancer Risk Equation

Chronic Hazard Quotient:	$HI_{DPM} = \frac{C_{DPM}}{REL_{AAC}}$
Where:	
HI_{DPM} =	Hazard Index; an expression of the potential for non-cancer health effects.
C_{DPM} =	Annual average DPM concentration ($\mu g/m^3$).
REL_{DPM} =	Reference exposure level (REL) for DPM; the DPM concentration at which no adverse health effects are anticipated.

As shown in Table 17, the annual average DPM concentration at the PMI is 0.02784, which yields a chronic hazard quotient of 0.006, which is less than the SCAQMD threshold of 1.0. As indicated above, the PMI is not an occupied receptor location; thus, the calculated hazard quotient at all other receptor locations would be less than 0.006 and less than the SCAQMD threshold of 1.0. This determination also applies to the nearest school to the project site, Urbita Elementary School, which is located approximately 0.14 miles to the north.

Carbon Monoxide Hotspots

Historically, to determine whether a project poses the potential for a CO hotspot, the quantitative CO screening procedures provided in the Transportation Project-Level Carbon Monoxide Protocol (the Protocol) were used. The Protocol determines a project may worsen air quality if the Project increases the percentage of vehicles in cold start modes by two percent or more; significantly increases traffic volumes by five percent or more; or worsen traffic flow, defined for signalized intersections as increasing average delay at intersections operating at level of service (LOS) E or F or causing an intersection that would operate at LOS D or better without the Project, to operate at LOS E or F. With new vehicles and improvements in fuels resulting in fewer emissions, the retirement of older polluting vehicles, and new controls and programs, CO concentrations have declined dramatically in California. As a result of emissions controls on new vehicles, the number of vehicles that can idle and the length of time that vehicles can idle before emissions would trigger a

CO impact has increased, so the use of LOS as an indicator is no longer applicable for determining CO impacts.

The Bay Area Air Quality Management District (BAAQMD) developed a screening-level analysis for CO hotspots in 2010 which finds projects that are consistent with the applicable congestion management program, and that do not cause traffic volumes at affected intersections to increase to more than 44,000 vehicles per hour, would not result in a CO hotspot that could exceed State or Federal air quality standards.[16] This BAAQMD screening threshold is generally consistent with the results of the CO modeling conducted for the SCAQMD's 2003 AQMP, which included a CO hotspot analysis at four busy intersections during AM and PM peak hour periods. The busiest intersection studied in this SCAQMD analysis, Wilshire Boulevard and Veteran Avenue, had 8,062 vehicles per hour during the AM peak, 7,719 vehicles per hour during the PM peak, and approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour CO concentration for this intersection was 4.6 ppm, which is less than a fourth of the 1-hour CAAQS CO standard (20 ppm).[17]

For purposes of this IS, the Project would have the potential to generate a CO hotspot if it would exceed the BAAQMD's screening traffic level for peak hour intersection traffic volumes (44,000 vehicles per hour) (thereby having the potential to result in CO concentrations that exceed 1-hour State (20 ppm), 1-hour Federal (35 ppm), and/or State and Federal 8-hour (9 ppm) ambient air quality standards for CO). Based on the TIA prepared for the Project (see Appendix F), the maximum number of vehicles moving through any study intersection would be substantially below the screening threshold of 44,000 vehicles per hour for a CO hotspot analysis. Therefore, the Project would not cause or significantly contribute to CO concentrations that exceed State or Federal ambient air quality standards for CO. This impact would be less than significant.

III e) **Less than Significant Impact.** According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). Odors are typically associated with industrial projects involving the use of chemicals, solvents, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills.

For the Project, a distribution warehouse use is assumed since specific tenants and uses of the buildings are unknown at this time. Warehouse distribution uses consist of storage and distribution of various packaged products. As such, objectionable odors may consist of that associated with the operation of diesel trucks around the buildings and forklifts inside the buildings. However, these odors are typical of an industrial zoned area and will have a less than significant impact on nearby sensitive receptors. The warehouse is proposed for light industrial uses. Consideration of the actual use of the building might be revised to include a manufacturing use, or other use that will create objectionable odors. Such uses would be required to obtain approval and comply with City Building Code and Development Code Section 19.20.030, and would not be permitted to emit any obnoxious odor or fumes. Impacts will be less than significant.

Cumulative Impacts

No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact. As described in this section, the proposed warehouse's operational emissions would not exceed thresholds. Therefore, the Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
f) Other: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	☐	☒	☐	☐

Discussion:

A General Biological Resources Assessment was prepared by MIG, dated October 2018, and is included in this report as Appendix C.

IV a) **Less than Significant with Mitigation Incorporated**. The Project site is located in an area that primarily houses industrial, commercial and residential uses. However, as this area is still in the process of becoming completely built-out, there are some areas of vacant land throughout the Project vicinity. The Project includes work on four separate parcels, all of which are currently undeveloped but were used at one time in the recent

past for light industrial storage. The development will also include a drainage connection under Inland Center Drive to the Lytle Creek Channel.

Special Status Plants

No special-status plant species are expected to be present on the Project site due to the extent of current development and subsequent lack of suitable habitat (refer to Appendix C); therefore, no impacts to special-status plants are anticipated as a result of Project implementation, and no further mitigation is required.

Special Status Wildlife

Native and ornamental trees, as well as various other substrates on the Project site, have the potential to provide nesting habitat for bird species protected by the CFGC Sections 3503 and 3513 as well as California horned lark. There is potential for ground- and tree-nesting birds to establish nests on the Project site prior any project-related construction. Construction activities including site mobilization, tree removal, other vegetation clearing, grubbing, grading, and noise and vibration from the operation of heavy equipment have the potential to result in significant direct (i.e., death or physical harm) and/or indirect (i.e., nest abandonment) impacts to nesting birds. The loss of an active nest of common or special-status bird species and/or their eggs or young as a result of project construction would be considered a violation of the CFGC, Section 3503, 3503.5, 3513 and therefore, would be considered a potentially significant impact. Implementation of Mitigation Measure BIO-1 would be required to reduce impacts to nesting birds to a less than significant level.

Several species of bats are known to occur in the vicinity of the Project site, including the western mastiff bat. Several large trees are located in the ornamental vegetation community (1.55 acres) on the Project site could provide suitable roosting or nesting habitat for bat species. Vegetation removal could result in the direct loss of roosting habitat and mortality of individuals during construction activities. Temporary disturbance to roosting bats during construction may including noise, air turbulence, dust, and ground vibration. Bats that forage near the ground could also be subject to crushing or disturbance by vehicles driving at dusk, dawn, or during the night. The construction and use of access roads could also disturb bats. However, with the implementation of Mitigation Measure BIO-2, potential impacts to roosting bats would be less than significant.

Although the Project site does not contain any habitat features that would be suitable to support the Santa Ana sucker, arroyo chub, and Santa Ana speckled dace species and lacks consistent hydrologic connectivity to suitable habitat areas that could facilitate upstream movement, impact avoidance measures should be implemented during project construction out of an abundance of caution in the unlikely event that an individual enters the Project site during construction.

If the Inland Drive storm connection is constructed during or shortly after storm events when sufficient water is in the Lytle Creek Channel to support fish species, construction activities would have the potential, albeit low, to adversely impact Santa Ana sucker and California Species of Concern Santa Ana specked dace and arroyo chub. This would represent a potentially significant impact according to CEQA guidelines. Implementation of Mitigation Measure BIO-3 is required to avoid potential inadvertent adverse impacts to special status fish species to a less than significant level.

IV b) **No Impact**. No sensitive natural vegetation communities defined by CDFW, USFWS, and/or local/regional plans are present on the Project site (See Appendix C). No impact will occur.

IV c) **Less than Significant with Mitigation Incorporated.** The USACE and EPA regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean

Water Act. Section 404 of the CWA requires a permit before dredged or fill material may be discharged into waters of the United States. Section 401 of the CWA requires an applicant for a federal permit to obtain a certification from the RWQCB. Additionally, Section 1602 of the CFGC requires the issuance of a Lake and Streambed Alteration Agreement (LSAA) to authorize work in jurisdictional streambeds. The concrete-lined Lytle Creek Channel is a potential USACE, CDFW, and RWQCB jurisdictional resource. Construction of the Inland Drive storm drain connection in Lytle Creek Channel would result in a temporary and potentially significant impact to federally protected waters of the U.S. as defined by Section 404 of the Clean Water Act (CWA) and Waters of the State. Impacts would be mitigated to a level of less than significant by implementing Mitigation Measure BIO-4.

IV d) **Less than Significant Impact**. The Project site does not function as a wildlife movement corridor or native wildlife nursery site and only facilitates localized movements by common species that are adapted to urban environments. Therefore, there will be a less than significant impact as a result from project construction and operation.

IV e) **No Impact**. The Project site does not occur within an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. No impact will occur.

IV f) **Less than Significant with Mitigation Incorporated** City of San Bernardino Municipal Code 15.34, Removal or Destruction of Trees, states that is unlawful for any person, firm, corporation, partnership, or association, either as owner, agent or otherwise, to cut down, uproot, destroy, and/or remove more than five (5) trees within any 36-month period from a development site or parcel of property without first being issued a permit from the Community and Economic Development Department of the City of San Bernardino (MC 15.34.020). If construction-related activities result in the loss of five or more trees, implementation of Mitigation Measure BIO-5 would reduce impacts to protected trees to a less than significant level.

Mitigation Measures

BIO-1 If vegetation removal is scheduled during the nesting season (typically February 1 to September 1), then a focused survey for active nests shall be conducted by a qualified biologist no more than five (5) days prior to the beginning of project-related activities (e.g., excavation, grading and vegetation removal). Surveys shall be conducted in proposed work areas, staging and storage areas, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys shall be conducted within a 250-foot radius surrounding the work area (in non-developed areas and where access is feasible). For larger raptors, such as those from the genus *Buteo*, the survey area shall encompass a 500-foot radius. Surveys shall be conducted during weather conditions suited to maximize the observation of possible nests and shall concentrate on areas of suitable habitat. If a lapse in project-related work of five (5) days or longer occurs, an additional nest survey shall be required before work can be reinitiated. If nests are encountered during any preconstruction survey, a qualified biologist shall determine if it may be feasible for construction to continue as planned without impacting the success of the nest, depending on conditions specific to each nest and the relative location and rate of construction activities. Any nest(s) within the Project site shall be monitored by a qualified biologist during active construction if work is occurring directly adjacent to the pre-determined no-work buffer. If the qualified biologist determines construction activities have potential to adversely affect a nest, the biologist shall immediately inform the construction manager to halt construction activities within minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on species and location. Construction activities within the no-work buffer may proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g. young have fledged, predation, or other non-anthropogenic nest failure).

BIO-2 A pre-construction survey shall be conducted in suitable habitat (e.g. trees) for roosting bats within 14 days prior to activities that remove vegetation or suitable structures. If an occupied maternity or colony roost is detected, CDFW shall be contacted about how to proceed. Typically, a buffer exclusion zone would be established around each occupied roost until bat activities have ceased. The size of the buffer would take into account:

- Proximity and noise level of project activities;
- Distance and amount of vegetation or screening between the roost and construction activities;
- Species-specific needs, if known, such as sensitivity to disturbance.

Due to restrictions of the California Health Department, direct contact by workers with any bat is not allowed. A qualified bat biologist will be contacted immediately if a bat roost is discovered during project construction.

BIO-3 To avoid potential adverse impacts to Santa Ana sucker, arroyo chub, and Santa Ana speckled dace in the event that these species are washed into the Project site during a storm or river flooding event, the timing of storm drain construction work within the Lytle Creek Channel will be restricted to the dry season when standing water is no greater than one (1) inch. No work shall be conducted when water is flowing in the channel. Prior to any work where ponded water is present within the channel, a qualified aquatic biologist shall conduct surveys for special status fish. If Santa Ana suckers occur in portions of the channel where construction activities are scheduled to occur, the applicant shall retain a biologist holding a USFWS permit for the Santa Ana sucker to monitor all construction activities in the channel thereafter. The resumes of the proposed biologists will be provided to the USFWS for concurrence. This biologist will be referred to as the permitted biologist hereafter. The permitted biologist will have the authority to stop all activities until appropriate corrective measures have been completed. The permitted biologist shall inspect the channel a minimum of three times a day from October 1 to April 30 and one time a day from May 1 through September 30 (unless otherwise approved by the CDFW and USFWS during construction to inspect for leaks, spills, or other debris that may enter the Lytle Creek Channel).

A complete Hazardous Material Spill kit capable of containing the largest potential vehicle spill of gasoline, diesel, or other hazardous materials will be kept on the Project site. The kit shall be located and maintained in areas accessible to crews. Spills on the roadway will be logged and reported to the biological monitor weekly and cleaned up immediately. Any spills will be reported to CDFW and USFWS within one hour. No refueling or equipment staging shall occur within the channel.

BIO-4 Any alterations of, or discharges into, waters of the United States, including Section 404 wetlands shall be in conformance with the Sections 404 and 401 of the CWA via certification and permitting prior to any demolition, grading, or construction that may impact jurisdictional area(s), as applicable. Activities that usually involve a regulated discharge of dredged or fill materials include (but are not limited to) grading, placing of riprap for erosion control, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments), stockpiling excavated material, mechanized removal of vegetation, and driving of piles for certain types of structures. If avoidance of federally protected wetlands is not feasible, securing 404 and 401 permits under the Clean Water Act and compliance with the federal and state "no net loss of wetlands" policy shall be required in accordance with USACE and RWQCB regulations.

Prior to the start of demolition, the applicant shall submit a jurisdictional delineation of waters of the U.S. to the USACE in order to request a formal verification of the limits of their jurisdiction and to identify potential impacts to waters of the U.S. If the USACE determines that jurisdictional waters of the U.S. will be impacted by the Project, the appropriate CWA Section 404 permit shall be

acquired by the applicant prior to the start of demolition of the Project. In addition, the Applicant shall be required to submit a Section 401 Water Quality Certification application to the Santa Ana RWQCB. If the USACE does not assert regulatory jurisdiction, then the applicant may be required to submit a Notice of Intent to the RWQCB for their General Permit R6T-2003-0004 for minor impact projects. If required, all regulatory permits shall be obtained, and all conditions shall be agreed upon to prior to demolition. The Project Applicant shall be responsible for complying with all conditions outlined in the applicable USACE, and/or RWQCB. Impact minimization measures associated with permit conditions of approval may include implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, as appropriate. Impacts to jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.

Storm water drainage plans and erosion and sediment control plans will be designed to avoid and minimize erosion and runoff to the work area within Lytle Creek Channel. To minimize indirect effects on water quality and wetland hydrology, the applicant will obtain a National Pollutant Discharge Elimination System Stormwater Permit (NPDES) and comply with drainage and storm water quality standards to avoid and minimize erosion and runoff to all wetlands that would avoided by the Project. As part of the Project design, the applicant will implement storm water quality treatment controls such as berms, off-stream detention basins, overflow collection areas, filtration systems, and sediment traps to control siltation and the potential discharge of pollutants to minimize impacts on water quality. The applicant will obtain a General Construction Storm Water Permit from the RWQCB, prepare a Storm Water Pollution Prevention Plan (SWPPP), and implement Best Management Practices (BMPs) to reduce water quality effects during and after construction. These BMPs include standard sediment and erosion control measures (e.g., installing orange construction fencing buffers, straw waddles, silt fencing, etc. around the perimeter of the construction zone) that will be implemented to protect jurisdictional wetlands and other waters that are being avoided during construction.

BIO-5 Prior to the removal of five or more trees, a tree removal permit will be obtained from the Development Services Department of the City of San Bernardino (MC 15.34.020).

Cumulative Impacts

As discussed above, impacts related to Biological Resources are anticipated to be less than significant with mitigation incorporated. Similar to the proposed warehouse development, all cumulative Projects would be subject to individual project review and conformance with conservation plans and standard provisions for compliance with state and federal protection laws. Since Project-related impacts would be less than significant and because cumulative Project-related impacts would be reduced to less than significant levels through mitigation, the cumulative impact from other past, present, and reasonably foreseeable projects, would be expected to be less than significant. Therefore, cumulative impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Be developed in a sensitive archaeological area as identified in the City's General Plan?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of CEQA?	☐	☒	☐	☐
c) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of CEQA?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion:

A California Historic Resources Information System-South Central Coastal Information Center (CHRIS-SCCIC) Record Search for the Project site and vicinity was performed by Mr. Chris Purtell, M.A., RPA of MIG, Inc. on July 30, 2018. A Cultural Resources Assessment for the Project was conducted by MIG and dated August 12, 2019 (See Appendix D).

V a) **Less than Significant with Mitigation Incorporated.** The Project includes a drainage connection under Inland Center Drive to the Lytle Creek Channel. The Project site and area adjacent to the Lytle Creek Channel where the drainage connection will occur are located in a sensitive archaeological area as identified in the City's General Plan and through consultation with the Gabrieleno Band of Mission Indians - Kizh Nation (GBMI-KN) and the San Manuel Band of Mission Indians (SMBMI). In order to comply with CEQA Guidelines Section 15064.5, PRC 5097.98(d)(1), the Native American Graves Protection and Repatriation Act (NAGPRA), and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the proposed Project will incorporate Mitigation Measures GBMI-KN-CUL-1 through GBMI-KN-CUL-3 and SMBMI-CUL-1 through SMBMI-CUL-3 to reduce potentially significant impacts to previously undiscovered archaeological resources to a less than significant level. With implementation of Mitigation Measures GBMI-KN-CUL-1 through GBMI-KN-CUL-3 and SMBMI-CUL-1 through SMBMI-CUL-3, impacts to sensitive archaeological resources will be less than significant.

Mitigation Measures

GBMI-KN-CUL-1 *Retain a Native American Monitor/Consultant.* The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians - Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the Project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission

Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

GBMI-KN-CUL-2 *Unanticipated Discovery of Tribal Cultural and Archeological Resources.* Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources.

GBMI-KN-CUL-3 *Public Resources Code Sections 21083.2(b) for Unique Archaeological Resources.* Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

SMBMI-CUL-1 *Archaeological Monitoring.* Due to the heightened cultural sensitivity of the proposed project area, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI)

agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

SMBMI-CUL-2 *Tribal Monitoring*. Due to the heightened cultural sensitivity of the proposed project area, Tribal monitors representing the San Manuel Band of Mission Indians shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of Tribal monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist, as detailed within SMBMI-CUL-1, and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and agree to the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

SMBMI-CUL-3 *Treatment of Cultural Resources*. If a pre-contact cultural resource is discovered during project implementation, ground disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Archaeological Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the Monitoring and Treatment Plan. A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all finds are subject, if feasible, to avoidance/preservation in place as treatment. Should any resource(s) not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by SMBMI. All plans for analysis shall be reviewed and approved by the applicant and SMBMI prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of SMBMI that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by SMBMI, the landowner, and the Lead Agency, and all finds shall be reburied within this location.

Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and SMBMI. All reburials are subject to a reburial agreement that shall be developed between the landowner and SMBMI outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with SMBMI to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees. All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and SMBMI for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and SMBMI.

V b) **Less than Significant with Mitigation Incorporated.** As discussed in Section a) above, the Project site and area adjacent to the Lytle Creek Channel is located in an area if high sensitivity for archaeological resources. However, Mitigation Measures GBMI-KN-CUL-1 through GBMI-KN-CUL-3 and SMBMI-CUL-1 through SMBMI-CUL-3 will reduce potentially significant impacts to previously undiscovered archaeological resources to a less than significant level.

V c) **No Impact.** The Project site consists of four adjacent parcels currently used for industrial storage. The Project site also includes the drainage connection under Inland Center Drive to the Lytle Creek Channel. The Project does not include demolition of any structures. According to the Records Search and site visits, the Project site does not include any structure that could be considered historic in nature. Therefore, the Project would result in no adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5. Additionally, in accordance with Assembly Bill 52 (AB 52), which added various provisions to the California Public Resources Code (PRC) that concern Tribal Cultural Resources, including Section 21080.3.1(d), the City is in the process of consulting with the San Manuel Band of Mission Indians - Kizh Nation and the Gabrieleno Band of Mission Indians. No historic resources have been identified on the Project site by either Tribe. As such, the Project will have no impact on historical resources.

V d) **Less than Significant Impact with Mitigation Incorporated.** No known human remains are anticipated to be located on or beneath the Project site, under the roadway, or the area adjacent to the creek channel. However, these findings do not preclude the existence of previously unknown human remains located below the ground surface, which may be encountered during construction excavations associated with the Project. Similar to the discussion regarding archaeological resources above, it is also possible to encounter buried human remains during construction given the proven prehistoric occupation of the region, the identification of multiple surface archaeological resources within a half-mile of the Study Area, and the favorable natural conditions that would have attracted prehistoric inhabitants to the area. As a result, Mitigation Measures GBMI-KN-CUL-4 through GBMI-KN-CUL-8 and SMBMI-CUL-4 have been incorporated to ensure any

buried human remains related to the Gabrieleno Band of Mission Indians - Kizh Nation or the San Manuel Band of Mission Indians will be properly preserved. With implementation of Mitigation Measure GBMI-KN-CUL-4 through GBMI-KN-CUL-8 and SMBMI-CUL-4 impacts to buried human remains will be less than significant as a result of construction of the warehouse and drainage connections.

Mitigation Measures

GBMI-KN-CUL-4 *Unanticipated Discovery of Human Remains and Associated Funerary Objects*. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

GBMI-KN-CUL-5 *Resource Assessment and Continuation of Work Protocol*. Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

GBMI-KN-CUL-6 *Kizh-Gabrieleno Procedures for Burials and Funerary Remains*. If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

GBMI-KN-CUL-7 *Treatment Measures*. Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work

closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

GBMI-KN-CUL-8 *Professional Standards.* Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

SMBMI-CUL-4 Inadvertent Discoveries of Human Remains/Funerary Objects. In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately who shall notify SMBMI, the applicant/developer, and the Lead Agency. The Lead Agency and the applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98. Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the

human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties. It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

Cumulative Impacts

With mitigation, the Project would result in no impacts to historical resources and less than significant impacts to known archaeological or paleontological resources and known human remains. The chances of cumulative impacts occurring as a result of Project implementation plus implementation of other Projects in the region is not likely since other Projects would be subject to individual Project-level environmental review and, if necessary, mitigation for their project-specific impacts. Since there would be no Project-related impacts and due to existing laws and regulations in place to protect cultural resources and prevent significant impact to paleontological resources, the potential incremental effects of the Project would not be cumulatively considerable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Discussion:

VI a) **Less than Significant Impact.**

Implementation of the Project would increase the demand for electricity and natural gas at the Project site and gasoline consumption in the region during construction and operation.

Electricity

Construction. Temporary electric power would be required for lighting and electronic equipment (e.g., computers) located in trailers used by the construction crew. However, the electricity used for such activities would be temporary and would have a negligible contribution to the project's overall energy consumption.

Operational. During operation of the Project, the warehouse would require electricity for multiple purposes, such as: building heating and cooling, lighting, appliances, and electronics.

As described in Section 4.3, the California Emissions Estimator Model (CalEEMod) was used to estimate project emissions from energy uses. Default electricity generations in CalEEMod were used for the proposed land use and climate zone based on compliance with the 2016 Title 24 Building Code.[7] Modifications were made to the model, based on the County's GHG DRP checklist. Such measures that would reduce electricity consumption include, but are not limited to: an improved efficiency heating, ventilation, and air conditioning (HVAC) system, high efficiency lights, water efficient faucets, and water efficient irrigation systems. Based on the project design and mitigations applied, the project is estimated to consume approximately 1,071,428 kWh/yr, with approximately 1,041,964 kWh/yr attributable to building electricity consumption and approximately 29,464 kWh/yr attributable to water consumption.

Although electricity consumption would increase at the site under implementation of the Project, the building envelope, HVAC, lighting, and other systems, would be designed to maximize energy performance. The project would be subject to statewide mandatory energy requirements as outlined in the CALGreen Code. In addition, the project would implement additional measures that would further reduce electricity consumption. Electricity that would be consumed by the Project would also be subject to the cap-and-trade regulation. For

[7] Based on the timing of construction, the Project would be constructed to the 2019 Title 24 CALGreen Building Code requirements, which are more efficient than the 2016 standards. Thus, the values presented reflect conservative assumptions, and likely overestimate energy that would be consumed by the Project

these reasons, the electricity that would be consumed by the Project is not considered to be inefficient or wasteful, and impacts would be less than significant.

Natural Gas

Construction. Natural gas consumption is not anticipated during construction of the Project. Fuels used for construction would generally consists of diesel and gasoline, which are discussed in the next subsection. Any amounts of natural gas that may be consumed during project construction would be nominal and would have a negligible contribution to the project's overall energy consumption.

Operational. Natural gas consumption during operation would be required during operation of the Project for various purposes, such as building heating and cooling.

Similar to the estimates derived for electricity consumption, CalEEMod was also used to estimate natural gas consumption associated with the Project. The demand calculations assumed the structure would be built to the 2016 Title 24 CALGreen efficiency requirements. In addition, mitigation was applied based on the information contained in the County's GHG DRP checklist. These measures include, but are not limited to: enhanced wall, attic, and window insulation; high efficiency water heater, and optimized building orientation. Based on the Project design and mitigations applied, the Project is estimated to consume approximately 3,152,040 kBTU/yr.

Although natural gas consumption would increase at the site under implementation of the Project, the building envelope, HVAC, lighting, and other systems, would be designed to maximize energy performance. The Project would be subject to statewide mandatory energy requirements as outlined in the CALGreen Code. In addition, the Project would implement additional measures that would further reduce natural gas consumption. Natural gas that would be consumed by the Project would also be subject to the cap-and-trade regulation. For these reasons, the natural gas that would be consumed by the project is not considered to be inefficient or wasteful, and impacts would be less than significant.

Diesel and Gasoline Fuel

Construction. Diesel and gasoline fuels, also referred to as petroleum in this subsection, would be consumed throughout construction of the Project. Fuel consumed by construction equipment would be the primary energy resource consumed over the course of construction, and vehicle miles traveled (VMT) associated with the transportation of construction materials (e.g., deliveries to the site) and worker trips to and from the site would also result in petroleum consumption. Whereas on-site, heavy-duty construction equipment and delivery trucks would predominantly use diesel fuel, construction workers would generally rely on gasoline-powered vehicles. The Project would be required to comply with CARB's Airborne Toxic Control Measures, which restricts heavy-duty diesel vehicle idling to five minutes. Since petroleum use during construction would be temporary and required to conduct development activities, it would not be wasteful or inefficient, and impacts would be less than significant.

Operational. Fuel consumption associated with the Project's operational phase would primarily be attributable to workers commuting to and from the Project and the operation of large, diesel-powered trucks (e.g., semi-trucks) needed to transport goods. Over the lifetime of the Project, the fuel efficiency of vehicles being used by the employees is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the Project site during operation is anticipated to decrease over time. There are numerous regulations in place that require and encourage fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and ZEVs in California. In addition, per the requirements identified in SB 375, CARB

adopted a regional goal for the SCAG region of reducing per-capita GHG emissions from 2005 levels by 8% by 2020 and 19% by 2035 for light-duty passenger vehicles. Accordingly, operation of the Project is expected to decrease the amount of petroleum it consumes in the future due to advances in fuel economy.

Although the Project would increase petroleum use in the region during construction and operation, the use would be a small fraction of the statewide use and, due to efficiency increase, would diminish over time. As such, petroleum consumption associated with the Project would not be considered inefficient or wasteful and would result in a less-than-significant impact.

VI b) **Less than Significant Impact.** The Project would not conflict with or obstruct a state or local plan adopted for the purposes of increasing the amount of renewable energy or energy efficiency. The California Title 24 Building Code contains energy efficiency standards for non-residential buildings. These standards address electricity and natural gas efficiency in lighting, water, heating, and air conditioning, as well as the effects of the building envelope (e.g., windows, doors, walls and rooves, etc.) on energy consumption. As described under Impact ENG-1, the Project would be required to comply with the 2019 Title 24 CALGreen standards, and would implement additional measures as identified in the County's GHG DRP checklist. Since the Project would comply with applicable State standards and adhere to the County's energy reductions measures identified in the GHG Emissions Reduction Plan, the Project would not conflict with nor obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.

Cumulative Impacts

The analysis presented in Impact ENG-1 and ENG-2 is cumulative in nature. As described in the analyses, the Project would not result in the unnecessary, inefficient, or wasteful use of energy resources, nor would it conflict with or obstruct a State or local plan for increasing renewable energy or energy efficiency.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Involve earth movement (cut and/or fill) based on information included in the Project Description Form?	☐	☐	☒	☐
b) Directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?	☐	☐	☒	☐
c) Be located within an Alquist-Priolo Earthquake Fault Zone?	☐	☐	☒	☐
d) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
e) Be located within an area subject to landslides, mudslides, subsidence, or other similar hazards as identified in the City's General Plan?	☐	☐	☒	☐
f) Be located within an area subject to liquefaction as identified in the City's General Plan?	☐	☐	☒	☐
g) Modify any unique physical feature based on a site survey/evaluation?	☐	☐	☐	☒
h) Result in erosion, dust, or unstable soil conditions from excavation, grading, fill, or other construction activities?	☐	☐	☒	☐
i) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Discussion:

VII a) **Less than Significant Impact.** The Project will have net imports of earthwork totaling 8,830 cubic yards of fill material. All soils will be placed and compacted in accordance with the Project geotechnical specifications and the California Building Code (CBC) to ensure adequate stability for future development. Impacts will be less than significant will implementation of existing regulations.

VII b) **Less than Significant Impact.** The Project, like most developments in California, will be subject to ground shaking impacts should a major earthquake occur in the future. The Project includes construction of the proposed warehouse building, totaling 101,464 square feet of floor space, along with associated landscaping, and parking improvements.

The proposed warehouse building will be subject to the seismic design criteria of the California Building Code (CBC). Adherence to these requirements will reduce the potential for structures constructed as part of the parking lot enhancements (i.e. fences, rolling gates, drainage outlets, etc.) to collapse during an earthquake, thereby minimizing injury and loss of life. Although structures may be damaged during earthquakes, adherence to seismic design requirements will minimize damage. The CBC is intended to provide minimum requirements to prevent major structural failure and loss of life. Adherence to existing regulations will reduce the risk of loss, injury, and death; impacts due to strong ground shaking will be less than significant.

VII c) **Less than Significant Impact.** The Project is not located within a known fault zone as identified in the City's General Plan.[18] [19] The Project is, however, still located in an area which has potential for earthquake damage, as it is approximately five miles south of the San Andreas Fault and ¼ mile northeast of the San Jacinto/ Loma Linda Faults. However, adherence to the CBC will be sufficient for mitigating any potential impacts. As such, impacts were determined to be less than significant.

VII d) **Less than Significant Impact.** Construction of the proposed warehouse will require ground disturbing activities relating to site clearing and grading. The Project site is currently comprised of permeable soils. At project completion the site would be comprised of no more than 85 percent impermeable surfaces. The required NPDES and SWPPP permits for stormwater pollution would be acquired. Best management practices for construction stormwater management would be implemented as part of the SWPPP for the Project. Construction of the proposed warehouse would not result in substantial soil erosion or the loss of topsoil. Standard construction procedures would ensure impacts caused by substantial soil erosion or the loss of topsoil would be less than significant.

VII e) **Less than Significant Impact.** Because no major groundwater production fields are in or near the Project site, the potential for surface subsidence associated with groundwater extraction is low. Moreover, no on-site removal of groundwater is proposed with construction of the warehouse. According to the City's General Plan, the Project site is located within an area of susceptibility to liquefaction and subsidence. Nevertheless, the Project would be subject to the City's construction standards that are based on the California Building Code for development within areas susceptible to liquefaction hazards. With adherence to existing regulations, impacts related to landslides, mudslides, subsidence, or other similar hazards will be less than significant.

VII f) **Less than Significant Impact.** As mentioned above, the Project site is located within an area of susceptibility to liquefaction and subsidence. However, according to the City of San Bernardino Water Department, groundwater levels for the site are in excess of 100-feet below ground surface (bgs) resulting in a less than significant potential chance of subsidence and liquefaction occurring (when groundwater is below 100-feet). Due to the Project site being in an area with a high susceptibility for liquefaction and subsidence, the Project is required to provide a geotechnical/soils study and incorporate recommendations of said study into the grading and building permits as mitigation for potential impacts of liquefaction and subsidence. With implementation to the measures recommended in the geotechnical/soils study, impacts will be less than significant.

VII g) **No Impact.** It was determined during field analysis of the Project site that there are no unique geological features on the Project site or within the Project vicinity. As such, a No Impact determination was made. No impact will occur.

VII h) **Less than Significant Impact.** Construction of the proposed warehouse will require ground disturbing activities, including export and import of soils. Best management practices for construction stormwater management would be implemented as part of the SWPPP for the Project. Construction of the proposed warehouse would not result in substantial soil erosion or the loss of topsoil. Standard construction

procedures would ensure impacts caused by substantial soil erosion or the loss of topsoil would be less than significant.

VII i) **Less than Significant Impact with Mitigation Incorporated.** The Project site consists of four previously disturbed parcels, a roadway, and an area adjacent to a creek channel. The Project site has been highly disturbed during previous earth moving activities. Any buried paleontological resources would likely have been already been uncovered or destroyed during these activities. However, in the event that paleontological materials are uncovered, Mitigation Measures GEO-1 through GEO-4 are required to reduce potentially significant impacts to previously undiscovered paleontological resources and/or unique geological features that may be accidentally encountered during Project implementation to a less than significant level. With implementation of Mitigation Measures GEO-1 through GEO-4, impacts to paleontological resources will be less than significant as a result of construction of the proposed warehouse and drainage connection.

Mitigation Measures

GEO-1 *Conduct Paleontological Sensitivity Training for Construction Personnel.* The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and, the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.

GEO-2 *Conduct Periodic Paleontological Spot Checks during grading and earth-moving activities.* The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, shall conduct periodic Paleontological Spot Checks beginning at depths below six (6) feet to determine if construction excavations have extended into older Quaternary deposits. After the initial Paleontological Spot Check, further periodic checks will be conducted at the discretion of the qualified paleontologist. If the qualified paleontologist determines that construction excavations have extended into the older Quaternary deposits, construction monitoring for Paleontological Resources will be required. The Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into the older Pleistocene alluvial deposits. Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known paleontological resources and/or unique geological features, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of paleontological resources and/or unique geological features encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional paleontologist.

GEO-3 *Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered.* In the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, ground-disturbing

activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.

GEO-4 *Prepare Report Upon Completion of Monitoring Services.* Upon completion of the above activities, the professional paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to the Applicant, the City, the Natural History Museums of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.

Cumulative Impacts

The potential cumulative impact related to earth and geology is typically site specific. The analysis herein determined that the Project would not result in any significant impacts related to landform modification, grading, or the destruction of a geologically significant landform or feature. Moreover, existing State and local laws and regulations are in place to protect people and property from substantial adverse geological and soils effects, including fault rupture, strong seismic ground shaking, seismic-induced ground failure (including liquefaction), and landslides. Existing laws and regulations also protect people and property from adverse effects related to soil erosion, expansive soils, loss of topsoil, development on an unstable geologic unit or soil type that could result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. These existing laws and regulations would render potentially adverse geological and soil effects of the Project to a level considered less than significant. Moreover, these existing laws and regulations ensure that past, present, and reasonably foreseeable future projects in the San Bernardino region do not result in substantial adverse geological and soils effects. As a result, the existing legal and regulatory framework would ensure that the incremental geological and soils effects of the Project would not result in greater adverse cumulative effects when considered together with the effects of other past, present, and reasonably foreseeable future projects in the San Bernardino region. The impacts of the Project related to geology and soils would not be cumulatively considerable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion:

The California Emissions Estimator Model (CalEEMod; V 2016.3.2) was used to analyze Air Quality and Greenhouse Gas Emissions. Air Quality modeling data can be found in Appendix A of this report. It should be noted that the CalEEMod modeling was conducted for an earlier iteration of the Project that included 102,375 total square feet of building area, 22,984 square feet of landscaping, 14 dock doors, and 105 standard parking stalls. The final proposed Project includes 101,464 total square feet of building area, 34,275 square feet of landscaping, 11 dock doors, and 89 standard parking stalls. Given the decrease in building square footage, dock doors, and parking, and the negligible increase in landscaping, the modeling analyzed a more impact-intensive Project than the final proposed Project.

VIII a) **Less Than Significant Impact.** Gases that trap heat in the atmosphere and affect regulation of the Earth's temperature are known as greenhouse gases (GHGs). Many chemical compounds found in the earth's atmosphere exhibit the GHG property. GHG allow sunlight to enter the atmosphere freely. When sunlight strikes the earth's surface, it is either absorbed or reflected back toward space. Earth that has absorbed sunlight warms up and emits infrared radiation toward space. GHG absorb this infrared radiation and "trap" the energy in the earth's atmosphere. Entrapment of too much infrared radiation produces an effect commonly referred to as "Global Warming", although the term "Global Climate Change" is preferred because effects are not just limited to higher global temperatures. GHG that contribute to climate regulation are a different type of pollutant than criteria or hazardous air pollutants because climate regulation is global in scale, both in terms of causes and effects. Some GHG are emitted to the atmosphere naturally by biological and geological processes such as evaporation (water vapor), aerobic respiration (carbon dioxide), and off-gassing from low oxygen environments such as swamps or exposed permafrost (methane); however, GHG emissions from human activities such as fuel combustion (e.g., carbon dioxide) and refrigerants use (e.g., hydrofluorocarbons) significantly contribute to overall GHG concentrations in the atmosphere, climate regulation, and global climate change. The 1997 United Nations' Kyoto Protocol international treaty set targets for reductions in emissions of four specific GHGs – carbon dioxide, methane, nitrous oxide, and sulfur hexafluoride – and two groups of gases – hydrofluorocarbons and perfluorocarbons. These GHG are the primary GHG emitted into the atmosphere by human activities. The six common GHG's are described below.

- Carbon Dioxide (CO_2). CO_2 is released to the atmosphere when fossil fuels (oil, gasoline, diesel, natural gas, and coal), solid waste, and wood or wood products are burned.

- Methane (CH4). CH4 is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from the decomposition of organic waste in municipal solid waste landfills and the raising of livestock.
- Nitrous oxide (N2O). N2O is emitted during agricultural and industrial activities, as well as during combustion of solid waste and fossil fuels.
- Sulfur hexafluoride (SF6). SF6 is commonly used as an electrical insulator in high voltage electrical transmission and distribution equipment such as circuit breakers, substations, and transmission switchgear. Releases of SF6 occur during maintenance and servicing as well as from leaks of electrical equipment.
- Hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). HFCs and PFCs are generated in a variety of industrial processes.

GHG emissions from human activities contribute to overall GHG concentrations in the atmosphere and the corresponding effects of global climate change (e.g., rising temperatures, increased severe weather events such as drought and flooding). GHGs can remain in the atmosphere long after they are emitted. The potential for a GHG to absorb and trap heat in the atmosphere is considered its global warming potential (GWP). The reference gas for measuring GWP is CO_2, which has a GWP of one. By comparison, CH_4 has a GWP of 25, which means that one molecule of CH_4 has 25 times the effect on global warming as one molecule of CO_2. Multiplying the estimated emissions for non-CO_2 GHGs by their GWP determines their carbon dioxide equivalent (CO_2e), which enables a project's combined global warming potential to be expressed in terms of mass CO_2 emissions.

Project GHG Emissions

The Project would generate GHG emissions from both short-term construction and long-term operational activities. To date, the SCAQMD has not adopted a numerical threshold for determining the significance of GHG emissions in the Basin; however, as an interim threshold based on guidance provided in the CAPCOA *CEQA and Climate Change* handbook, the SCAQMD has considered adopting and recommending for use a non-zero threshold that captures approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD using this interim method is 10,000 Metric Tons of Carbon Dioxide Equivalents (MTCO2e) per year for industrial projects, 3,500 MTCO2e for residential projects, 1,400 MTCO2e for commercial projects, and 3,000 MTCO2e for mixed-use projects.[20] As described in more detail below, the Project would not generate short-term or long-term emissions that exceed SCAQMD-recommended pollutant thresholds.

The Project's construction activities are summarized in Section III b). Potential project construction emissions were estimated using CalEEMod V.2016.3.2. Construction activities are short-term and cease to emit GHG upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Therefore, the SCAQMD recommends amortizing construction emissions over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions and compared to annual, long-term GHG thresholds.

Once constructed, the Project would generate GHG emissions from the area, energy, and mobile sources described in Section III b), as well as the following additional sources specific to GHG emissions:

- **Energy use and consumption.** In addition to natural gas usage, the Project would generate GHG emissions from the generation of electricity used to power equipment, lighting, etc. The CalEEMod default estimate of energy consumption for the Project is approxiamtely 1,071 megawatt-hours (MWhrs) per year.

- **Water use and waste water generation.** The Project would consume water for uses such as drinking, sanitary purposes, landscaping, etc. The CalEEMod default estimate of water consumption for the Project is approximately 24.01 million gallons (Mgal) of water per year.
- **Solid waste generation.** The Project would generate solid waste for landfilling and subsequent decomposition, which releases GHG. The CalEEMod default estimate of solid waste generation for the Project is approximately 125 tons per year.

The Project's GHG emissions, as estimated using CalEEMod V.2016.3.2, are shown in Table 19 (Greenhouse Gas Emissions Inventory).

Table 19
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)(A)			
	CO2	CH4	N2O	TOTAL MTCO2e
Construction				
Construction 2019	531.81	0.09	0.00	534.12
Construction 2020	44.67	0.01	0.00	44.91
Construction Total	576.48	0.10	0.00	579.03
30-Year Amortization(B)	19.22	<0.01	0.00	19.30
Operational				
Area	0.01	<0.01	<0.01	0.01
Energy	509.59	0.02	0.01	511.81
Mobile	2,205.37	0.09	0.00	2,207.77
Off-Road				
Solid Waste	17.46	<0.01	0.00	17.60
Water and Wastewater	25.39	1.50	0.00	62.91
Total	2,864.43	2.38	0.02	2,931.40
Total Construction + Operational(C)	2,853.65	2.38	0.02	2,950.70
Proposed SCAQMD Threshold				**10,000**
Exceeds Threshold?				**No**

Source: MIG, 2018 (See Appendix A).

(A) Emissions estimated using CalEEMod, V 2016.3.2. Estimates are based on default model assumptions unless otherwise noted in this IS

(B) Emissions are amortized over the life of the project, which is presumed to be 30 years

(C) Totals may not equal due to rounding.

As shown in Table 19, the Project's GHG emissions would be well below the SCAQMD's latest interim guidance and recommendation for GHG significance thresholds for industrial projects (10,000 MTCO2e) and, therefore, would not generate GHG emissions that have a significant effect on the environment. It is worth noting the Project's GHG estimates do not take into account potential GHG reductions associated with the green building, water conservation, and other energy efficiency measures required to be implemented by state and City codes and policies, and thus would be even lower then estimated.

The SCAQMD's interim thresholds, in general, establish a performance standard and GHG reduction objective that will ultimately contribute to reducing GHG emissions and stabilize climate change consistent with the long term goal contained in Executive Order S-3-05 (to reduce GHG emissions to 80 percent below 1990 levels by 2050). Thus, projects that meet the SCAQMD's current interim thresholds for Year 2020 would not interfere with the state's 2030 and 2050 GHG reduction targets. Currently, estimated GHG reductions necessary to achieve current state GHG reduction goas are addressed via regulatory requirements at the state level, which the Project would be required to comply with. As shown in Table 19, vehicle trips account for the majority of the Project's increase in GHG emissions. GHG emissions from vehicles would

continue to be reduced over time as individual vehicles are retired and replaced with more efficient vehicles and electric or other alternatively-fueled, low or zero emission vehicles.

VIII b) **No Impact.** The Project would not conflict with CARB's Scoping Plan, the regional SCS, the City's General Plan, or the SANBAG Sub-regional Climate Action Plan. The Project's consistency with these plans is described in more detail below. CARB's 2017 Climate Change Scoping Plan is the primary document used by CARB to ensure state GHG reduction goals are met.[21] The 2017 Climate Change Scoping Plan's primary objective is to identify the measures needed to achieve the 2030 reduction target established under Executive Order B-30-15 and SB 32. The major elements of the plan are generally geared toward actions either CARB or other state entities will pursue, such as, but not limited to:

- Implementing the LCFS, with an increased stringency (18 percent by 2030);
- Implementation of SB 350, which expands the RPS to 50 percent and doubles energy efficiency savings; and
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing CH4 and hydrocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by the year 2030.

Many of the measures identified in the 2017 Climate Change Scoping Plan are not applicable at the Project level, such as the Cap-and-Trade Program that applies to all large industrial GHG emitters (industrial sources emitting more than 25,000 MTCO2e/yr). Although most of these measures would be implemented at the State level, the GHG reductions achieved by these state measures would be realized at the local level. For example, regardless of actions taken by the City, emissions generated through gasoline combustion in motor vehicles within San Bernardino would produce less GHG in 2030 than they do now.

In addition to State measures, Appendix B to CARB's 2017 Climate Change Scoping Plan identifies potential actions that could be undertaken at a local level to support the State's climate goals. This appendix is organized into two categories Category A applies to code and broad planning documents and is not applicable to the Project. Category B includes measures that could be considered for individual projects. The Project is consistent with many of the suggested measures in Appendix B through required compliance with SCAQMD rules and the California Green Building Standards Code. The Project, therefore, would not conflict with the goals of the 2017 Climate Change Scoping Plan.

SCAG's RTP/SCS identifies regional and local transportation projects intended to improve the efficiency of the region's transportation network and expand mobility choices. The Project is consistent with existing City and County land use plans upon which the SCS is based and would not conflict or interfere with implementation of the 2016 RTP/SCS policies at the local or regional level. The City's General Plan Natural Resources and Conservation Element and Energy and Water Conservation Element include policies that generally call on the City to establish community wide or municipal programs to promote energy efficiency and reduce vehicle trips and/or GHG emissions. The Project is consistent with existing City land use and zoning designations and would comply with all applicable city green building requirements, energy efficiency measures, etc. for new development projects.

Cumulative Impacts
GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. As discussed above, the warehouse's emissions would be below the SCAQMD's threshold for of 10,000 MT per year of CO2e for industrial projects and would not conflict with applicable plans. Thus, the Project's cumulative contribution of GHG emissions would be less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS –				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion:

IX a) **Less than Significant Impact.** The Project could result in a significant hazard to the public if the Project includes the routine transport, use, or disposal of hazardous materials or places housing near a facility which routinely transports, uses, or disposes of hazardous materials. The Project is located within an area of the City that is characterized by industrial, commercial, and residential development. The Project does not include a housing component and would therefore not place housing near any hazardous materials facilities. The routine use, transport, or disposal of hazardous materials is primarily associated with industrial uses that require such materials for manufacturing operations or produce hazardous wastes as by-products of production applications. The Project includes the operation of a light industrial warehouse use. The Project does not propose or facilitate any activity involving significant use, routine transport, or disposal of hazardous substances as part of operation.

During construction, there would be a minor level of transport, use, and disposal of hazardous materials and wastes that are typical of construction projects. This would include fuels and lubricants for construction machinery, coating materials, etc. Routine construction control measures and best management practices for hazardous materials storage, application, waste disposal, accident prevention and clean-up, etc. would be sufficient to reduce potential impacts to a less than significant level.

With regard to project operation, widely used hazardous materials common at commercial warehousing uses such as the proposed light industrial use include paints and other solvents, cleaners, and pesticides utilized during normal upkeep of the proposed development. The remnants of these and other products are disposed of as household hazardous waste that are prohibited or discouraged from being disposed of at local landfills. Regular operation and cleaning of the warehouse use would not result in significant impacts involving the use, storage, transport or disposal of hazardous wastes and substances. Use of common household hazardous materials and their disposal does not present a substantial health risk to the community. Impacts associated with the routine transport and use of hazardous materials or wastes would be less than significant.

IX b) **No Impact.** Construction of the proposed warehouse will require the use and transport of hazardous materials such as asphalt, paints, and other solvents. Construction activities could also produce hazardous wastes associated with the use of such products. Construction of the Project requires ordinary construction activities and will not require a substantial or uncommon amount of hazardous materials to complete.

The Project site is currently undeveloped and does not contain any structures that would require demolition. Therefore, activities associated with the demolition of structures would not pose a hazard with regard to asbestos containing materials (ACM) or lead-based paints. No impact will occur.

IX c) **Less than Significant Impact.** The nearest school to the site is Urbita Elementary School, located approximately 0.14 miles to the north of the project site. Operation of the Project will not generate any hazardous emissions. Storage, handling, production or disposal of acutely hazardous materials associated with future operation of the warehouse would be subject to existing regulations. Impacts would be less than significant with implementation of existing regulations.

IX d) **Less than Significant Impact.** The presence of site contamination was evaluated for the Project site and surrounding properties through evaluation of Government Code 65962.5, and the results are discussed herein.

The California Environmental Protection Agency maintains a record, known as the State *Cortese List*, which is a compilation of various sites throughout the state that have been compromised due to soil or groundwater contamination from past uses.[22] Based upon review of the Cortese List, the Project site is not listed as a hazardous waste and substance site by the Department of Toxic Substances Control (DTSC),[23] listed as a

hazardous solid waste disposal site by the SWRCB,[24] currently subject to a Cease and Desist Order (CDO) or a Cleanup and Abatement Order (CAO) as issued by the SWRCB,[25] or developed with a hazardous waste facility subject to corrective action by the DTSC.[26] However, based upon review of the GeoTracker database, four leaking underground storage tank (LUST) sites occur on or within close proximity to the Project, as listed by the State Water Resources Control Board (SWRCB).[27] Two of the LUST sites occur on the Project site itself, while the other two occur on adjacent sites to the northeast. Table 20 (LUST Cleanup Sites) lists the LUST sites located on and within close proximity to the Project site.

Table 20
LUST Cleanup Sites

Site Name	Global ID	Address	Cleanup Status
TFI Appliance Service	T0607107529	941 Inland Center Drive	Completed – Case Closed
San Bernardino Pipe & Supply	T0607100162	939 Inland Center Drive	Completed – Case Closed
Daugherty Company	T0607100417	895 Inland Center Drive	Completed – Case Closed
Fairco, Inc.	T0607100248	915 Scenic Drive	Completed – Case Closed
Source: SWRCB GeoTracker, 2018			

As shown in Table 20, all four cases have been formally closed and issued a closure letter or other formal closure decision document by the State Water Resources Control Board. The TFI Appliance Service site was closed as of December 5, 1999. The San Bernardino Pipe & Supply site is closed as of December 15, 1999. The Daugherty Company site was closed as of February 25, 1999. And the Fairco, Inc. site was closed as of March 9, 2009. Moreover, the identified LUST sites have been remediated such that the tanks are no longer leaking and that any contamination does not exceed actionable levels. As such, the Project will not involve the release of hazardous materials into the environment.

No other site contamination that would be considered a hazardous material has been identified at the Project site. Therefore, impacts would be less than significant.

IX e) **Less than Significant Impact.** The Project is located approximately 2.5 miles from San Bernardino International Airport. Formerly Norton Air Force Base, the airport is used minimally for cargo planes, the fire department, and small private planes; however, passenger flights are expected to increase in coming years. The project is not located within an airport land use plan and will not expose persons residing or working in the Project area to excessive airport safety hazards. Less than significant impacts will occur.

IX f) **Less than Significant Impact.** The Project is not located within the vicinity of a private airstrip; therefore, no impacts related to private airstrips are expected. The Project is located approximately 2.5 miles from San Bernardino International Airport. Formerly Norton Air Force Base, the airport is used minimally for cargo planes, the fire department, and small private planes; however, passenger flights are expected to increase in coming years. The Project will not expose persons residing or working in the Project area to excessive airport safety hazards. Less than significant impacts will occur.

IX g) **Less than Significant Impact.** The Project is not expected to expose persons residing or working in the Project area to health and safety hazards. The Project is not expected to significantly increase employment in the area. The development of a light industrial warehouse will not present a significant impact to the evacuation plans for the City of San Bernardino. The Project site is located on Inland Center Drive between Riverwalk Drive and "I" Street. Inland Center Drive is a major arterial that may function as an evacuation route from the Project site. Access to the site will be provided via three driveways on Inland Center Drive. The Project will not create, interrupt, or otherwise reduce the ability of Inland Center Road to provide for emergency access. Therefore, the Project will have a less than significant impact on emergency response and evacuation plans.

IX h) **No Impact.** The Project site is located in an almost completely urbanized portion of the City, with the exception of vacant lots scattered between existing developments. The Project is not located within a wildfire hazard area.[28] No impact will occur.

Cumulative Impacts

The incremental effects of the Project related to hazards and hazardous materials, if any, are anticipated to be minimal, and any effects would be site-specific. Therefore, the Project would not result in incremental effects to hazards or hazardous materials that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable future project. The Project would not result in cumulatively considerable impacts to or from hazards or hazardous materials.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	**HYDROLOGY AND WATER QUALITY** – Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, such as from areas of material storage, vehicle or equipment maintenance (including washing or detailing), waste handling, hazardous materials handling or storage, delivery areas, loading docks, or other outdoor areas?	☐	☐	☒	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☐	☒
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Panel No. 06071C8677H)	☐	☐	☐	☒

h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion:

X a) **Less than Significant Impact.** A project can have a significant impact if it violates any water quality standards or waste discharge requirements. The Project site is zoned for light industrial development, which by its nature requires a significant amount of parking, truck staging and circulation, in addition to building coverage. This in turn increases the amount of impermeable surfaces and the amount of flows into storm drains. The requirement for 15% landscape coverage serves to provide relief for this during development. The Project site is fairly flat, sloping about 1 percent towards the southwest, and drainage from the site occurs via sheet flow to the street.

The Project site is currently undeveloped. The Project includes the construction of a warehouse building and associated parking and landscape improvements. The Project also includes a drainage connection under Inland Center Drive to the Lytle Creek Channel. The Project would result in 85% coverage with impervious surfaces, which would increase stormwater flows into the storm drain system. Landscaped area will make up the remaining 11 percent of the drainage area of the site. A Water Quality Management Plan (WQMP) was created in order to comply with the requirements of the City of San Bernardino and the NPDES Areawide Stormwater Program requiring the preparation of a WQMP. As part of the plan, runoff from the site will be treated through an underground infiltration system located on the southwest side of the Project site. Runoff will be directed to proposed catch basins and conveyed to the infiltration system under the site. When water fills up the underground infiltration system, water will overflow into a sump pump pit and be discharged through a parkway drain in Inland Center Drive. The Project also includes construction of a new spur connecting the parkway drain in Inland Center Drive with the Lytle Creek Channel. A more detailed discussion of proposed on-site drainage for the Project can be found in Section IX.c,d,e below.

The plan also requires non-structural and structural source control Best Management Practices (BMPs) to be incorporated to reduce pollution from the Project. Non-structural BMPs to be incorporated into the Project include: education of property owners, tenants, and occupants; activity restrictions; landscape management BMPs; BMP maintenance; a Spill Contingency Plan; hazardous materials disclosure compliance; a litter/debris control program; employee training; a catch basin inspection program; and vacuum sweeping of private street and parking lots. Structural BMPs to be incorporated into the Project include: storm drain system stenciling and signage; construction of trash and waste storage areas; efficient landscape design and irrigation systems; and a finished grade of landscaped areas at a minimum of 1-2 inches below the curb, sidewalk, or pavement. All BMPs included as part of the Project WQMP are required to be maintained through regular scheduled inspection and maintenance. [29]

The Project is also subject to preventative low-impact development (LID) site design requirements. Design features intended to comply with these requirements will include disconnecting roof drains from the storm drain system and connecting them to the underground infiltration system; revegetation of all disturbed areas; use of uncompacted native material in the proposed infiltration chambers; and staking of proposed landscaped areas during construction to minimize compaction.

The Project will be required to adhere to all SARWQCB permitting requirements for construction and NPDES standards for stormwater runoff. With adherence to SARWQCB permitting requirements and NPDES standards, implementation of non-structural and structural BMPs, and adherence to LID design requirements, impacts to water quality standards or waste discharge requirements will be less than significant.

X b) **Less than Significant Impact.** A significant impact could occur if the Project results in the extraction of groundwater or the interference with groundwater recharge to such an extent that groundwater levels fall below the operating depths of existing wells. The Project does not propose any withdrawals or additions to existing groundwater supplies. The Project will receive water service from the City of San Bernardino Municipal Water Department, which utilizes groundwater. Construction activities are known to impact shallow aquifers. However, no significant amounts of below-grade construction, such as basements or subsurface parking, will be included in the Project design. Cut and fill activities would only take place on the top few feet of the surface. Moreover, it was found during the geotechnical investigation that the Project would not impact any known aquifers because the static groundwater table is considered to have existed at depths in excess of 50 feet at the time of subsurface exploration. Impacts to groundwater supplies will be less than significant with development of the Project.

X c, d, e) **Less than Significant Impact.** Any construction project has the potential to affect drainage patterns and absorption rates, insofar as development creates impervious surfaces in areas which previously could absorb water. Potentially significant impacts to the existing drainage pattern of the site or area could occur if development of the Project results in substantial on- or off-site erosion or siltation.

The Project site is currently undeveloped with three concrete pads from previous development of the site. The existing drainage boundary of the site is separated into northeast and southwest portions. The northeast portion of the site currently drains from the west to the east corner with an average 1.2 percent slope to a culvert, which is intercepted by an 8-inch pipe, which drains through the residential development to the east and discharges through the curb face to Valley View Drive. The southwest portion of the site currently drains from north to south with an average slope of 1.6%, and the site runoff is collected at the south corner of the site with a 6-inch PVC pipe and then discharges to Inland Center Drive by a pump station and a 6-inch force main.[30]

The Project includes construction of a light industrial warehouse and associated parking and landscape improvements. On-site runoff will drain to low points throughout the site where catch basins will intercept the runoff and convey it to an underground storm drain system. The underground storm drain system will then convey the site runoff to the north end of the Project and discharge into an underground infiltration chamber system. The underground infiltration chamber system will be sized to capture and retain the required WQMP storm water volume for the Project site. Once the required volume of runoff is captured, the system will be designed to overflow into an underground storm drain system, which will convey the overflow to an on-site sump pump. The on-site sump pump will then pump the site runoff to a proposed new drain pipe under Inland Center Drive that will connect to and discharge the runoff into the Lytle Creek Channel southwest of the site.

Huit-Zollars, Inc. prepared a hydrology study for the Project in January 2015. The hydrologic analysis was prepared in accordance with the San Bernardino County Flood Control District's Hydrology Manual Rational Method using the AES 2013 software for San Bernardino County. The Unit Hydrograph analysis was completed for Existing Condition and Proposed Condition 100-year storm event using Civil software. The 100-year, 1-hour rainfall rate was taken from the isohyetal maps in the Hydrology Manual. The hydrologic soils type for the site is "A" and was taken from the soil map in the Hydrology Manual. A "commercial" land use was used for the Project site with an AMC of III for the Proposed Condition. Unit Hydrograph analyses were run to determine the detention volume required to mitigate the increase in runoff. The Unit Hydrograph analysis indicated that the Existing Condition generates 3.15 acre-feet of stormwater runoff, while the

Proposed Condition (with infiltration chamber system) would generate 3.13 acre-feet of stormwater runoff. Based on the analysis, it was determined that the Project would generate less volume of stormwater runoff than the current existing condition. It was determined that all proposed drainage and storm drain facilities would be sized adequately to protect the proposed buildings from flooding associated with a 100-year flood event. Less than significant impacts will occur.

Steps will also be taken to minimize impervious areas, maximize natural infiltration capacity, and preserve the existing drainage pattern and times of concentration. The Project would include 34,275 square feet of landscaping covering 15% of the site. Runoff will be directed toward landscaped areas to maximize natural infiltration capacity. Landscaping will also be provided between impervious areas to reduce runoff. Additional steps will be taken to protect existing vegetation, re-vegetate disturbed areas, and minimize unnecessary compaction in stormwater retention and infiltration basin areas. All surrounding vegetation will be protected in place outside the disturbed area. Planter islands will be included in the Project, as well as a vegetated buffer zone along the Project boundary with Inland Center Drive and residential developments to the north, south and west.

Although additional pervious surfaces are proposed that would increase the amount of runoff generated on the site, the majority of project-related stormwater flows will be controlled using the above-mentioned measures. Additionally, the Project is subject to development impact fees to support maintenance of area storm drainage facilities. Erosion will further be controlled on-site by requiring the Project to obtain all necessary Santa Ana Regional Water Quality Control Board (SARWQCB) permits and comply with National Pollution Discharge Elimination System (NPDES) standards for stormwater runoff. As a result of the drainage improvements, the design of the Project will not substantially alter drainage patterns in the area to the extent that substantial on- or off-site erosion or siltation will occur. The Project will not alter the course of a stream or river. The Project would not create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts to drainage patterns and stormwater runoff will be less than significant.

X f) **No Impact.** The Project does not propose any uses that will have the potential to otherwise degrade water quality beyond those issues discussed in Section IX.a. No impact will occur.

X g, i, j) **No Impact.** The Project site is located in Zone X, outside of the 100-year flood plain per FEMA panel #06071C8683J.[31] As indicated in the City's General Plan Safety Element, approximately half the project site is located within the dam inundation area for Seven Oaks Dam, which is located approximately 10 miles to the east.[32] The nearest water retaining structure to the Project site is the Lytle Creek Channel approximately 1,100 feet southwest of the Project site.[33] This concrete channel conveys intermittent flows into the Santa Ana River and is subject to certification and inspection to ensure that failure does not occur. The Project is not adjacent to any body of water that has the potential to seiche or tsunami and the Project site is not in the path of any potential mudflow. Given the distance to Seven Oaks Dam and standard maintenance designed to ensure the integrity of the dam, impacts from dam inundation are not expected. As such, no impact will occur.

X h) **No Impact.** The Project would not place structures within a 100 year flood hazard area which would impede or redirect flood flows. Therefore, the Project would have no impact on impeding or redirecting flood flows within a 100-year floodplain. As such, impacts related to impeding or redirecting flood flows will not occur.

Cumulative Impacts

The potential impacts related to hydrology and storm water runoff are typically site specific and site specific BMPs are implemented at the Project level. The analysis above determined that the implementation of the Project would not result in significant impacts. Therefore, the Project would have no impact under most

hydrology criteria, and therefore could not contribute toward a cumulative impact. In regard to Project impacts that would be considered less than significant, such impacts are not expected to result in compounded or increased impacts when considered together with similar effects from other past, present, and reasonably foreseeable future projects, as other projects would be subject to similar laws and requirements regarding hydrology practices. Potential impacts are considered less than cumulative considerable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
d) Be developed within the Hillside Management Overlay District?	☐	☐	☐	☒
e) Be developed within Foothill Fire Zones A, B, or C as identified in the City's General Plan?	☐	☐	☐	☒
f) Be developed within the Airport Influence Area as adopted by the San Bernardino International Airport Authority?	☐	☐	☐	☒

Discussion:

XI a) **No Impact**. The Project site is comprised of four parcels that are currently undeveloped but were used for light industrial storage and auto servicing activities in the recent past. A Lot Merger will be required to merge the four parcels into a single parcel. The Project site is surrounded by residential development, similar light industrial uses, and vacant land. The Project does not include the reconfiguration of an existing roadways or streets. There are residential uses in the immediate vicinity of the Project site; however, the Project will not physically divide any established community. No impact will occur.

XI b) **No Impact.** The Project would not conflict with existing land uses as designated in the General Plan Land Use Map Zoning District Maps. The Project site has been determined to be located within the City of San Bernardino General Plan and Zoning designation of Industrial Light (IL), which allows development of the Project through a Development Permit. The site was found to not be located within any specific plan area. It does not conflict with any other land use plan, policy or regulation of any agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect. No impact will occur.

XI c) **No Impact.** The Project is not located within a wildlife conservation plan or natural community conservation plan.[34] Therefore, the Project will not conflict with any applicable habitat conservation plan or natural community conservation plan. No impact will occur.

XI d) **No Impact**. The Project site is not located within or adjacent to the Hillside Management Overlay District.[35] No impact will occur.

XI e) **No Impact**. The Project site is not located within a Fire Hazard Area as identified in the City's General Plan. No impact will occur.

XI f) **No Impact.** The Project site is not within the Influence Area of the San Bernardino International Airport Authority. Operation of the warehouses will not interfere with any airport operations. No impact will occur.

Cumulative Impacts

The Project does not conflict with any existing land use regulations and therefore could not contribute towards any cumulative impacts. The Project does not propose any new roadways or other significant infrastructure improvements that would restrict access or require a diversion for existing travel routes. The Project does not result in an impact on any sensitive plant or animal species covered by a habitat conservation plan or natural community conservation plan, nor does it hinder the implementation or establishing of such plans. For these reasons, the Project would not cumulatively contribute to land use conflicts and potential impacts are considered less than cumulative considerable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
c) Be located in a Mineral Resource Zone as adopted by the State Mining and Geology Board and identified in the City's General Plan?	☐	☐	☐	☒

Discussion:

XII a-c) **No Impact.** According to the City's General Plan, the Project site is not located in an area designated as a Mineral Resource Zone; which are areas of significant mineral deposits. As such, the Project will not have an impact on any mineral resources. No Impact will occur.

Cumulative Impacts
The Project would not result in direct or indirect permanent or temporary impacts related to mineral resources. Therefore, the Project would not result in incremental effects to mineral resources that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. Thus, no cumulative impacts related to mineral resources would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the City's General Plan or Development Code, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or Airport Influence Area, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion:

Appendix E of this report contains existing ambient noise data, vibration calculations, and traffic noise modeling data. It should be noted that the TIA prepared by RK Engineering analyzed a previous iteration of the Project that included 102,375 square feet of building area, 22,984 square feet of landscaping, 14 dock doors, and 105 standard parking stalls. The final proposed Project includes 101,464 total square feet of building area, 34,275 square feet of landscaping, 11 dock doors, and 89 standard parking stalls. Given the decrease in building square footage, dock doors, and parking, and the negligible increase in landscaping, the modeling analyzed a more impact-intensive Project than the final proposed Project.

Noise is generally defined as unwanted sound and is widely recognized as a form of environmental degradation. Airborne sound is the rapid fluctuation of air pressure above and below atmospheric pressure. The frequency (pitch), amplitude (intensity or loudness), and duration of a sound all contribute to the effect on a listener, or receptor, and whether or not the receptor perceives the sound as "noisy" or annoying.

Pitch is the height or depth of a tone or sound and depends on the frequency of the vibrations by which it is produced. Sound frequency is expressed in terms of cycles per second, or Hertz (Hz). Humans generally hear sounds with frequencies between 20 and 20,000 Hz and perceive higher frequency sounds, or high pitch noise, as louder than low-frequency sound or sounds low in pitch. Sound intensity or loudness is a function of the amplitude of the pressure wave generated by a noise source combined with the reception characteristics of the human ear. Atmospheric factors and obstructions between the noise source and receptor also affect the loudness perceived by the receptor. Sound pressure levels are typically expressed on a

logarithmic scale in terms of decibels (dB). A dB is a unit of measurement that indicates the relative amplitude (i.e., intensity or loudness) of a sound, with 0 dB corresponding roughly to the threshold of hearing for the healthy, unimpaired human ear.

Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 dBs represents a ten-fold increase in acoustic energy, while 20 dBs is 100 times more intense, 30 dBs is 1,000 times more intense, etc. In general, there is a relationship between the subjective noisiness or loudness of a sound and its intensity, with each 10 dB increase in sound level perceived as approximately a doubling of loudness. Due to the logarithmic basis, decibels cannot be directly added or subtracted together using common arithmetic operations:

$$50\ decibels + 50\ decibels \neq 100\ decibels$$

Instead, the combined sound level from two or more sources must be combined logarithmically. For example, if one noise source produces a sound power level of 50 dBA, two of the same sources would combine to produce 53 dB as shown below.

$$10 * 10log\left(10^{\left(\frac{50}{10}\right)} + 10^{\left(\frac{50}{10}\right)}\right) = 53\ decibels$$

In general, when one source is 10 dB higher than another source, the quieter source does not add to the sound levels produced by the louder source because the louder source contains ten times more sound energy than the quieter source.

Sound Characterization

Although humans generally can hear sounds with frequencies between 20 and 20,000 Hz most of the sounds humans are normally exposed to do not consist of a single frequency, but rather a broad range of frequencies perceived differently by the human ear. In general, humans are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. Instruments used to measure sound, therefore, include an electrical filter that enables the instrument's detectors to replicate human hearing. This filter, known as the "A-weighting" or "A-weighted sound level" filters low and very high frequencies, giving greater weight to the frequencies of sound to which the human ear is typically most sensitive. Most environmental measurements are reported in dBA, meaning decibels on the A-scale.

Sound levels are usually not steady and vary over time. Therefore, a method for describing either the average character of the sound or the statistical behavior of the variations over a period of time is necessary. The continuous equivalent noise level (Leq) descriptor is used to represent the average character of the sound over a period of time. The Leq represents the level of steady-state noise that would have the same acoustical energy as the sum of the time-varying noise measured over a given time period. Leq is useful for evaluating shorter time periods over the course of a day. The most common Leq averaging period is hourly, but Leq can describe any series of noise events over a given time period.

Variable noise levels are the values that are exceed for a portion of the measured time period. Thus, the L1, L10, L50, and L90 descriptors represent the sound levels exceeded 1%, 10%, 50%, and 90% of the time the measurement was performed. The L90 value usually corresponds to the background sound level at the measurement location.

When considering environmental noise, it is important to account for the different responses people have to daytime and nighttime noise. In general, during the nighttime, background noise levels are generally quieter than during the daytime but also more noticeable due to the fact that household noise has decreased as

people begin to retire and sleep. Noise exposure over the course of an entire day is described by the day/night average sound level, DNL (or Ldn), and the community noise equivalent level, or CNEL, descriptors. Both descriptors represent the 24-hour noise exposure in a community or area. For DNL, the 24-hour day is divided into a 15-hour daytime period (7 AM to 10 PM) and a 9-hour nighttime period (10 PM to 7 AM) and a 10 dB "penalty" is added to measure nighttime noise levels when calculating the 24-hour average noise level. For example, a 45 dBA nighttime sound level would contribute as much to the overall day-night average as a 55 dBA daytime sound level. The CNEL descriptor is similar to Ldn, except that it includes an additional 5 dBA penalty for noise events that occur during the evening time period (7 PM to 10 PM). The artificial penalties imposed during DNL and CNEL calculations are intended to account for a receptor's increased sensitivity to noise levels during quieter nighttime periods.

Sound Propagation

The energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out and travels away from the noise generating source. The strength of the source is often characterized by its "sound power level." Sound power level is independent of the distance a receiver is from the source and is a property of the source alone. Knowing the sound power level of an idealized source and its distance from a receiver, the sound pressure level at a specific point (e.g., a property line or a receiver) can be calculated based on geometrical spreading and attenuation (noise reduction) as a result of distance and environmental factors, such as ground cover (asphalt vs. grass or trees), atmospheric absorption, and shielding by terrain or barriers.

For an ideal "point" source of sound, such as mechanical equipment, the energy contained in a sound pressure wave dissipates and is absorbed by the surrounding environment as the sound wave spreads out in a spherical pattern and travels away from the point source. Theoretically, the sound level attenuates, or decreases, by 6 dB with each doubling of distance from the point source. [36]

Equation 1

$$dBA2 = dBA1 + 20 * Log\ (D1/D2)$$

Where:

dBA1 = Known noise level, such as a reference noise level

D1 = Distance associated with dBA1

dBA2 = Noise level at distance 2

D2 = Distance associated with dBA2

In contrast, a "line" source of sound, such as roadway traffic or a rail line, spreads out in a cylindrical pattern and theoretically attenuates by 3 dB with each doubling of distance from the line source; however, the sound level at a receptor location can be modified further by additional factors. The first is the presence of a reflecting plane such as the ground. For hard ground, a reflecting plane typically increases A-weighted sound pressure levels by 3 dB. If some of the reflected sound is absorbed by the surface, this increase will be less than 3 dB. Other factors affecting the predicted sound pressure level are often lumped together into a term called "excess attenuation." Excess attenuation is the amount of additional attenuation that occurs beyond simple spherical or cylindrical spreading. For sound propagation outdoors, there is almost always excess attenuation, producing lower levels than what would be predicted by spherical or cylindrical spreading. Some examples include attenuation by sound absorption in air; attenuation by barriers; attenuation by rain, sleet, snow, or fog; attenuation by grass, shrubbery, and trees; and attenuation from shadow zones created by wind and temperature gradients. Under certain meteorological conditions, like fog and low-level clouds, some of these excess attenuation mechanisms are reduced or eliminated due to noise reflection.

Noise Effects

Noise effects on human beings are generally categorized as:

- Subjective effects of annoyance, nuisance, and/or dissatisfaction
- Interference with activities such as speech, sleep, learning, or relaxing
- Physiological effects such as startling and hearing loss

Most environmental noise levels produce subjective or interference effects; physiological effects are usually limited to high noise environments such as industrial manufacturing facilities or airports. Predicting the subjective and interference effects of noise is difficult due to the wide variation in individual thresholds of annoyance and past experiences with noise; however, an accepted method to determine a person's subjective reaction to a new noise source is to compare it the existing environment without the noise source, or the "ambient" noise environment. In general, the more a new noise source exceeds the ambient noise level, the more likely it is to be considered annoying and to disturb normal activities.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness that would almost certainly cause an adverse response from community noise receptors.[37]

Existing Ambient Noise Levels

The City's General Plan Noise Element identifies that San Bernardino is affected by both transportation (vehicles, rail, and air traffic) and non-transportation (sports events, commercial and industrial activity, construction) noise sources. According to Figure N-2 of the General Plan, the Project site is or will soon be exposed to traffic noise levels in the range of 65 to 70 CNEL, primarily due to traffic on I-215.[38]

The existing ambient noise levels in the Project area were monitored in November 2018 (MIG 2018; see Appendix E, Noise Data). Ambient noise levels were measured with two Larson Davis SoundTrack LxT Type 1 sound level meters; ambient noise measurements were collected in 10-minute intervals. Conditions during the monitoring were generally clear and sunny during the daytime, with a daily high of approximately 90 degrees Fahrenheit and winds from the west/southwest between approximately five to 10 miles per hour. The ambient noise monitoring consisted of two short-term (ST) measurements at locations selected to:

- Provide direct observations of existing noise sources at and in the vicinity of the Project area;
- Determine typical ambient noise levels at and in the vicinity of the Project area; and
- Evaluate potential project noise levels at sensitive residential receptor locations adjacent to the eastern and southern property boundary.

The ambient noise monitoring locations are described below.

- **Location ST-1** was located approximately 10 feet southeast of Inland Center Drive, within the Project site. The ambient noise levels measured at location ST-1 are considered representative of background daytime noise levels associated existing site operations and vehicle travel on Inland Center Drive.

- **Location ST-2** was located approximately 375 feet southeast of Inland Center Drive, in the back of the property near its shared property line with residences located on Valley View Drive. The ambient noise levels measured at location ST-2 are considered representative of background daytime noise levels associated with the site operations, I-210, and the existing ambient noise levels at residences on Valley View Drive.

Based on observations made during the ambient noise monitoring, the existing noise environment in the Project vicinity consists primarily of transportation noise sources, particularly vehicular traffic on Inland Center Drive, as well as noise associated with the site's existing operations (yard storage and forklift equipment operations). Table 21 summarizes the results of the ambient noise monitoring conducted for this EIR.

Table 21
Existing Ambient Noise Levels in the Project Area

Monitoring Site	Duration	Leq	Lmin	Lmax	L(1.6)	L(05)	L(16.7)	(L25)	L(50)	L(90)
ST-1	1-Hour	64.4	43.9	76.8	72.1	69.4	65.8	59.9	48.0	64.4
ST-2	1-Hour	55.6	40.6	78.7	66.5	58.2	51.1	47.6	43.9	55.6
Source: MIG 2018 (see Appendix E)										

Noise Sensitive Receptors

Noise sensitive receptors are buildings or areas where unwanted sound or increases in sound may have an adverse effect on people or land uses. Residential areas, motels and hotels, hospitals and health care facilities, school facilities, and parks are examples of noise receptors that could be sensitive to changes in existing environmental noise levels. The noise sensitive receptors near the Project site include:

- The Crestview Mobile Park directly south of the Project site.
- Residences on Valley View Drive directly east of the Project site.
- Residences on South I Street, approximately 100 feet to the northwest of the Project site.

Applicable Noise Regulations

California Building Standards Code

The California Building Standards Code is contained in Title 24 of the California Code of Regulations and consists of 11 different parts that set various construction and building requirements. Part 2, California Building Code, Section 1207, Sound Transmission, establishes sound transmission standards for interior walls, partitions, and floor/ceiling assemblies. Specifically, Section 1207.4 establishes that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA DNL or CNEL (as set by the local General Plan) in any habitable room.

California Green Building Standards Code

The California Green Building Standards Code is Part 11 to the California Building Standards Code. Chapter 5, Nonresidential Mandatory Standards, includes the following standards related to noise:

- Section 5.507.4.1.1 sets forth that buildings exposed to a noise level of 65 dB Leq (1-hour) during any hour of operation shall have exterior wall and roof-ceiling assemblies exposed to the noise source

meeting a composting sound transmission class (STC) rating of at least 45 (or an outdoor indoor transmission class (OITC) of 35, with exterior windows of a minimum STC of 40.

- Section 5.507.4.2 sets forth that wall and roof assemblies for buildings exposed to a 65 dBA Leq pursuant to Section 5.507.4.1.1, shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed 50 dBA Leq in occupied areas during any hour of operation. This requirement shall be documented by preparing an acoustical analysis documenting interior sound levels prepared by personnel approved by the architect or engineer of record.

Caltrans

The California Department of Transportation's (Caltrans) *Transportation and Construction Vibration Guidance Manual* provides a summary of vibration criteria that have been reported by researchers, organizations, and governmental agencies.[39] Chapters Six and Seven of this manual summarize vibration detection and annoyance criteria from various agencies and provide Caltrans' recommended guidelines and thresholds for evaluating potential vibration impacts on buildings and humans from transportation and construction projects. These thresholds are summarized in Table 22 and Table 23.

Table 22
Caltrans' Vibration Threshold Criteria for Building Damage

Structural Integrity	Maximum PPV (in/sec)	
	Transient	Continuous
Extremely fragile buildings, ruins, monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50
Source: Caltrans 2013 Note: PPV = peak particle velocity		

Table 23
Caltrans' Vibration Threshold Criteria for Human Response

Human Response	Maximum PPV (in/sec)	
	Transient	Continuous
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40
Source: Caltrans 2013 Note: PPV = peak particle velocity		

City of San Bernardino General Plan

Figure N-1 of the City's General Plan presents the City's land use compatibility chart for community noise levels and establishes 70 DNL or CNEL as the normally acceptable noise limit for industrial and manufacturing land uses. The CNEL metric includes a 5 dB evening penalty and is considered a more conservative noise exposure metric. Therefore, for the purposes of this IS analysis, 70 CNEL is considered the normally acceptable noise exposure limit for industrial land uses.

The City's General Plan also contains a number of goals and policies pertaining to noise. Relevant goals and policies include:

- Goal 14.1 Ensure that residents are protected from excessive noise through careful land planning.
    - Policy 14.1.2 Require that automobile and truck access to commercial properties abutting residential parcels be located at the maximum practical distance from the residential parcel.
    - Policy 14.1.3 Require that all parking for commercial uses abutting residential areas be enclosed within a structure, buffered by walls, and/or limited hours of operation.
    - Policy 14.1.4 Prohibit the development of new or expansion of existing industrial, commercial, or other uses that generate noise impacts on housing, schools, health care facilities or other sensitive uses above a Ldn of 65 dB(A).
- Goal 14.2 Encourage the reduction of noise from transportation related noise sources such as motor vehicles, aircraft operations, and railroad movements.
    - Policy 14.2.3: Require that development that increases the ambient noise level adjacent to noise-sensitive land uses provide appropriate mitigation measures.
- Goal 14.3 Protect residents from the negative effects of "spill over" or nuisance noise.
    - Policy 14.3.1 Require that construction activities adjacent to residential units be limited as necessary to prevent adverse noise impacts.
    - Policy 14.3.2 Require that construction activities employ feasible and practical techniques that minimize the noise impacts on adjacent uses.
    - Policy 14.3.5 Require that the hours of truck deliveries to commercial properties abutting residential uses be limited unless there is no feasible alternative or there are overriding transportation benefits by scheduling deliveries at another hour.

City of San Bernardino Municipal Code

Municipal Code Section 8.54, Noise Control, establishes various regulations for community-wide noise sources.

- Section 8.54.060, Exemptions, exempts certain activities and noise from the Municipal Code's noise control provisions. Specifically, Section 8.54.060 B exempts noises that are "an accompaniment and effect of a lawful business, commercial, or industrial enterprise carried on in an area zoned for that purpose, except where there is evidence that such noise is a nuisance and that such a nuisance is a result of the employment of unnecessary and injurious methods of operation."
- Section 8.54.070, Disturbances from Construction Activity, sets forth that no person shall be engaged or employed, or cause any other person to be engaged or employed, in any work of construction, erection, alteration, repair, addition, movement, demolition, or improvement to any building or structure except within the hours of 7 AM and 8 PM.

City of San Bernardino Development Code

The City's Development Code promotes the public health, safety, general welfare and preserves and enhances the City by providing regulations to ensure an appropriate mix of land uses in an orderly manner.

- Section III-19.20.030-15, Noise, sets forth that no loudspeaker, bells, gongs, buzzers, mechanical equipment or other sounds, attention-attracting, or communication device associated with any use shall be discernible beyond any boundary line of the parcel, except fire protection devices, burglar alarms and church bells. In addition, Section III-19.20.030-15 A establishes that in residential areas, no exterior noise level shall exceed 65 dBA and no interior noise level shall exceed 45 dBA.
- Section III-19.20.030-28, Vibration, sets forth that no vibration associated with any use shall be permitted which is discernible beyond the boundary line of the property.

XIII a) **Less than Significant Impact.** As discussed in Section XII.d below, construction noise would be noticeable since construction noise would be higher than the ambient noise environment at and near the site; however,

the City's municipal code does not set specific noise level standards for construction noise. Such noise is considered exempt so long as the construction activity occurs between the hours of 7 AM and 8 PM (Municipal Code Section 8.54.070). Therefore, exposure of persons to noise levels in excess of local standards will be less than significant.

The development of the proposed Inland Center Warehouse Project would result in a new industrial land use development within the City that would generate operational noise from mobile (e.g., vehicles and trucks traveling and idling and on-site) and stationary (e.g., heating, ventilation, and air conditioning (HVAC) equipment) sources of noise. The following analysis evaluates: 1) If the Project would be compatible with existing site noise levels; and 2) If the Project would generate noise levels that could exceed applicable City standards. As described in more detail below, the Project would expose people to or generate noise levels that exceed the City's standard of 65 dBA Leq for residential properties.

The Project's potential to generate increases in traffic noise levels and expose people working in the area to airport-related noise hazards are addressed in Section XII d) and Section 12 e)-f) below, respectively.

Exposure to Noise Levels that Exceed Standards

The Project would be located on lands designated and zoned for industrial land uses. Pursuant to the City's General Plan, the normally acceptable noise exposure limit for industrial land uses is 70 CNEL. Based on the ambient noise monitoring conducted for the Project (see Table 21) and the future roadway noise contours contained in General Plan Figure N-2 (60 to 65 CNEL), the proposed light industrial project is considered compatible with the existing noise environment. Therefore, the Project would not expose people working at the site to incompatible noise levels. This impact is considered less than significant.

Generation of Noise Levels that Exceed Standards

The Project would consist of a light industrial/warehouse building that would front Inland Center Drive. The proposed U-shaped building would be located in the center of the approximately 5.25-acre property. The building would contain 14 truck docks; these docks would be recessed from the font façade of the building (i.e. located within the "U" of the U-shaped building) and would thus be fully shielded from the properties that adjoin the Project site to the north (South Bay Foundry, Inc.), south (Crestview Mobile Park), and east (single-family residences that front Valley View Drive). A perimeter parking area for employees (with access road) would surround the building and site on the north, south, and east. An 8-foot high concrete screen wall would be installed along the site's northern, southern, and eastern boundaries.

The site would be accessed via two driveways off of Inland Center Drive. According to the TIA prepared for the Project (see Appendix F), all project truck traffic (100%) and 85% of the Project's passenger vehicle traffic would enter the site via the southern driveway; 75% of the Project's truck traffic and 30% of the Project's passenger vehicle traffic would exit the site via the southern driveway.

Although specific equipment types are currently not known, the proposed buildings would generate noise from on-site mobile and stationary noise sources, which are described in detail further below.

Project Noise Sources

The Project's on-site noise sources would include:

- Truck travel down the site driveway and into the loading dock area, truck maneuvering into loading docks (with a back-up alarm), and other miscellaneous truck noise sources such as engine start-up and revving, a cab door closing, and release of compressed air from truck brake systems. For the purposes of this analysis:

- All trucks accessing the Project were presumed to be no larger than full-sized (60 feet in length), heavy-duty tractor trailers
- On-site truck travel was presumed to occur at a speed of 15 miles per hour (mph)
- On-site truck idling was presumed to occur for a total of 15 minutes per loading/unloading operation

- Automobile travel along each building's perimeter road/fire lane, automobile parking, and other miscellaneous automobile noise sources such as doors closing and engine start-up and revving. Similar to trucks, automobile travel was presumed to occur at low speeds (15 mph).

- Rooftop-mounted HVAC units are presumed to be rated at 5 tons and generally located in the center of the office portions of the proposed building industrial building. Each unit would be fully concealed behind a parapet or enclosure that would reduce potential HVAC unit noise levels.

The Project's potential mobile noise sources would not operate continuously. Once parked and engines shut off, noise would cease to be generated. The average, hourly noise level associated with variable (i.e., non-steady) noise source operations and corresponding noise levels may be calculated using Equation 2 as follows[40]:

Equation 2

$$Hourly\ Leq = 10 * Log\ (P_h * 10^{(L_p/10)})$$

Where:

P_h = Percentage or fraction of hour the noise is generated

L_p = The noise level generated during the partial hour (P_h)

Reference and potential hourly average noise levels associated with the Project's noise sources is summarized in Table 24. All reference noise levels are presented at a distance of 3 feet.

Table 24
Project Noise Source – Reference and Hourly Leq Noise Levels

Noise Source	Reference dBA(A)	Duration(B)	Hourly Leq(C)
Automobile Trip			
Low speed travel (15 mph)/parking	*55*	*60 seconds*	*37.2*
Door closing	*95*	*1 second*	*59.4*
Engine start and revving	*95*	*5 seconds*	*66.4*
Total Combined Noise Level			*67.2*
Truck Delivery			
Low speed travel (15 mph)	*90*	*60 seconds*	*72.2*
Dock maneuvering (w/ back-up alarm)	*100*	*60 seconds*	*82.2*
Air brake release	*100*	*3 seconds*	*69.2*
Main engine idling	*80*	*900 seconds*	*74.0*
Door closing	*95*	*1 second*	*59.4*
Engine start and revving	*100*	*10 seconds*	*74.4*
Total Combined Noise Level			*83.9*
HVAC Unit			
Operation (5 Ton)	*88*	*1,188 seconds*	*83.2(D)*

Source: Soundplan, V. 8.2.
(A) Reference dBA is based on a distance of 3 feet.
(B) Duration is used to estimate the percentage of time the noise is generated per Equation 1 (out of 3,600

Noise Source	Reference dBA(A)	Duration(B)	Hourly Leq(C)

seconds in an hour).
(C) Hourly Leq estimated using Equation 1.
(D) Estimate does not include attenuation provided by parapet wall.

Automobile travel and related noise is assumed to occur during the hours of 8 AM (shift change), 12 PM (lunch breaks), 5 PM (shift change), and 12 AM (shift change); minor amounts of activity would occur during other time periods, but the greatest amount of automobile travel, parking activities, engine start-ups would occur during periods of shift changes. Truck deliveries are assumed to occur evenly throughout the daytime and nighttime. This is considered a conservative (i.e., likely to overestimate noise) assumption since it is anticipated overall truck activity would be higher during the daytime than the nighttime. Since trucks and automobiles would travel to and maneuver into loading docks and parking areas, noise from travel and maneuvering is assumed to occur from the actual loading dock or parking space where the trip was presumed to conclude. This is also considered a conservative (i.e., likely to overestimate noise) assumption since some portion of the on-site travel would occur away from the loading dock/parking space.

HVAC equipment was presumed to operate for 20 minutes every hour of the day, which is considered a conservative (likely to overestimate noise) assumption since this level of operation would likely not occur (i.e., typical use involves daytime cooling operations during the summer and early morning/evening heating operations during the winter).

Table 24 above provides reference sound pressure levels associated with an individual on-site truck trip, vehicle trip, and HVAC unit. The total combined sound pressure level from multiple, identical sources of noise at a receiver location may be determined using Equation 3.[41]

Equation 3

$$SPL_{Total} = SPL_1 + 10 * Log\ (N)$$

Where:

SPL_1 = Sound pressure level of one source

N = Number of identical sources to be added

Predicted Noise Levels at Sensitive Receptor Locations

The Project's potential noise levels were estimated using the reference and calculated hourly Leq noise levels identified in Table 24 above, adjusted for distance per Equation 1 and the assumed amount of trucks parking, vehicles parking, etc. per Equation 3. In general, the estimated noise levels do not account for potential reflection or any atmospheric or ground absorption or attenuation due to the presence of predominantly paved surfaces between noise source and modeled receiver location (i.e., property line). Similarly, no adjustment for topography was considered for mobile sources since the property line would generally be at the same elevation as truck dock and parking areas.

- Automobile trip noise: Each on-site automobile trip would produce an average hourly noise level of approximately 67.2 dBA at a distance of 3 feet. The proposed parking area would surround the building, with the center of each space located approximately 40 feet from the Project property line. At this distance, each automobile trip would generate an average hourly noise level of 44.7. The combined noise level at the property line from 10 such trips occurring at the same time would be 54.7 dBA; the combined noise level from 40 such trips occurring at the same time would be 60.7 dBA. With the proposed 8-foot-tall solid concrete wall, these noise levels would be reduced by a

minimum of 15 dB (to levels below 46 dBA) and would not exceed the City's 65 dBA standard for residential properties.

- Truck trip noise: Each on-site truck trip would produce an average hourly noise level of approximately 83.9 dBA at a distance of 3 feet. Truck maneuvering and loading would occur in the center of the site, and would be recessed into the proposed U-shaped building. The U-shaped building would be approximately 37-feet high at the truck dock area and would shield truck loading and unloading noise sources (e.g., some maneuvering, idling, air brake release, door closings, engine starting, etc.) from properties on the north, south, and east of the Project site, but not to the west (across Inland Center Drive)[8]. The closest residential property line to the west is situated approximately 215 feet away from the center of the truck dock loading area (as measured from the front of the recessed loading area, where the front of the truck would be located). At this distance, each truck trip would generate an average hourly noise level of 45.8 dBA. Based on the TIA prepared for the Project, the maximum number of potential truck trips would be 15 trips during the AM peak hour. The combined noise level at the closest residential property line to the west of the Project would be 57.6 dBA, which is less than the City's 65 dBA standard for residential properties.

  Certain truck noise activities would not be shielded by the U-shaped building design. These include low-speed travel in to and out of project driveways and the loading area, as well as initial truck maneuvering within the loading area. These activities would not significantly impact the residential and commercial receptors located adjacent to the proposed north and south access driveways for the following reasons:

  - Low-speed truck travel would generate noise levels of approximately 72.2 dBA (Leq) and 90 dBA (Lmax) at a distance of 3 feet. Low-speed truck travel would, on average, occur approximately 40 feet from the Project property line. At this distance, low-speed truck travel noise would be approximately 49.7 dBA (Leq) and 67.5 (Lmax). The proposed 8-foot-tall, solid concrete wall would partially reduce truck noise; the proposed wall would be less effective for trucks than passenger cards because a truck's exhaust is typically situated approximately 12 feet above ground surface. Partial attenuation would occur from the wall's shielding of tire-road interaction, braking, and other near-ground noise contributing sources. This partial attenuation would reduce low speed truck travel noise to less than 49.7 dBA, which is less than City's 65 dBA standard for residential properties. Potential low-speed truck travel Lmax noise levels (67.5 dBA) would be consistent with existing Lmax levels at the site (76.8 to 78.7 dBA, see Table 21) and would not represent a significant change to the environment.
  - Truck maneuvering would generate noise levels of approximately 82.2 dBA (Leq) and 100 dBA (Lmax) at a distance of 3 feet. Low-speed truck travel would, on average, occur at least 160 feet from the Project property line. At this distance, truck maneuvering would be approximately 47.7 dBA (Leq) and 65.5 (Lmax). With the proposed 8-foot-tall, solid concrete wall truck maneuvering noise would be less than 47.7 dBA Leq and would not exceed the City's 65 dBA standard. Potential truck maneuvering Lmax noise levels (65.5 dBA) would be consistent with existing Lmax levels at the site (76.8 to 78.7 dBA, see Table 21) and would not represent a significant change to the environment.

- Potential HVAC equipment noise levels produce an average hourly noise level of approximately 83.2 dBA at a distance of 3 feet. These units would be located near the proposed buildings northwest and southwest corners, behind a parapet wall, at least 75 feet from any project property line. At this

[8] The depth of the recessed truck loading and unloading area is approximately 70 feet long. The legal length limit for California heavy-duty tractor-trailer combinations is 65 feet, although some interstate trucks may be closer to 70 feet in length if they contain an extended truck cab. For the purposes of this IS, nearly all trucks accessing the site are assumed to be 65 feet in length or less. Thus, the recessed truck docks would be shielded from and have no line of sight to properties on the north, south, and east of the building.

distance, HVAC units would generate a noise level of approximately 55.2 dBA Leq, which is less than the City's 65 dBA standard for residential properties.

As described above, none of the Project's noise sources would individually exceed the City's noise standard of 65 dBA for residential properties; however, adjacent properties to the north (South Bay Foundry, Inc.) and south (Crestview Mobile Park) of the site may experience combined noise levels from one or more individual project noise sources. When combined, the Project's potential automobile noise levels (46 dBA), low speed truck trip noise levels (49.7 dBA), truck maneuvering noise levels (47.7 dBA), and potential HVAC system noise levels (55.2 dBA Leq) would yield a total combined noise level of 57.2 dBA Leq, which is below the City's 65 dBA noise standard for residential properties. Impact with respect to exceedance of applicable standards would be less than significant.

XIII b) **Less than Significant Impact.** Vibration is the movement of particles within a medium or object such as the ground or a building. Vibration may be caused by natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or humans (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources are usually characterized as continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency; however, unlike airborne sound, there is no standard way of measuring and reporting amplitude. Vibration amplitudes can be expressed in terms of velocity (inches per second) or discussed in dB units in order to compress the range of numbers required to describe vibration[9]. Vibration impacts to buildings are usually discussed in terms of peak particle velocity (PPV) in inches per second (in/sec). PPV represents the maximum instantaneous positive or negative peak of a vibration signal and is most appropriate for evaluating the potential for building damage. Vibration can impact people, structures, and sensitive equipment. The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). [42],[43]

The potential for groundborne vibration is typically greatest when vibratory or large equipment such as rollers, impact drivers, or bulldozers are in operation. For the Project, the largest earthmoving equipment would primarily operate during site preparation, grading, building construction, and paving work. This equipment would, at worst-case and very limited period of times, operate adjacent to the site's property lines and within approximately 15 feet of the mobile homes in the Crestview Mobile Park, within 25 feet of single family residences on Valley View Drive, and approximately 130 feet from the industrial building to the north of the site (South Bay Foundry, Inc.); however, most site work including all building construction activities would occur at least 50 feet from project property lines. Table 25 lists the typical vibration levels generated by the type of heavy-duty construction equipment most likely to be used during project construction, as well as the estimated vibration levels at nearby sensitive receptors, including the residences immediately south and east of the Project site.

[9] As with airborne sound, the groundborne velocity can also be expressed in decibel notation as velocity decibels, or dBV (FTA, 2006). The vibration of floors and walls may cause perceptible vibration, rattling of items such as windows or dishes on shelves, or a low-frequency rumble noise, referred to as groundborne noise. This analysis uses PPV to describe vibration effects.

Table 25
Estimated Project Construction Groundborne Vibration Levels

Equipment	Peak Particle Velocity[A] (Inches/Second) at Distance				
	15 Feet[C]	25 Feet	50 Feet	100 Feet	200 Feet
Large Bulldozer	0.156	0.089	0.042	0.019	0.009
Small Bulldozer	0.053	0.003	0.014	0.007	0.003
Loaded Truck	0.133	0.076	0.035	0.017	0.008
Jackhammer	0.061	0.035	0.016	0.008	0.004

Sources: Caltrans 2013 and FTA 2006.
(A) Estimated PPV calculated as: PPV(D)=PPV(ref*(25/D^1.3 where PPV(D)= Estimated PPV at distance; PPVref= Reference PPV at 25 ft; D= Distance from equipment to receiver; and n= ground attenuation rate (1.3 for competent sands, sandy clays, silty clays, and silts).
(B) Estimated Lv calculated as: Lv(D)=Lv(25 feet)-30Log(D/25) where Lv(D)= estimated velocity level in decibels at distance, Lv(25 feet)= RMS velocity amplitude at 25 f; and D= distance from equipment to receiver.

As shown in Table 25, at their closest, presuming work occurs on the property line, construction activities could occur within approximately 15 feet of the adjacent mobile homes to the south of the property and 25 feet of the adjacent residences to the east of the property. At these distance, a large bulldozer would generate a ground vibration level of 0.156 PPV and 0.089 PPM, which are below Caltrans' vibration threshold criteria for damage to older residential structures 0.50 PPV and, therefore, would not result in building damage. In addition, levels of vibration produced by construction equipment are evaluated against Caltrans' vibration threshold criteria for human response. The ground vibration levels of 0.156 and 0.089 PPV generated by a large bulldozer at 15 and 25 feet, respectively, would exceed Caltrans' non-continuous vibration detection threshold (0.035 PPV) for "barely perceptible" but not the threshold (0.24) for distinctly perceptible. This impact is considered less than significant because it would be intermittent (occurring only a few hours each day when equipment was in operation), infrequent (equipment capable of generating the greatest vibration would operate a few weeks at most during site preparation, grading, and paving activities – see Table 2), and would not damage the adjacent residential structures. For these reasons, potential groundborne vibrations generated by the project are not considered excessive. This impact is considered less than significant.

XIII c) **Less than Significant Impact.** The development of the proposed Inland Center Warehouse Project would result in a new industrial land use development within the City that would generate noise from mobile (e.g., vehicles and trucks traveling and idling and on-site) and stationary (e.g., HVAC equipment) sources of noise. The following analysis evaluates if the Project's on- and off-site noise levels would result in a substantial, permanent increase ambient noise levels. As described in more detail below, the Project would not result in a substantial, permanent increase in ambient noise levels.

Potential Increases in Ambient Noise Level from On-Site Noise Sources

As shown in Appendix E, the measured, average hourly noise level at the site ranged from 64.4 dBA Leq near Inland Center Drive to approximately 55.6 dBA Leq at the property line between the Project site and the single family residences on Valley View drive. In addition, as presented under discussion III a) above, the Project's total combined average hourly noise level at the property lines to the north and south of Project site would be approximately 57.2 dBA Leq; the Project's average hourly noise level at its east property line would be driven by automobile parking activities and would be less than 46 dBA Leq.

Based on the estimated project noise levels and the corresponding measured, ambient noise level, the Project would result in a 0.5 dB increase in ambient noise levels at the eastern property line shared with residences on Valley View Drive and a 0.8 dBA increase in ambient noise levels at the north and south property lines shared with the South Bay Foundry, Inc. and the Crestview Mobile Park. A 1 dB change in noise levels is generally

not discernible to most human beings. These increases, therefore, would not constitute a substantial, permanent change to ambient noise levels.

Potential Increases in Ambient Noise Level from Off-Site Project Traffic

The Project would generate traffic that would be distributed onto the local roadway system and potentially increase noise levels along travel routes. Caltrans considers a doubling of total traffic volume to result in a three dBA increase in traffic-related noise levels. [44] If the Project would not result in a doubling of traffic volumes on the local roadway system, it would not result in a substantial permanent increase in traffic-related noise levels.

The TIA prepared for the Project identifies the Project would result in a net increase in trip generation equal to 508 total passenger car and truck trips, or 675 total trips in terms of passenger car equivalents (RK Engineering, Inc. 2018, Appendix F). Passenger car equivalents is a metric used to show equivalent impact of a truck on the roadway system in terms of the typical automobile, since trucks generally occupy a space equal to two or more vehicles. According to the TIA, 14.1% of the Project traffic (95 PCEs) would occur during the AM peak hour, 12.6% of project traffic would occur during the PM peak hour (85 PCEs), and (assuming an even distribution) 3% of project traffic would occur during all other hours (22.5 PCEs). In addition, the TIA prepared for the Project identifies that project-related traffic would be concentrated on Inland Center Drive, the primary road used to access the site, while other roads would receive much less project traffic (typically less than 10% of total traffic). Table 26 and Table 27 identify the increases in traffic levels attributable to the Project under Year 2020 and Year 2040 conditions, based on the trip distribution assumptions contained in the TIA.

Table 26
Inland Center Warehouse Project Net Change in ADT (Year 2020)

Road	Segment	Year 2020 No Project Traffic Volume	Year 2020 Plus Project Traffic Volume	Percent Change
AM Peak Hour (Without Related Projects)				
Inland Center Drive	Northeast of I Street	1,194	1266	6.0%
Inland Center Drive	Southwest of I Street	603	680	12.8%
PM Peak Hour (Without Related Projects)				
Inland Center Drive	Northeast of I Street	1,474	1,539	4.4%
Inland Center Drive	Southwest of I Street	965	1,017	5.4%
AM Peak Hour (With Related Projects)				
Inland Center Drive	Northeast of I Street	2,478	2,551	2.9%
Inland Center Drive	Southwest of I Street	1,27	1,605	5.1%
PM Peak Hour (Without Related Projects)				
Inland Center Drive	Northeast of I Street	2,725	2,790	2.4%
Inland Center Drive	Southwest of I Street	1,865	1,935	3.8%
Source: Source: RK Engineering, Inc. 2018, modified by MIG				

Table 27
Inland Center Warehouse Project Net Change in ADT (Year 2040)

Road	Segment	Year 2040 No Project Traffic Volume	Year 2040 Plus Project Traffic Volume	Percent Change
AM Peak Hour (Without Related Projects)				
Inland Center Drive	Northeast of I Street	2,884	2,956	2.5%
Inland Center Drive	Southwest of I Street	1,760	1,838	4.4%
PM Peak Hour (Without Related Projects)				
Inland Center Drive	Northeast of I Street	3,136	3,200	2.0%
Inland Center Drive	Southwest of I Street	2,146	2,215	3.2%
Source: RK Engineering, Inc. 2018, modified by MIG				

As shown in Table 26 and Table 27, the Project could result in up to a 12.8% increase in traffic volumes on Inland Center Drive. Since the Project would not double traffic volumes on roadways in the Project vicinity, traffic noise would not increase by 3 dBA. A noise level of less than 3 dBA is typically not perceptible to the human ear in an outdoor environment. Project traffic, therefore, would not result in a substantial, permanent increase in noise levels along the roadways used to access the Project site.

XIII d) **Less than Significant Impact.** The Project would require the use of heavy-duty, off-road construction equipment during construction activities. Since project specific information is not available at this time, potential construction-related noise impacts can only be evaluated based on the typical construction activities associated with industrial development. Project construction activities would include: staging, site preparation (e.g., land clearing), grading, utility trenching, foundation work (e.g., excavation, pouring concrete pads), material deliveries, building construction (e.g., framing, concrete pouring, welding), paving, coating application, and site finishing work. In general, these activities would involve the use of worker vehicles, delivery trucks, dump trucks, and heavy-duty construction equipment such as (but not limited to) backhoes, tractors, loaders, graders, excavators, rollers, cranes, material lifts, generators, and air compressors. Table 28 presents the noise levels associated with typical types of construction equipment that could be used to develop the Project. [45,46]

Table 28
Typical Construction Equipment Noise Levels (dBA)

Equipment	Reference Noise Level at 50 Feet (Lmax)(A)	Percent Usage Factor(B)	Predicted Noise Levels (Leq) at Distance(C)					
			25 Feet	50 Feet	100 Feet	150 Feet	250 Feet	350 Feet
Bulldozer	85	40	82	81	75	71	67	64
Backhoe	80	40	87	76	70	66	62	59
Compact Roller	80	20	79	73	67	63	59	56
Concrete Mixer	85	40	87	81	75	71	67	64
Crane	85	16	83	77	71	67	63	60
Excavator	85	40	87	81	75	71	67	64
Generator	82	50	85	79	73	69	65	62
Pneumatic tools	85	50	88	82	76	72	68	65
Scraper	85	40	87	82	76	72	68	64
Delivery Truck	85	40	87	81	75	71	67	64
Vibratory Roller	80	20	79	73	67	63	59	56

Sources: Caltrans, 2013 and FHWA, 2010.
(A) L_{max} noise levels based on manufacturer's specifications.
(B) Usage factor refers to the amount of time the equipment produces noise over the time period.
(C) Estimate does not account for any atmospheric or ground attenuation factors. Calculated noise levels based on Caltrans, 2013: L_{eq} (hourly) = L_{max} at 50 feet – 20log (D/50) + 10log (UF), where: L_{max} =

Equipment	Reference Noise Level at 50 Feet (Lmax)(A)	Percent Usage Factor(B)	Predicted Noise Levels (Leq) at Distance(C)					
			25 Feet	50 Feet	100 Feet	150 Feet	250 Feet	350 Feet
reference L_{max} from manufacturer or other source; D = distance of interest; UF = usage fraction or fraction of time period of interest equipment is in use.								

With regard to construction noise, site preparation and grading phases typically result in the highest temporary noise levels due to the use of heavy-duty equipment such as dozers, excavators, graders, loaders, scrapers, and trucks. As shown in

Table 28, the worst-case Leq and Lmax noise levels associated with the operation of pneumatic tools and scrapers are predicted to be approximately 82 dBA, at a distance of 50 feet from the equipment operating area. At an active construction site, it is not uncommon for two or more pieces of construction equipment to operate at the same time and in close proximity. The concurrent operation of two or more pieces of construction equipment would result in noise levels of approximately 85 to 88 dBA at a distance of 50 feet from equipment operating areas[10]. These maximum noise levels would occur for a short period time; as site preparation (10 days) and grading (20 days) is completed and building construction begins, work activities would occur further from property lines and generate lower construction noise levels.

Construction noise would be noticeable since construction noise would be higher than the ambient noise environment at and near the site; however, the City's municipal code does not set specific noise level standards for construction noise. Such noise is considered exempt so long as the construction activity occurs between the hours of 7 AM and 8 PM (Municipal Code Section 8.54.070). Therefore, temporary construction noise levels are considered less than significant.

XIII e-f) **No Impact.** The closest airport to the site is San Bernardino International Airport (SBIA), located 2.5 miles east of the Project site. According to Figure LU-4 of the City's General Plan, the Project is not located within any planning or other area of influence associated with SBIA. In addition, there are no private air strips located within two miles of the Project. The Project, therefore, would not expose people working in the Project area to excessive airport-related noise levels.

Cumulative Impacts

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to buildout of the Project and other projects in the vicinity. A project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level threshold. The combined effect compares the "cumulative with Project" condition to existing conditions. Although there may be a significant noise increase due to the Project in combination with other related projects (combined effects), it must also be demonstrated that the Project has an incremental effect. In other words, a significant portion of the noise increase must be due to the Project. The following criteria were utilized to evaluate the combined effect of the cumulative noise increase.

- Combined Effect. The cumulative with Project noise level "Future With Project" would cause a significant cumulative impact if a 3.0 dB increase over existing conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use.
- Incremental Effect. The "Future With Project" causes a 1.0 dBA increase in noise over the "Future Without Project" noise level.

[10] As shown in Table 28, a single bulldozer provides a sound level of 81 dBA Leq at a distance of 50 feet; when two identical sound levels are combined, the noise level increases to 84 dBA Leq and when three identical sound levels are combined, the noise level increases to 86 dBA Leq. These estimates assume no shielding or other noise control measures are in place at or near the work areas.

- A significant impact would result only if both the combined and incremental effects criteria have been exceeded.

As indicated in analysis of noise impacts above, none of the roadway segments would exceed both the Combined Effect and Incremental Effect criteria. Therefore, the Project in combination with cumulative background traffic noise levels would result in a less than significant cumulative impact.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Remove existing housing and displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Discussion:

XIV a) **Less than Significant Impact**. The Project site is designated for light industrial uses, has been used for light industrial uses in the recent past, and is currently used for industrial storage. According to the SCAG 2016 RTP/SCS growth estimates, the City of San Bernardino is anticipated to see employment in the City increase from 88,900 jobs in 2012 to 128,900 jobs in 2040, an increase of 40,000 jobs. According to the Project applicant, the warehouse is not anticipated to require more than 100 employees during operation. As such, the Project would be consistent with the SCAG growth projections for the City, which are based on buildout of the City's General Plan, and will not induce substantial population growth in the area either directly or indirectly. Any population growth as a result of the Project would be offset by areas designated for housing to meet housing demands. Finally, because the Project is consistent with anticipated buildout of the City's General Plan, these impacts are not considered significant.

XIV b) **Less than Significant Impact**. No housing would be displaced as a result of project development. The Project does not provide any housing and is not located in an undeveloped area that would require a major extension of infrastructure, other than the drainage connection to the Lytle Creek Channel. Less than significant impacts will occur.

Cumulative Impacts

The Project would not result in direct or indirect permanent or temporary impacts related to population or housing. Therefore, the Project would not result in incremental effects to population and housing that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable future projects. As a result, no cumulative impacts related to population and housing would occur.

XV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection, including medical aid?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks or other recreational facilities?	☐	☐	☒	☐
Other governmental services?	☐	☐	☐	☒

Discussion:

XV a) **Fire Protection, Less than Significant Impact.** The Project is located within the service area of the City of San Bernardino Fire Department. Emergency medical care, hazardous materials teams and resources, aircraft rescue and firefighting services, and fire safety inspection for businesses are provided by the department. The department operates from twelve stations and has mutual joint response agreements with the cities of Loma Linda, Colton, Rialto, Central Valley Fire District, and the U.S. Forest Service. Response times vary across the City, but the adopted standard response time by the City is five minutes or less for 90 percent of the emergency calls for service. The nearest fire station to the Project site is Fire Station No. 221 located at 200 East 3rd Street, approximately 1.95 miles northeast of the Project site.

The Project includes construction of a warehouse and associated parking and landscaping improvements. Any future tenants of the warehouses that would be storing and using hazardous materials would be required to adhere to local and state ordinances pertaining to the handling and storage of such materials. The Project is anticipated to create an incremental increase in demand for fire services. Development of the Project would include adequate fire access. In addition, Development Impact Fees that are collected at the time of building permit issuance for approved projects will offset incremental impacts of development on demand for services. Impacts related to expansion of fire protection services will be less than significant.

Police Protection, Less than Significant Impact. The Project is located within the service area of the City of San Bernardino Police Department, which divides the City into four districts. The Project site is also within the jurisdiction of the San Bernardino county Sheriff. The nearest San Bernardino Police Station is located at 710 North D Street, approximately 2.10 miles northeast of the Project site. The nearest San Bernardino County Sheriff station is located at 200 South Lena Road, approximately 2.10 miles northeast of the Project site. All emergency calls and requests for service from the Project site will be dispatched from the main police station at 710 North D Street. Response times of police patrol units average 4.5 minutes for 911

Emergency calls; 7.9 minutes for 911 Priority One (Urgent) calls; and 19.2 minutes for Priority Two (As Soon as Possible) calls.

Development of the Project site will generate an incremental increase in the need for police protection in the Project area. However, this incremental increase is anticipated with build out of the City's General Plan. The Police Department reviews its needs on a yearly basis and adjusts service levels as needed to maintain an adequate level of public protection. Therefore, a less than significant impact to police services will occur.

Schools, Less than Significant Impact. The Project includes construction of a warehouse and associated parking and landscape improvements. The Project will not result in any direct population growth, or associated growth in students, within the San Bernardino City Unified School District. However, occupation of the Project could have the potential to increase demand on local school services by bringing more employment opportunities into the area. As most of the employees that would staff the warehouses in the future could be reasonably expected to come from the local population, any increase in staffing levels in the future will increase demand on schools. However, payment of development impact fees required under State law would offset the cost of increased demand on school district facilities in the future. Project impacts on school facilities would be less than significant.

Parks and Recreation, Less than Significant Impact. Development of the Project could have the potential to impact demand on parks and recreation facilities if it induced substantial population growth in the vicinity. However, staffing of the warehouse is expected to come from the local population. As such, the proposed light industrial development will not result in any direct population growth that would require expansion or acquisition of recreational facilities. Less than significant impacts will occur.

Other Governmental Facilities, No Impact. Development of the Project would not result directly in any population growth that would require expansion of any other public services such as libraries or hospitals. No impact will occur.

Cumulative Impacts
The Project would not result in a significant impact to any public services or facilities. Therefore, the Project would not result in incremental effects to public services or facilities that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable future projects. The Project would not result in cumulatively considerable impacts to public services or facilities.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Discussion:

XVI a, b) **Less than Significant Impact**. The Project includes construction of a 101,464-square foot warehouse. Employees of the warehouse would be drawn from existing residents within or near the City of San Bernardino. As such, the Project itself would not create demand for additional parks, or other recreational activities as the workforce will be drawn from the existing population of the area and from additional housing planned by the City to accommodate anticipated buildout of the City's General Plan. Impacts would be less than significant impact.

Cumulative Impacts

The Project would not result in an increased use of recreational facilities or require construction or expansion of existing recreational facilities. Therefore, no cumulative impacts on recreational facilities would result from Project implementation.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersection, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Discussion:

A traffic study was conducted for the Project by RK Engineering Group, Inc (See Appendix F, Traffic Analysis). The TIA prepared by RK Engineering analyzed a previous iteration of the Project that included 102,375 square feet of building area, 22,984 square feet of landscaping, 14 dock doors, and 105 standard parking stalls. The final proposed Project includes 101,464 total square feet of building area, 34,275 square feet of landscaping, 11 dock doors, and 89 standard parking stalls. Given the decrease in building square footage, dock doors, and parking, and the negligible increase in landscaping, the modeling analyzed a more impact-intensive Project than the final proposed Project. Similarly, the difference in building area would not change the average daily trip rates and volumes.[47]

XVII a) **Less than Significant with Mitigation Incorporated.** Operation of the Project could reduce the performance of the circulation system if the Project-related increase in vehicle trips or any proposed improvements decrease the Level of Service (LOS) on existing streets when the existing LOS is C or worse.[48] In addition, impacts could occur if project improvements reduce the performance of any mode of transportation including mass transit and non-motorized travel.

The Traffic Study analyzes the weekday peak hour levels of service (LOS) at eight study area intersections for the following scenarios:

1. Existing Conditions (2018)
2. Project Opening Year (2020):
    a. Without Related Projects, Without Project Conditions;
    b. Without Related Projects, With Project Conditions;
    c. With Related Projects, Without Project Conditions;
    d. With Related Projects, With Project Conditions;
3. Long Range Year (2040) Conditions (With and Without Project Conditions)

Study Area

Inland Center Drive is a northeast-southwest arterial that provides access to both residential and commercial (retail) uses within the City of San Bernardino. Inland Center Drive is a four-lane Major Arterial per the City's General Plan, which provides connection to the I-215 freeway as well as the Interstate 10 (I-10) freeway (via North 10th Street in Colton). There are commercial, light industrial, residential, and vacant uses on both the north and south sides of Inland Center Drive. The existing traffic along Inland Center Drive includes traffic from residences in the vicinity, as well as commercial traffic from the Inland Center Mall located adjacent to the Project site on the opposite side of I-215, and traffic related to industrial uses in the area. The following study area intersections were analyzed:

1. Mt. Vernon Avenue/ Colton Avenue
2. Fairview Avenue/ Colton Avenue-Inland Center Drive
3. Project Driveway 1/ Inland Center Drive
4. Project Driveway 2/ Inland Center Drive
5. 'I' Street/ Inland Center Drive
6. Scenic Drive/ Inland Center Drive
7. I-215 Southbound Ramps/ Inland Center Drive
8. I-215 Northbound Ramps/ Inland Center Drive

Methodology

The criteria used to evaluate LOS conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted. Uninterrupted flow is generally found only on limited access (freeway) facilities in urban areas. Levels of service are based on definitions found in Table 3-1 of the Caltrans Highway Capacity Manual (HCM). The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control.

Level of service is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The levels of service determined in the traffic study were calculated using the HCM methodology. The relationship of delay to LOS is demonstrated in Table 29, LOS Significance Thresholds.

Table 29
LOS Significance Thresholds

LOS	Intersection LOS Criteria	
	Signalized Delay (seconds)	Unsignalized Delay (seconds)
A	0.00 – 10.00	0.00 – 10.00
B	10.01 – 20.00	10.01 – 15.00
C	20.01 – 35.00	15.01 – 25.00
D	35.01 – 55.00	25.01 – 35.00
E	55.01 – 80.00	35.01 – 50.00
F	>80.01	>50.01
LOS = level of service Source: Caltrans Highway Capacity Manual		

Signalized intersections are considered deficient (LOS F) if the overall intersection critical volume-to-capacity (V/C) ratio equals to or exceeds 1.0, even if the level of service is defined by the delay value is below the defined LOS standard. All analysis scenarios utilized in the traffic study were done in accordance with the City of San Bernardino and County of San Bernardino Traffic Study Guidelines. Saturation flow rates of 1,800 vehicles per hour of green (vphg) for through and right turn lanes, 1,700 vehicles for single left turn lanes, and 1,600 vehicles per lane for dual left turn lanes have been assumed for Existing and Opening Year (2020) scenarios. Saturation flow rates of 1,900 vehicles per hour of green (vphg) for through and right turn lanes, 1,800 vehicles for single left turn lanes, and 1,700 vehicles per lane for dual left turn lanes have been assumed for Long Range Year (2040) scenarios. Existing conditions peak hour factors have been calculated based upon the traffic counts collected at the study area intersections. Existing peak hour factors have been used for Project Opening Year (2020). For Long Range Year (2040) conditions, peak hour factors have been adjusted to 0.95 to account for the more consistent flow of traffic expected as congestion increases.

Definition of Deficiency and Significant Impact

The following definitions of deficiencies and significant impacts have been developed in accordance with the City of San Bernardino Traffic Impact Study Guidelines and the County of San Bernardino CMP Traffic Impact Study Guidelines requirements

Deficiency

The definition of an intersection deficiency has been obtained from the County of San Bernardino CMP Traffic Impact Study Guidelines. The guidelines state that peak hour intersection operations of LOS D or better are generally acceptable during the peak hours in the region. Therefore, any intersection operating at LOS E or LOS F will be considered deficient.

Thresholds of Significance

The acceptable Level of Service (LOS) for intersections within the City of San Bernardino is LOS D or better. The City of San Bernardino Traffic Impact Study Guidelines state that the following criteria shall be used to determine if the addition of project traffic should be considered to have significant impacts and feasible measures must be identified to mitigate the impacts. According to the City of San Bernardino, the impact is considered significant for intersections if the Project related increase in the V/C ratio equals or exceeds the thresholds shown in Table 30, LOS Significant Impact Thresholds, below.

Table 30
LOS significant Impact Thresholds

Pre-Project LOS	Pre-Project V/C	Project V/C Increase
C	0.71 – 0.80	0.04 or more
D	0.81 – 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

Mitigation measures must be identified for intersections that show a significant project impact per the above thresholds and operate at LOS E or worse. The LOS with mitigation must be improved to LOS D or better for intersections. The City of San Bernardino Traffic Impact Study Guidelines do not contain any significant impact criteria for unsignalized intersections. Therefore, consistent with other recent traffic analyses prepared in the City, the traffic study used the following criterion to determine if the Project would result in significant traffic impacts at unsignalized study area intersections:

- For unsignalized intersections, the impact is considered significant if the Project related increase degrades the intersection operations to LOS E or worse and the Project adds traffic such that the intersection satisfies the Peak Hour Signal Warrant.

Existing Conditions

Existing conditions intersection level of service calculations for the study were based upon manual AM and PM peak hour turning movement counts taken in August 2018. The AM peak hour traffic volumes were determined by counting the two-hour period between 7:00 AM and 9:00 PM. Similarly, the PM peak hour traffic volumes were identified by counting the two-hour period between 4:00 PM and 6:00 PM. Due to the high level of truck trailer traffic in the area, truck axle classification factors were applied to the base existing traffic counts to account for the heavy trucks. Large trucks generally occupy more space on the roadway than a typical passenger vehicle. In order to show the equivalent impacts of the trucks at the study area intersections, an adjustment factor was used to convert truck traffic into passenger car equivalents (PCEs). The PCE factors used for this project are based on the City of San Bernardino standards and are as follows:

Vehicle Type	PCE Factor
Passenger Car	1.0
2 Axle Trucks	2.0
3 Axle Trucks	2.5
4+ Axle Trucks	3.0

As Table 31 (Existing (2018) Peak Hour Intersection LOS Summary) indicates, all study area intersections are currently operating at acceptable levels of service during the peak hours for Existing Conditions with the exception of Scenic Drive/Inland Center Drive, which is currently operating at a deficient LOS (LOS E or F). As shown in Section 5.0 of Traffic Analysis, the Scenic Drive/Inland Center Drive intersection currently satisfies the MUTCD peak hour signal warrant during the PM peak hour.

Table 31
Existing (2018) Peak Hour Intersection LOS Summary

	Intersection	Traffic Control[1,2]	AM Peak Hour			PM Peak hour		
			Delay (Seconds)	HCM LOS	V/C Ratio	Delay (Seconds)	HCM LOS	V/C Ratio
1	Mt. Vernon Avenue/ Colton Avenue	TS	13.1	B	0.295	18.2	B	0.446
2	Fairview Avenue/ Colton Avenue	TS	22.6	C	0.325	17.6	B	0.307
3	Project Driveway 1/ Inland Center Drive	CSS	--	--	--	--	--	--
4	Project Driveway 2/ Inland Center Drive	CSS	--	--	--	--	--	--
5	'I' Street/ Inland Center Drive[3]	TS	17.5	B	0.404	15.0	B	0.410
6	Scenic Drive/ Inland Center Drive	CSS	**271.3**	**F**	0.291	**312.1**	**F**	0.417
7	I-215 SB Ramps/ Inland Center Drive	TS	15.2	B	0.301	19.6	B	0.461
8	I-215 NB Ramps/ Inland Center Drive	TS	16.7	B	0.370	20.2	C	0.448

[1] Analysis Software: Traffix, Version 8.0. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] TS = Traffic Signal CSS = Cross-Street Stop
[3] It should be noted that the south leg of the intersection of 'I' Street at Inland Center Drive is not incorporated into the traffic signal operations. For analysis purposes, it is assumed the south leg is signal operated. Recommendations will be proposed for future conditions to modify the traffic signal to signalize the southern leg.

Public transit services in the study area are provided by OmniTrans. Currently, Routes 2 and 15 operate within the vicinity of the Project site. Part of the City of San Bernardino's General Plan is to provide a system of complete streets that accommodate safe and convenient access and travel for all users and to promote sustainable transportation throughout the community. The City's Bike Plan indicates there are two bikeway facilities located in close proximity to the Project site: Inland Center Drive (Class I Bikeway) and Mt. Vernon Avenue (Class II Bikeway). The pedestrian network in the study area consists of sidewalks and pedestrian crosswalks, with pedestrian crossing controls at signalized intersections.

Traffic Signal Warrant Analysis

The unsignalized study intersections were evaluated for signalization based on the peak hour warrants and procedures contained in the *California Manual on Uniform Traffic Control Devices* (MUTCD), 2014 Edition. Table 32 (MUTCD Peak Hour Signal Warrant Analysis Summary) summarizes the results of the MUTCD peak hour signal warrant analysis at the unsignalized study intersections for the analysis scenarios listed above. As shown in Table 32, the Project driveways are not expected to satisfy the MUTCD peak hour traffic signal warrants for the analysis scenarios evaluated as part of the Traffic Analysis. As also shown in Table 32, the Scenic Drive/Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Table 32
MUTCD Peak Hour Signal Warrant Analysis Summary

Analysis Scenario	Peak Hour	Signal Warrant Satisfied?		
		Project Driveway 1 at Inland Center Drive	Project Driveway 2 at Inland Center Drive	Scenic Drive at Inland Center Drive
Project Opening Year (2020) Without Related Projects Without Project Traffic	AM	No	No	No
	PM	No	No	**Yes**
Project Opening Year (2020) Without Related Projects With Project Traffic	AM	No	No	No
	PM	No	No	**Yes**
Project Opening Year (2020) With Related Projects Without Project Traffic	AM	No	No	**Yes**
	PM	No	No	**Yes**
Project Opening Year (2020) With Related Projects With Project Traffic	AM	No	No	**Yes**
	PM	No	No	**Yes**
Long Range Year (2040) Without Project Traffic	AM	No	No	**Yes**
	PM	No	No	**Yes**
Long Range Year (2040) With Project Traffic	AM	No	No	**Yes**
	PM	No	No	**Yes**
Source: RK Engineering, 2018.				

Project Traffic and Trip Generation

Traffic related to the Project was calculated in accordance with the following accepted procedural steps: trip generation, trip distribution, and trip assignment. This project is expected to attract a significant amount of heavy vehicle traffic due to the specific operational characteristics of the site. This would be mainly the hauling of freight by large multi-axle trucks. Large trucks generally occupy more space on the roadway; therefore, in order to show the equivalent impacts of the trucks at this site, the Project trip generation has been converted to passenger car equivalents (PCE). The *City of Fontana Truck Trip Generation Study for Light Industrial Uses, August 2003* was used to estimate the heavy vehicle mix for this project. The PCE factors used for this project are based on City of San Bernardino standards and are as follows:

Vehicle Type	PCE Factor	Vehicle Mix
Passenger Car	1.0	0.7860
2 Axle Trucks	2.0	0.0800
3 Axle Trucks	2.5	0.0390
4+ Axle Trucks	3.0	0.0950

As indicated in Table 33, Project Trip Generation with PCEs, the Project is estimated to generate 375 PCE-adjusted trip-ends per day, with 95 PCE-adjusted vehicles per hour during the peak AM hour and 85 PCE-adjusted vehicles per hour during the PM peak hour. Given that the Project is expected to generate a significant amount of heavy vehicle traffic, these totals were adjusted to convert truck traffic into passenger car equivalent, as described in the previous section.

Table 33
Project Trip Generation with PCEs

	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation									
	102.374	TSF	675	84	11	95	11	74	85
ADT = average daily traffic TSF = thousand square feet									

Future Traffic Conditions

This section of describes the development of future traffic volume forecasts, and presents the resulting traffic volumes that were used in the traffic operations analysis. Future traffic conditions were evaluated for Project Opening Year (2020) Without Related Projects; With and Without Project conditions, Project Opening Year (2020) With Related Projects; With and Without Project conditions, and Long Range Year (2035); With and Without Project conditions.

Related Developments

The City of San Bernardino provided RK Engineering with a list of related developments within the study area that were known at the time the traffic study was prepared. Table 34, Related Project Trip Generation, below shows the trip generation for the related projects, based on the known project descriptions.

Table 34
Related Projects Trip Generation

ID	Case No.	Jurisdiction	Land Use	Quant.	Units[1]	Peak Hour						ADT
						AM			PM			
						In	Out	Total	In	Out	Total	
1	CUP 14-13	San Bernardino	Quality Restaurant	6.365	TSF	4	1	5	33	16	49	534
2	CUP 16-17	San Bernardino	Convenience/Gas Station	24	VFP	337	337	674	276	276	552	5,532
			Automated Car Wash	3.800	TSF	--	--	--	27	27	54	540
3	CUP 16-20	San Bernardino	Quality Restaurant	3.508	TSF	2	1	3	18	9	27	294
4	CUP 16-23	San Bernardino	All Suites Hotel	106	Rooms	19	17	36	18	20	38	473
5	CUP 17-07	San Bernardino	Small Office Building	2.4	TSF	4	1	5	2	4	6	39
6	CUP 17-15	San Bernardino	Gas/Service Station	16	VFP	82	82	164	112	112	224	2,752
			Fast Food w/o Drive Thru	1.953	TSF	29	20	49	28	28	56	676
7	CUP 17-17	San Bernardino	Banquet Hall	3.614	TSF	--	--	--	103	103	206	206
8	CUP 17-23	San Bernardino	Hotel	98	Rooms	27	19	46	30	29	59	819
9	CUP 17-27	San Bernardino	Motel	44	Rooms	6	11	17	9	8	17	147
10	CUP 17-29	San Bernardino	Convenience/Gas Station	18	VFP	253	253	506	207	207	414	4,149
11	DP-D15-09	San Bernardino	General Light Industrial	154.560	TSF	95	13	108	13	85	98	767
12	DP-D15-12	San Bernardino	Single-Tenant Office Bldg.	337.000	TSF	534	66	600	86	490	576	3,791
13	DP-D15-13	San Bernardino	General Light Industrial	337.000	TSF	208	28	236	28	185	213	1,672
14	DP-D15-14	San Bernardino	General Light Industrial	127.327	TSF	78	11	89	10	70	80	632
15	DP-D16-22	San Bernardino	Warehouse	14.202	TSF	2	1	3	1	2	3	25
16	DP-D16-24	San Bernardino	General Light Industrial	476.632	TSF	294	40	334	39	261	300	2,364
17	DP-D16-26	San Bernardino	General Light Industrial	1,065.00	TSF	656	89	745	87	584	671	5,282
18	DP-D16-27	San Bernardino	General Light Industrial	43.953	TSF	44	7	51	8	42	50	428
19	DP-D17-02	San Bernardino	General Light Industrial	343.440	TSF	212	29	241	28	188	216	1,703
20	DP-D17-03	San Bernardino	General Light Industrial	197.500	TSF	122	17	139	16	108	124	980
21	DP-D17-05	San Bernardino	Motel	70	Rooms	10	17	27	14	12	26	235
22	DP-D18-05	San Bernardino	General Light Industrial	135.287	TSF	83	11	94	11	74	85	671
23	DP-D18-06	San Bernardino	General Light Industrial	3.215	TSF	2	0	2	0	2	2	16
24	DP-D18-08	San Bernardino	Warehouse	15.219	TSF	2	1	3	1	2	3	26
25	DP-P15-01	San Bernardino	Industrial Park	94.965	TSF	31	7	38	8	30	38	320
26	DP-P16-04	San Bernardino	Multi-Family Low-Rise	38	DU	4	13	17	13	8	21	278
27	DP-P17-02	San Bernardino	General Light Industrial	124.980	TSF	77	10	87	10	69	79	620
Cumulative Developments Total Trip Generation						**3,217**	**1,102**	**4,319**	**1,236**	**3,051**	**4,287**	**35,971**

[1] TSF = Thousand Square Feet
DU = Dwelling Units
VFP = Vehicle Fueling Position

Project Opening Year (2020) Conditions

The operations analysis for Project Opening Year (2020) conditions examined four (4) scenarios: Project Opening Year (2020) Without Related Projects and Without Project conditions; Project Opening Year (2020) Without Related Projects and With Project conditions; Project Opening Year (2020) With Related Projects and Without Project conditions; and Project Opening Year (2020) With Related Projects and With Project conditions. Each of these conditions is discussed in the remainder of this section.

Project Opening Year (2020) Without Related Projects and Without Project Conditions

Project Opening Year (2020) traffic volumes were based on traffic projections from the San Bernardino Transportation Analysis Model (SBTAM). As indicated in Table 35, Project Opening Year (2020) Without Related Projects and Without Project Traffic, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) Without Related Projects Without Project Conditions with the exception of the following study intersection which is forecast to continue to operate at a deficient LOS (LOS E or F):

- Scenic Drive/ Inland Center Drive (both AM and PM peak hours).

As shown in Section 5.0 of the Project Traffic Analysis, the Scenic Drive/Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Table 35
Project Opening Year (2020) Without Related Projects and Without Project Traffic

Intersection		Traffic Control[2]	AM Peak Hour			PM Peak Hour		
			Delay[1] (Seconds)	HCM LOS	V/C[2] Ratio	Delay[1] (Seconds)	HCM LOS	V/C[2] Ratio
1	Mt. Vernon Avenue/ Colton Avenue	TS	16.7	B	0.314	20.6	C	0.473
2	Fairview Avenue/ Colton Avenue	TS	22.0	C	0.344	18.4	B	0.326
3	Project Driveway 1/ Inland Center Drive	CSS	--	--	--	--	--	--
4	Project Driveway 2/ Inland Center Drive	CSS	--	--	--	--	--	--
5	'I' Street/ Inland Center Drive[3]	TS	17.0	B	0.429	14.4	B	0.436
6	Scenic Drive/ Inland Center Drive	CSS	**423.6**	**F**	0.308	**484.8**	**F**	0.442
7	I-215 SB Ramps/ Inland Center Drive	TS	27.4	C	0.320	27.6	C	0.489
8	I-215 NB Ramps/ Inland Center Drive	TS	23.3	C	0.392	28.0	C	0.475

[1] Analysis Software: Traffix, Version 8.0. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] TS = Traffic Signal CSS = Cross-Street Stop
[3] It should be noted that the south leg of the intersection of 'I' Street at Inland Center Drive is not incorporated into the traffic signal operations. For analysis purposes, it is assumed the south leg is signal operated. Recommendations will be proposed for future conditions to modify the traffic signal to signalize the southern leg.

Project Opening Year (2020) Without Related Projects and With Project Conditions

Project Opening Year (2020) Without Related Projects and With Project traffic volumes were calculated by adding the Project volumes to the Project Opening Year (2020) Without Related Projects and Without Project traffic volumes. As indicated in Table 36, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) Without Related Projects With Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Project Driveway 1/ Inland Center Drive (PM peak hour only); and
- Scenic Drive/ Inland Center Drive (both AM and PM peak hours).

However, based on agency-established thresholds of significance involving Volume to Capacity Ratio (V/C), the Project is forecast to result in a significant traffic impact only at the intersection of Scenic Drive and Inland Center Drive (PM peak hour only) for Opening Year (2020) Without Related Projects With Project Conditions. As shown in Table 36, Volume to Capacity Ratio impacts at the Project Driveway 1/ Inland Center Drive intersection would be less than significant. As previously discussed, the Scenic Drive/Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Because of this, Mitigation Measure TRAF-1 has been incorporated to reduce the Project traffic impacts at Scenic Drive/ Inland Center Drive to a level considered less than significant for Opening Year (2020) Without Related Projects With Project Traffic conditions. Mitigation Measure TRAF-1 requires the Project applicant to contribute fair share payments toward implementation of a traffic signal at the intersection of Scenic Drive and Inland Center Drive. As shown in Table 36, implementation of a traffic signal at this intersection would reduce impacts to less than significant.

However, it should be noted that the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay in this scenario. Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the intersection of I Street and Inland Center Drive and also the I-215 Ramps at Inland Center Drive is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location. As such, the final decision to require fair share contributions toward a traffic signal at this intersection will be made by the City Public Works Director and/or Traffic Engineer.

Table 36
Project Opening Year (2020) Without Related Projects and With Project Traffic

	Intersection	Traffic Control[2]	AM Peak Hour			PM Peak Hour			Change in V/C Ratio		Sig. Impact?	
			Delay[1] (Seconds)	HCM LOS	V/C[3] Ratio	Delay[1] (Seconds)	HCM LOS	V/C[3] Ratio	AM	PM	AM	PM
1	Mt. Vernon Avenue/ Colton Avenue	TS	17.1	B	0.319	21.1	C	0.479	0.005	0.006	NO	NO
2	Fairview Avenue/ Colton Avenue	TS	21.8	C	0.346	17.9	B	0.333	0.002	0.007	NO	NO
3	Project Driveway 1/ Inland Center Drive	CSS	14.6	B	0.179	**48.2**	**E**	0.307	--	--	NO	NO
4	Project Driveway 2/ Inland Center Drive	CSS	10.2	B	0.189	11.6	B	0.305	--	--	NO	NO
5	'I' Street/ Inland Center Drive[4]	TS	17.2	B	0.429	14.4	B	0.442	0.000	0.006	NO	NO
6	Scenic Drive/ Inland Center Drive	CSS	**565.2**	**F**	0.313	**587.3**	**F**	0.471	0.005	0.029	NO	**YES**
	- With Mitigation	CSS	5.9	A	0.313	6.2	A	0.471	0.005	0.029	NO	NO
7	I-215 SB Ramps/ Inland Center Drive	TS	28.0	C	0.338	28.3	C	0.508	0.018	0.019	NO	NO
8	I-215 NB Ramps/ Inland Center Drive	TS	23.7	C	0.415	28.6	C	0.487	0.023	0.012	NO	NO

[1]Analysis Software: Traffix, Version 8.0. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] TS = Traffic Signal CSS = Cross-Street Stop
[3] V/C = Volume to Capacity Ratio. It should be noted that V/C is not calculated for unsignalized intersections.
[4] It should be noted that the south leg of the intersection of 'I' Street at Inland Center Drive is not incorporated into the traffic signal operations. For analysis purposes, it is assumed the south leg is signal operated. Recommendations will be proposed for future conditions to modify the traffic signal to signalize the southern leg.

Project Opening Year (2020) With Related Projects and Without Project Conditions

Project Opening Year (2020) With Related Projects and Without Project traffic volumes were based on the traffic projections from the SBTAM and the addition of trips associated with other related developments in the study area. This scenario does not assume implementation of Mitigation Measure TRAF-1. As indicated in Table 37, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) With Related Projects Without Project Conditions with the exception of the following study intersections which are forecast to continue to operate at a deficient LOS (LOS E or F):

- Mt. Vernon Avenue/ Colton Avenue (both AM and PM peak hours);
- Scenic Drive/ Inland Center Drive (both AM and PM peak hours);
- I-215 SB Ramps/ Inland Center Drive (AM peak hour only); and
- I-215 NB Ramps/ Inland Center Drive (PM peak hour only).

As previously discussed, the Scenic Drive/ Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Table 37
Project Opening Year (2020) With Related Projects Without Project Traffic

Intersection		Traffic Control[2]	AM			PM		
			Delay[1] (Seconds)	HCM LOS	V/C[3] Ratio	Delay[1] (Seconds)	HCM LOS	V/C[3] Ratio
1	Mt. Vernon Avenue/ Colton Avenue	TS	**70.0**	**E**	0.705	**89.4**	**F**	0.854
2	Fairview Avenue/ Colton Avenue	TS	31.2	C	0.530	31.0	C	0.651
3	Project Driveway 1/ Inland Center Drive	CSS	--	--	--	--	--	--
4	Project Driveway 2/ Inland Center Drive	CSS	--	--	--	--	--	--
5	'I' Street/ Inland Center Drive[4]	TS	34.6	C	0.753	42.4	D	0.832
6	Scenic Drive/ Inland Center Drive	CSS	**>999.9**	**F**	0.795	**>999.9**	**F**	0.647
7	I-215 SB Ramps/ Inland Center Drive	TS	**106.5**	**F**	0.460	53.9	D	0.655
8	I-215 NB Ramps/ Inland Center Drive	TS	40.5	D	0.640	**123.7**	**F**	1.040

[1]Analysis Software: Traffix, Version 8.0. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] TS = Traffic Signal CSS = Cross-Street Stop
[3] V/C = Volume to Capacity Ratio. It should be noted that V/C is not calculated for unsignalized intersections.
[4] It should be noted that the south leg of the intersection of 'I' Street at Inland Center Drive is not incorporated into the traffic signal operations. For analysis purposes, it is assumed the south leg is signal operated. Recommendations will be proposed for future conditions to modify the traffic signal to signalize the southern leg.

Project Opening Year (2020) With Related Projects and With Project Conditions

Project Opening Year (2020) With Related Projects and With Project traffic volumes were calculated by adding project volumes to Project Opening Year (2020) With Related Projects and Without Project traffic volumes. This scenario does not assume implementation of the mitigation measures identified in the previous sections of this report. As indicated in Table 38, Project Opening Year (2020) With Related Projects and With Project Traffic, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) With Related Projects With Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt. Vernon Avenue/ Colton Avenue (both AM and PM peak hours);
- Project Driveway 1/ Inland Center Drive (both AM and PM peak hours);
- Scenic Drive/ Inland Center Drive (both AM and PM peak hours);
- I-215 SB Ramps/ Inland Center Drive (both AM and PM peak hours); and
- I-215 NB Ramps/ Inland Center Drive (PM peak hour only).

However, based on agency-established thresholds of significance involving Volume to Capacity Ratio (V/C), the Project is forecast to result in a significant traffic impact only at the following study intersections for Opening Year (2020) With Related Projects and With Project Conditions:

- Scenic Drive/ Inland Center Drive (PM peak hour only);
- I-215 SB Ramps/ Inland Center Drive (AM peak hour only); and
- I-215 NB Ramps/ Inland Center Drive (both AM and PM peak hours).

As shown in Table 38, Volume to Capacity Ratio impacts at the intersections of Mt. Vernon Avenue/ Colton Avenue and Project Driveway 1/ Inland Center Drive would be less than significant. As previously discussed, the Scenic Drive/Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios. Because of this, Mitigation Measure TRAF-1 has been incorporated to reduce the Project traffic impacts at Scenic Drive/ Inland Center Drive to a level considered less than significant for Opening Year

(2020) With Related Projects and With Project Traffic conditions. Mitigation Measure TRAF-1 requires the Project applicant to contribute fair share payments toward implementation of a traffic signal at the intersection of Scenic Drive and Inland Center Drive. As shown in Table 38, implementation of a traffic signal would reduce impacts at this intersection to less than significant.

However, it should be noted that the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay in this scenario. Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the intersection of I Street and Inland Center Drive and also the I-215 Ramps at Inland Center Drive is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location. As such, the final decision to require fair share contributions toward a traffic signal at this intersection will be made by the City Public Works Director and/or Traffic Engineer.

For the intersections of Southbound I-215 Ramps/ Inland Center Drive and Northbound I-215 Ramps/ Inland Center Drive, impacts would not be reduced to less than significant with implementation of the traffic signal at the intersection of Scenic Drive/ Inland Center Drive (Mitigation Measure TRAF-1). To reduce Volume to Capacity Ratio impacts at the intersections of Southbound I-215 Ramps/ Inland Center Drive and Northbound I-215 Ramps/ Inland Center Drive to less than significant, Mitigation Measures TRAF-2 and TRAF-3 have been incorporated. Mitigation Measure TRAF-2 requires the Project applicant to make a fair share contribution towards restriping the southbound off-ramp approach from one left-turn lane, one shared left-turn/ through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane. Mitigation Measure TRAF-3 requires the applicant to make a fair share contribution towards restriping the northbound off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane. With implementation of Mitigation Measures TRAF-2 and TRAF-3, cumulative impacts to these intersections would be reduced to less than significant.

Table 38
Project Opening Year (2020) With Related Project With Project Traffic

	Intersection	Traffic Control[2]	AM Peak Hour			PM Peak Hour			Change in V/C Ratio		Sig. Impact?	
			Delay[1] (Seconds)	HCM LOS	V/C[3] Ratio	Delay[1] (Seconds)	HCM LOS	V/C[3] Ratio	AM	PM	AM	PM
1	Mt. Vernon Avenue/ Colton Avenue	TS	**71.9**	**E**	0.708	**89.6**	**F**	0.860	0.003	0.006	NO	NO
2	Fairview Avenue/ Colton Avenue	TS	30.2	C	0.537	33.2	C	0.658	0.007	0.007	NO	NO
3	Project Driveway 1/ Inland Center Drive	CSS	**539.9**	**F**	0.522	**>999.9**	**F**	0.630	--	--	NO	NO
4	Project Driveway 2/ Inland Center Drive	CSS	18.4	C	0.519	15.3	C	0.628	--	--	NO	NO
5	'I' Street/ Inland Center Drive[4]	TS	36.2	D	0.758	43.2	D	0.839	0.005	0.007	NO	NO
6	Scenic Drive/ Inland Center Drive	CSS	**>999.9**	**F**	0.800	**>999.9**	**F**	0.678	0.005	0.031	NO	**YES**
	- With Mitigation	TS	52.0	D	0.800	10.5	B	0.678	0.005	0.031	NO	NO
7	I-215 SB Ramps/ Inland Center Drive	TS	**112.0**	**F**	0.486	**56.0**	**E**	0.658	0.026	0.003	**YES**	NO
	- With Mitigation	TS	**101.3**	**F**	0.443	48.3	D	0.610	-0.017	-0.045	NO	NO
8	I-215 NB Ramps/ Inland Center Drive	TS	43.7	D	0.663	**128.4**	**F**	1.058	0.023	0.018	**YES**	**YES**
	- With Mitigation	TS	36.5	D	0.544	**88.7**	**F**	0.800	-0.240	-0.240	NO	NO

[1]Analysis Software: Traffix, Version 8.0. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] TS = Traffic Signal CSS = Cross-Street Stop
[3] V/C = Volume to Capacity Ratio. It should be noted that V/C is not calculated for unsignalized intersections.
[4] It should be noted that the south leg of the intersection of 'I' Street at Inland Center Drive is not incorporated into the traffic signal operations. For analysis purposes, it is assumed the south leg is signal operated. Recommendations will be proposed for future conditions to modify the traffic signal to signalize the southern leg.

Long Range Year (2040) Conditions

The operations analysis for Long Range Year (2040) conditions examined two scenarios: Long Range Year (2040) Without Project and Long Range Year (2040) With Project. Each of these conditions is discussed in the remainder of this section.

Long Range Year (2040) Without Project Conditions

Long Range Year (2040) Without Project traffic volumes were based on traffic projections from the SBTAM. It was assumed all related developments had been accounted for in the traffic model. Long-Range (2040) Without Project Conditions does not assume implementation of the mitigation measures identified in the previous sections of this report. As indicated in Table 39, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Long-Range (2040) Without Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt. Vernon Avenue/ Colton Avenue (both AM and PM peak hours);
- Scenic Drive/ Inland Center Drive (both AM and PM peak hours);
- I-215 SB Ramps/ Inland Center Drive (both AM and PM peak hours); and
- I-215 NB Ramps/ Inland Center Drive (PM peak hour only).

Table 39
Long Range Year (2040) Without Project Traffic

	Intersection	Traffic Control[2]	AM			PM		
			Delay[1] (Seconds)	LOS	V/C[3] Ratio	Delay[1] (Seconds)	LOS	V/C[3] Ratio
1	Mt. Vernon Avenue/ Colton Avenue	TS	**65.5**	**E**	0.859	**118.2**	F	1.016
2	Fairview Avenue/ Colton Avenue	TS	27.6	C	0.615	34.4	C	0.761
3	Project Driveway 1/ Inland Center Drive	CSS	--	--	--	--	--	--
4	Project Driveway 2/ Inland Center Drive	CSS	--	--	--	--	--	--
5	'I' Street/ Inland Center Drive[4]	TS	22.8	C	0.869	48.9	D	0.958
6	Scenic Drive/ Inland Center Drive	CSS	**>999.9**	**F**	0.937	**>999.9**	F	0.776
7	I-215 SB Ramps/ Inland Center Drive	TS	**94.9**	**F**	0.528	**57.5**	E	0.753
8	I-215 NB Ramps/ Inland Center Drive	TS	37.9	D	0.762	**117.6**	F	1.197

[1]Analysis Software: Traffix, Version 8.0. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] TS = Traffic Signal CSS = Cross-Street Stop
[3] V/C = Volume to Capacity Ratio. It should be noted that V/C is not calculated for unsignalized intersections.
[4] It should be noted that the south leg of the intersection of 'I' Street at Inland Center Drive is not incorporated into the traffic signal operations. For analysis purposes, it is assumed the south leg is signal operated. Recommendations will be proposed for future conditions to modify the traffic signal to signalize the southern leg.

Long Range Year (2040) With Project Conditions

Long Range Year (2040) With Project traffic volumes were calculated by adding project volumes to Long Range Year (2040) Without Project traffic volumes. It was assumed all related developments have been accounted for in the traffic model. This scenario does not assume implementation of the mitigation measures identified in the previous sections of this report. As indicated in Table 40, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Long-Range (2040) With Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt. Vernon Avenue/ Colton Avenue (both AM and PM peak hours);
- Project Driveway 1/ Inland Center Drive (both AM and PM peak hours);
- Scenic Drive/ Inland Center Drive (both AM and PM peak hours);

- I-215 SB Ramps/ Inland Center Drive (both AM and PM peak hours); and
- I-215 NB Ramps/ Inland Center Drive (PM peak hour only).

However, based on agency-established thresholds of significance involving Volume to Capacity Ratio (V/C), the Project is forecast to result in a significant traffic impact only at the following study intersections for Long Range Year (2040) With Project Conditions:

- Scenic Drive/ Inland Center Drive (PM peak hour only);
- I-215 SB Ramps/ Inland Center Drive (AM peak hour only); and
- I-215 NB Ramps/ Inland Center Drive (both AM and PM peak hours).

As shown in Table 40, Volume to Capacity Ratio impacts at the intersections of Mt. Vernon Avenue/ Colton Avenue and Project Driveway 1/ Inland Center Drive would be less than significant. As previously discussed, the Scenic Drive/Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Because of this, Mitigation Measure TRA-1 has been incorporated to reduce the Project traffic impacts at Scenic Drive/ Inland Center Drive to a level considered less than significant for Long Range Year (2040) With Project Traffic conditions. Mitigation Measure TRA-1 requires the Project applicant to contribute fair share payments toward implementation of a traffic signal at the intersection of Scenic Drive and Inland Center Drive. As shown in Table 40, implementation of a traffic signal at this intersection would reduce impacts to less than significant.

However, it should be noted that the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay in this scenario. Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the intersection of I Street and Inland Center Drive and also the I-215 Ramps at Inland Center Drive is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location. As such, the final decision to require fair share contributions toward a traffic signal at this intersection will be made by the City Public Works Director and/or Traffic Engineer.

For the intersections of Southbound I-215 Ramps/ Inland Center Drive and Northbound I-215 Ramps/ Inland Center Drive, impacts would not be reduced to less than significant with implementation of the traffic signal at the intersection of Scenic Drive/ Inland Center Drive (Mitigation Measure TRA-1). To reduce Volume to Capacity Ratio impacts at the intersections of Southbound I-215 Ramps/ Inland Center Drive and Northbound I-215 Ramps/ Inland Center Drive to less than significant, Mitigation Measures TRA-2 and TRA-3 have been incorporated. Mitigation Measure TRA-2 requires the Project applicant to make a fair share contribution towards restriping the southbound off-ramp approach from one left-turn lane, one shared left-turn/ through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane. Mitigation Measure TRA-3 requires the applicant to make a fair share contribution towards restriping the northbound off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane. With implementation of Mitigation Measures TRA-2 and TRA-3, cumulative impacts to these intersections would be reduced to less than significant.

Table 40
Long Range Year (2040) With Project Traffic

	Intersection	Traffic Control[2]	AM Peak Hour			PM Peak Hour			Change in V/C Ratio		Sig. Impact?	
			Delay[1] (Seconds)	HCM LOS	V/C[3] Ratio	Delay[1] (Seconds)	HCM LOS	V/C[3] Ratio	AM	PM	AM	PM
1	Mt. Vernon Avenue/ Colton Avenue	TS	**66.3**	**E**	0.867	**120.4**	**F**	1.022	0.008	0.006	NO	NO
2	Fairview Avenue/ Colton Avenue	TS	28.3	C	0.623	36.2	D	0.768	0.008	0.007	NO	NO
3	Project Driveway 1/ Inland Center Drive	CSS	**749.3**	**F**	0.599	**>999.9**	**F**	0.721	--	--	NO	NO
4	Project Driveway 2/ Inland Center Drive	CSS	20.7	C	0.596	16.7	C	0.719	--	--	NO	NO
5	'I' Street/ Inland Center Drive[4]	TS	23.4	C	0.873	50.5	D	0.965	0.004	0.007	NO	NO
6	Scenic Drive/ Inland Center Drive	CSS	**>999.9**	**F**	0.941	**>999.9**	**F**	0.806	0.004	0.030	NO	**YES**
	- With Mitigation	TS	34.7	C	0.941	16.8	B	0.806	0.004	0.030	NO	NO
7	I-215 SB Ramps/ Inland Center Drive	TS	**98.4**	**F**	0.555	**60.0**	**F**	0.756	0.027	0.030	**YES**	NO
	- With Mitigation	TS	**89.5**	**F**	0.510	51.8	D	0.705	-0.018	-0.048	NO	NO
8	I-215 NB Ramps/ Inland Center Drive	TS	39.7	D	0.784	**121.4**	**F**	1.213	0.022	0.016	**YES**	**YES**
	- With Mitigation	TS	42.0	D	0.749	**88.9**	**F**	0.945	-0.013	-0.252	NO	NO

[1]Analysis Software: Traffix, Version 8.0. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
[2] TS = Traffic Signal CSS = Cross-Street Stop
[3] V/C = Volume to Capacity Ratio. It should be noted that V/C is not calculated for unsignalized intersections.
[4] It should be noted that the south leg of the intersection of 'I' Street at Inland Center Drive is not incorporated into the traffic signal operations. For analysis purposes, it is assumed the south leg is signal operated. Recommendations will be proposed for future conditions to modify the traffic signal to signalize the southern leg.

Off-Site Improvements

Recommended off-site improvements for the Project include: implementation of a traffic signal at the intersection of Scenic Drive/ Inland Center Drive; restriping the southbound I-215 off-ramp approach from one left-turn lane, one shared left-turn/ through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane; and restriping the northbound I-215 off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane. Incorporated mitigation measures require the Project applicant to contribute towards the cost of the recommended off-site intersection improvements on a fair-share or "pro-rata" basis. The Project's fair-share intersection contributions are included in Table 41, Opening Year (2020) Project Fair-Share Intersection Contribution and Table 42, Long Range Year (2040) Project Fair-Share Intersection Contribution. With payment of fair-share intersection contributions, impacts will be less than significant.

Table 41
Opening Year (2020) Project Fair-Share Intersection Contribution

Intersection	Existing Traffic		Opening Year 2020 With Related Projects With Project Traffic		Growth in Traffic		Project Traffic		Project % of Opening Year Growth in Traffic	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Scenic Drive/ Inland Center Drive	1,327	1,648	2,765	3,062	1,438	1,414	72	64	5.01%	4.53%
I-215 SB Ramps/ Inland Center Drive	1,795	2,471	3,588	4,206	1,793	1,735	72	64	4.02%	3.69%
I-215 NB Ramps/ Inland Center Drive	1,782	2,369	2,808	3,867	1,026	1,498	42	32	4.09%	2.14%

Project Fair-Share Contribution represents the project's traffic contribution at each study area intersection as a percentage of the overall growth in traffic for Year 2040 conditions. This table is for informational purposes only and is not tied to mitigation.

Table 42
Long Range Year (2040) Project Fair-Share Intersection Contribution

Intersection	Existing Traffic		Long Range Year 2040 With Project Traffic		Growth in Traffic		Project Traffic		Project % of Long Range Growth in Traffic	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Scenic Drive/ Inland Center Drive	1,327	1,648	3,215	3,593	1,888	1,945	72	64	3.81%	3.29%
I-215 SB Ramps/ Inland Center Drive	1,795	2,471	4,134	4,849	2,339	2,378	72	64	3.08%	2.69%
I-215 NB Ramps/ Inland Center Drive	1,782	2,369	3,710	4,709	1,928	2,340	42	32	2.18%	1.37%
Project Fair-Share Contribution represents the project's traffic contribution at each study area intersection as a percentage of the overall growth in traffic for Year 2040 conditions. This table is for informational purposes only and is not tied to mitigation.										

Mitigation Measures

TRA-1 Improvement to the impacted intersections will be performed as follows at the time the City determines that such improvements are needed to maintain desired service levels:

- Scenic Drive/ Inland Center Drive: New traffic signal.

Prior to the issuance of a certificate of occupancy the project proponent shall be required to pay to the City of San Bernardino a fair-share contribution for the above improvements.

TRA-2 Improvement to the impacted intersections will be performed as follows at the time the City determines that such improvements are needed to maintain desired service levels:

- I-215 Southbound Ramps/ Inland Center Drive: Restripe the southbound off-ramp approach from one left-turn lane, one shared left-turn/ through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane.

Prior to the issuance of a certificate of occupancy the project proponent shall be required to pay to the City of San Bernardino a fair-share contribution for the above improvements.

TRA-3 Improvement to the impacted intersections will be performed as follows at the time the City determines that such improvements are needed to maintain desired service levels:

- I-215 Northbound Ramps/ Inland Center Drive: Restripe the northbound off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane.

Prior to the issuance of a certificate of occupancy the project proponent shall be required to pay to the City of San Bernardino a fair-share contribution for the above improvements.

XVII b) **No Impact.** The Project will not impact any Congestion Management Program (CMP) facilities. No impact will occur.

XVII c) **No Impact.** The Project is located approximately 2.50 miles from the nearest airport, San Bernardino International Airport and will not change air traffic patterns or substantially increase ridership. Therefore no impact will occur.

XVII d) **Less than Significant Impact.** The Project would increase traffic levels at one of the Project study area intersections to a level significant enough to require mitigation. As discussed in Section XVI.a, the Project will

include mitigation. This mitigation would include payment of fair share contributions towards a new traffic signal at Scenic Drive/ Inland Center Drive and restriping at the Southbound and Northbound I-215 ramps. These improvements would be conditioned upon final approval of the City Engineer and would not represent a significant design hazard. Any activities that would interfere with the local roadway network during these improvements would be required to adhere to the Caltrans Construction Manual guidelines for traffic control and closures. The Project does not require any other roadway or circulation network changes that could result in traffic safety issues. Proposed landscaping is setback sufficiently to provide adequate line of site at project intersections. Less than significant safety impacts will occur.

XVII e) **Less than Significant Impact.** Adequate emergency access will be provided through an on-site circulation pattern designed to accommodate emergency vehicles. The Project will include two 36-foot wide driveways that will provide emergency access to the interior of the site and to the warehouse building. The Project will be subject to Police and Fire Department requirements for circulation design. As such, impacts will remain less than significant.

XVII f) **Less than Significant Impact.** The Project consists of construction of a warehouse and associated parking and landscaping improvements. There are no alternative transportation facilities located on the Project site. Due to the nature of the development, the Project will not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. A less than significant impact will occur.

Cumulative Impacts

The traffic study addresses both the Project-specific and the Project's contribution to cumulative impacts. The Project would have a significant impact to the intersections of Scenic Drive/ Inland Center Drive, I-215 Southbound Ramps/ Inland Center Drive, and I-215 Northbound Ramps/ Inland Center Drive during Opening Year (2020) and Long Range Year (2040) conditions. However, this impact would occur without development of the Project and mitigation is included to require the Project applicant to make fair share contributions towards off-site improvements that would reduce impacts to less than significant levels. Therefore, impacts from the Project are considered less than significant and no cumulatively considerable impact will occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES – Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a Cultural Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion:

XVIII a) **No Impact.** As shown in Section V.c above, the Project does not include demolition of any structures. According to the Records Search and site visits, the Project site does not include any structure that could be considered historic in nature. Therefore, the Project would result in no adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5. Additionally, pursuant to AB 52, notices were sent to local tribes regarding possible tribal resources located on or around the Project site. No responses were received from any tribe or native group that identifies historic resources on the site. As such, the Project will have no impact on historical resources.

XVIII b) **Less than Significant with Mitigation Incorporated.** Assembly Bill (AB) 52 specifies that a project that may cause a substantial adverse change to a defined Tribal Cultural Resources (TCR) may result in a significant effect on the environment. AB 52 requires tribes interested in development Projects within a traditionally and culturally affiliated geographic area to notify a lead agency of such interest and to request notification of future Projects subject to CEQA prior to determining if a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The lead agency is then required to notify the tribe within 14 days of deeming a development application subject to CEQA complete to notify the requesting tribe as an invitation to consult on the Project. AB 52 identifies examples of mitigation measures that will avoid or minimize impacts to TCR. The bill makes the above provisions applicable to Projects that have a Notice of Preparation or a Notice of Intent to Adopt a Negative Declaration/Mitigated Negative Declaration circulated on or after July 1, 2015. AB 52 amends Sections

5097.94 and adds Sections 21073, 21074, 2108.3.1., 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to the California Public Resources Code (PRC), relating to Native Americans.

As part of the findings process, a Sacred Lands File (SLF) was conducted to ascertain whether any information relating to the presence of Native American cultural resources within the Project area was available. The search indicated the absence of documentation of tribal resources in the Project area. However, the absence of documentation in the SLF does not indicate the absence of Native American cultural resources within the Project area. In accordance with Assembly Bill 52 (AB 52), which added various provisions to the California Public Resources Code (PRC) that concern Tribal Cultural Resources, including Section 21080.3.1(d), the City contacted the following tribes requesting to be notified of Projects: San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, and Gabrieleno Band of Mission Indians - Kizh Nation. Responses were received from the Gabrieleno Band of Mission Indians - Kizh Nation and the San Manuel Band of Mission Indians requesting consultation and incorporation of mitigation that would reduce impacts to tribal cultural resources. As such, Mitigation Measures GBMI-KN-TCR-1 through GBMI-KN-TCR-8 and SMBMI-TCR-1 through SMBMI-TCR-4 have been incorporated to address any previously undiscovered archaeological resources relating to TCR's encountered during Project implementation. Incorporation of these mitigation measures would ensure that potential impacts to buried TCRs are less than significant through requirements for evaluation, salvage, curation, and reporting.

Mitigation Measures

GBMI-KN-TCR-1 *Retain a Native American Monitor/Consultant.* The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians - Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the Project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

GBMI-KN-TCR-2 *Unanticipated Discovery of Tribal Cultural and Archeological Resources.* Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or

appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources.

GBMI-KN-TCR-3 *Public Resources Code Sections 21083.2(b) for Unique Archaeological Resources.* Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

GBMI-KN-TCR-4 *Unanticipated Discovery of Human Remains and Associated Funerary Objects.* Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

GBMI-KN-TCR-5 *Resource Assessment and Continuation of Work Protocol.* Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

GBMI-KN-TCR-6 *Kizh-Gabrieleno Procedures for Burials and Funerary Remains.* If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

GBMI-KN-TCR-7 *Treatment Measures*. Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

GBMI-KN-TCR-8 *Professional Standards*. Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

SMBMI-TCR-1 *Archaeological Monitoring*. Due to the heightened cultural sensitivity of the proposed project area, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be

completed by the archaeologist and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

SMBMI-TCR-2 *Tribal Monitoring*. Due to the heightened cultural sensitivity of the proposed project area, Tribal monitors representing the San Manuel Band of Mission Indians shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of Tribal monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist, as detailed within SMBMI-TCR-1, and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and agree to the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

SMBMI-TCR-3 *Treatment of Cultural Resources*. If a pre-contact cultural resource is discovered during project implementation, ground disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Archaeological Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the Monitoring and Treatment Plan. A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all finds are subject, if feasible, to avoidance/preservation in place as treatment. Should any resource(s) not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by SMBMI. All plans for analysis shall be reviewed and approved by the applicant and SMBMI prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of SMBMI that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by SMBMI, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all

cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and SMBMI. All reburials are subject to a reburial agreement that shall be developed between the landowner and SMBMI outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with SMBMI to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees. All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and SMBMI for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and SMBMI.

SMBMI-TCR-4 Inadvertent Discoveries of Human Remains/Funerary Objects. In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately who shall notify SMBMI, the applicant/developer, and the Lead Agency. The Lead Agency and the applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98. Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties. It is understood by all Parties that unless

otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

Cumulative Impacts

With mitigation, the Project would result in less than significant impacts to tribal cultural resources. The chances of cumulative impacts occurring as a result of Project implementation plus implementation of other projects in the region is not likely since projects would be subject to individual project-level environmental review. Since there would be no Project-related impacts and due to existing laws and regulations in place to protect tribal cultural resources and prevent significant impact to such resources, the potential incremental effects of the Project would not be cumulatively considerable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion:

XIX a) **Less than Significant Impact.** The Project could affect Regional Water Quality Control Board treatment standards by increasing wastewater production, which would require expansion of existing facilities or construction of new facilities. Exceeding the RWQCB treatment standards could result in contamination of surface or ground waters with pollutants such as pathogens and nitrates.

The Project includes construction of a warehouse and associated parking and landscape improvements. The Project also includes related drainage and lighting improvements. New development in the city is required to install wastewater infrastructure concurrent with project development. The City of San Bernardino Municipal Water Department (SBMWD) operates the Margaret H. Chandler Water Reclamation Plant (WRP) and the Colton/San Bernardino Rapid Infiltration and Extraction (RIX) Tertiary Treatment Facility. All wastewater

generated by the interior plumbing system of the Project would be discharged into the local sewer main and conveyed for treatment at these plants. The WRP and RIX employ primary and secondary treatment processes and have the capacity to treat 33 million gallons per day (GPD) of wastewater.[49]

Based on calculations for water use, the warehouse buildings will use approximately 24 million gallons of water annually, which includes both indoor uses such as toilets and drinking fountains and outdoor use such as sprinklers for landscaping. Generally, wastewater is assumed to make up 80% of total indoor water demand. Indoor water demand for the Project is 23.35 million gallons of wastewater per year. As such, the Project is estimated to generate approximately 1.87 million gallons of wastewater per year, or 51,188 gallons per day (gpd). This volume is well within the treatment capacity of the WRP and RIX. This project would thus have a less-than-significant impact on the ability of the facility to operate within its established wastewater treatment requirements, which are enforced via the facility's NPDES permit authorized by the Santa Ana Regional Water Quality Control Board (SARWQCB).

Wastewater flows associated with the Project would consist of the same kinds of substances typically generated by warehouse uses, and no modifications to any existing wastewater treatment systems or construction of any new ones would be needed to treat this project's wastewater. The ultimate disposal of effluent and solids will occur in compliance with waste discharge requirements set by the California RWQCB. Wastewater conveyed from the site would undergo treatment in accordance with applicable regulations, including the requirements of the RWQCB. The Project would have a less than significant impact related to wastewater treatment requirements of the SARWQCB.

XIX b) **Less than Significant Impact.** The City delivers water to over 40,000 residential, commercial and industrial accounts throughout its service area. Over the last eight years, the City has received its water from wells in the San Bernardino Basin Area (SBBA), which is managed by the San Bernardino Municipal Water District (SBMWD). Currently, water is derived from 57 groundwater wells located throughout its service area. The wells range from 50 to 1,300 feet in depth, and have production capacities ranging from 50 to 3,500 gallons per minute (gpm). In 2009, the SBMWD pumped 42,277 acre-feet of water from its wells.[50]

Regarding wastewater facilities, as discussed in the preceding response, wastewater generated at the Project site is treated at the WRP and RIX. The Project is estimated to have a wastewater generation of approximately 51,188 gpd. As stated in section 4.18.a, this generation is well within the existing remaining treatment capacity of the WRP and RIX.

Connections to local water and sewer mains would involve temporary and less than significant construction impacts that would occur in conjunction with other on-site improvements. No additional improvements are anticipated to either sewer lines or treatment facilities to serve the Project, as the Project represents a replacement use. Standard connection fees will address any incremental impacts of the Project. Therefore, the Project will result in less than significant impacts as a result of new or expanded water supply and wastewater treatment facilities.

XIX c) **Less than Significant Impact.** Potentially significant impacts could occur as a result of this project if storm water runoff was increased to a level that would require construction of new storm drainage facilities. As discussed in the Hydrology section, the Project would not generate substantially increased runoff from the site that would require construction of new storm drainage facilities. As part of the plan, runoff from the site will be treated through an underground infiltration system located on the north side of the Project site. Runoff will be directed to proposed catch basins and conveyed to the infiltration system under the site. When water fills up the underground infiltration system, water will overflow into a sump pump pit and be discharged through a parkway drain in Inland Center Drive which will eventually drain into the Lytle Creek Channel. A more detailed discussion of proposed on-site drainage for the Project can be found in Section IX.c,d,e below.

The plan also requires non-structural and structural source control Best Management Practices (BMPs) to be incorporated to reduce pollution from the Project. Non-structural BMPs to be incorporated into the Project include: education of property owners, tenants, and occupants; activity restrictions; landscape management BMPs; BMP maintenance; a Spill Contingency Plan; hazardous materials disclosure compliance; a litter/debris control program; employee training; a catch basin inspection program; and vacuum sweeping of private street and parking lots. Structural BMPs to be incorporated into the Project include: storm drain system stenciling and signage; construction of trash and waste storage areas; efficient landscape design and irrigation systems; and a finished grade of landscaped areas at a minimum of 1-2 inches below the curb, sidewalk, or pavement. All BMPs included as part of the Project WQMP are required to be maintained through regular scheduled inspection and maintenance.

The Project is also subject to preventative low-impact development (LID) site design requirements. Design features intended to comply with these requirements will include disconnecting roof drains from the storm drain system and connecting them to the underground infiltration system; revegetation of all disturbed areas; use of uncompacted native material in the proposed infiltration chambers; and staking of proposed landscaped areas during construction to minimize compaction.

The Project will be required to adhere to all SARWQCB permitting requirements for construction and NPDES standards for stormwater runoff. With adherence to SARWQCB permitting requirements and NPDES standards, implementation of non-structural and structural BMPs, and adherence to LID design requirements, impacts to water quality standards or waste discharge requirements will be less than significant.

XVI d) **Less than Significant Impact.** According to the *San Bernardino Valley Regional 2015 Urban Water Management Plan* (*UWMP*), the City reported an estimated total demand of 42,277 total acre-feet in fiscal year 2009-2010 from its 57 wells. In 2020, it is estimated the total demand will be 45,969 total acre-feet. The Project would generate a marginal increase in additional demand for water from the City's wells, relative to overall existing citywide demand. Based on calculations for water use, the warehouses will use a total of approximately 24 million gallons of water annually, or approximately 73.65 AFY, which includes both indoor uses such as toilets and drinking fountains and outdoor use such as sprinklers for landscaping. As the Urban Water Management Plan anticipates an overall increase in demand associated with development in the area over 2015 conditions, and the water demand for this project is within that demand assumption, impacts would be less than significant. The Project would not substantially deplete water supplies, and the Project would have a less than significant impact on entitled water supplies.

The Project would also be required to comply with Chapter 17.06 (Water Wide Landscape Program) of the City of San Bernardino Municipal Code, which would lessen the Project's overall demand for water resources. Also, CBC Title 24 water efficiency measures require a demonstrated 20 percent reduction in the use of potable water. The Project's landscaping plans include drought tolerant landscaping materials. Compliance with Title 24, and the City's Water Conservation in Landscaping and Water Efficient Landscaping Ordinances will reduce the Project's impacts to groundwater supplies to a level of less than significant.

XIX e) **Less than Significant Impact.** As detailed in Sections 4.18a and 4.18b, the Project will be adequately served by existing waste water treatment facilities. Therefore, a less than significant impact would occur.

XIX f) **Less than Significant Impact.** Significant impacts could occur if the Project will exceed the existing permitted landfill capacity or violates federal, state, and local statutes and regulations.

Different uses have varying levels of estimated solid waste production. According to CalEEMod default settings for waste production, the proposed warehouse would produce 126 tons of waste annually, or 690 pounds per day.

The City of San Bernardino has an exclusive contract with the franchised hauler Burrtec Waste Industries to collect trash from all households and businesses in the City. Regional landfill capacity fluctuates daily and is regularly monitored by the Los Angeles County Sanitation Districts (LACSD) to ensure there is sufficient landfill space available to dispose of municipal solid wastes throughout the region. This project's additional solid waste stream would have a less than significant impact on regional landfill capacity. Cities must meet the 50% landfill diversion mandate required by State law. According to the California Department of Resources Recycling and Recovery (CalRecycle), the City disposes of waste at several area landfills, including[51]:

- Arvin Sanitary Landfill
- Azusa Land Reclamation Co. Landfill
- Badlands Sanitary Landfill
- California Street Landfill
- Colton Sanitary Landfill
- Commerce Refuse-to-Energy Facility
- El Sobrante Landfill
- Frank R. Bowerman Sanitary Landfill
- Lamb Canyon Sanitary Landfill
- Lancaster Landfill and Recycling Center
- Landers Sanitary Landfill
- Mid Valley Sanitary Landfill
- Olinda Alpha Sanitary Landfill
- San Timoteo Sanitary Landfill
- Simi Valley Landfill & Recycling Center
- Southeast Resource Recovery Facility
- Victorville Sanitary Landfill

The majority of waste in 2017 went to the Olinda Alpha Sanitary Landfill and the Lamb Canyon Sanitary Landfill. The Olinda Alpha Sanitary Landfill, located in Brea, has a permitted daily capacity of 8,000 tons, with a permitted total capacity of 74,900,000 cubic yards and a remaining capacity of 38,578,383 cubic yards. This landfill is projected to close in 2021.[52] The Lamb Canyon Sanitary Landfill, located in Beaumont, has a permitted daily capacity of 5,000 tons per day and a total capacity of 33,041,000 tons, with a remaining capacity of 18,955,000 tons. This landfill is estimated to close in 2021.[53] Although these existing landfills currently used by San Bernardino are anticipated to close in 2021, other regional landfills have remaining capacity. Also, regional plans are underway to transport waste by rail to landfill sites in the desert areas to the east. There is adequate landfill capacity in the region to accommodate project-generated waste. Considering the availability of landfill capacity and the relatively nominal amount of solid waste generation from the Project, project solid waste disposal needs can be adequately met without a significant impact on the capacity of the nearest and optional, more distant, landfills. Therefore, it is not expected that the Project would impact the City's compliance with state-mandated (AB 939) waste diversion requirements. Impacts will be less than significant.

XIX g) **Less than Significant Impact.** The Project is required to comply with all applicable Federal, State, County, and City statutes and regulations related to solid waste as a standard project condition of approval. Therefore, no impact would occur.

Cumulative Impacts

The Project would have a less than significant impact with respect to utilities/service systems. The Project would require use of existing water and wastewater infrastructure, as well as existing, available solid waste

disposal for building facility operation. Development of public utility infrastructure is part of an extensive planning process involving utility providers and jurisdictions with discretionary review authority. The coordination process associated with the preparation of development and infrastructure plans is intended to ensure that adequate resources are available to serve both individual projects and cumulative demand for resources and infrastructure as a result of cumulative growth and development in the area. Individual projects are subject to review for utility capacity to avoid unanticipated interruptions in service or inadequate supplies. Coordination with the utility companies allows for the provision of utility service to the Project and other developments. The Project and other planned projects are subject to connection and service fees to assist in facility expansion and service improvements triggered by an increase in demand. Because of the utility planning and coordination activities described above, no significant cumulative utility impacts are anticipated.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX.	**WILDFIRE** – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
	a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
	b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or uncontrolled spread of a wildfire?	☐	☐	☐	☒
	c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
	d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

XX a) **No Impact.** The Project Site is not located within or near any State Responsibility Areas.[54] The nearest such area is approximately 4.4 miles north of the Project site. No circulation changes are proposed as part of the Project. Implementation of the Project would not impair an adopted emergency response plan or emergency evacuation plan.

XX b) **No Impact.** The Project Site is not located within or near any State Responsibility Areas. The nearest such area is approximately 4.4 miles north of the Project site. The Project site is relatively flat with no noticeable slopes in the Project vicinity. Impacts related to exacerbation of wildfire will not occur.

XX c) **No Impact.** The Project Site is not located within or near any State Responsibility Areas. The nearest such area is approximately 4.4 miles north of the Project site. The Project does not require the installation of roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. No impact will occur.

XX d) **No Impact.** The Project site is located within a completely urbanized area. The Project Site is not located within or near any State Responsibility Areas. The nearest such area is approximately 4.4 miles north of the Project site. The Project will not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. No impact will occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion:

XXI a) **Less Than Significant with Mitigation Incorporated.** The Project would not substantially impact any scenic vistas, scenic resources, or the visual character of the area, as discussed in Section 4.1 and would not result in excessive light or glare. The Project site is located within a developed area with no natural habitat. The Project would not significantly impact any sensitive plants, plant communities, fish, wildlife or habitat for any sensitive species with mitigation incorporated. There would be no impact to migratory birds. Adverse impacts to historic resources would not occur. Construction-phase procedures would be implemented in the event any important cultural, archaeological, or paleontological resources are discovered during grading, consistent with Mitigation Measures CUL-1 through CUL-9. The Project site is not known to have any association with an important example of California's history or prehistory. The environmental analysis provided in Section 4.3 concludes that impacts related to emissions of criteria pollutants and other air quality impacts would be less than significant. Sections 4.7 and 4.9 conclude that impacts related to climate change and hydrology and water quality would be less than significant. Based on the preceding analysis of potential impacts in the responses to items 4.1 thru 4.18, no evidence is presented that this Project would degrade the quality of the environment. Impacts related to degradation of the environment, biological resources, and cultural resources would be less than significant with mitigation incorporated.

XXI b) **Less Than Significant with Mitigation Incorporated.** The Project would result in significant impacts in the following areas: biological resources, cultural resources, and traffic. A Mitigation Monitoring and Reporting Program has been prepared for each of these environmental issue areas in order to reduce impacts to less than significant levels. Standard conditions would also be imposed upon the Project. Other new development projects within the City would also be subject to these requirements. All other impacts of the Project were determined either to have no impact or to be less than significant, without the need for mitigation. Cumulatively, the Project would not result in any significant impacts that would substantially

combine with impacts of other current or probable future impacts. Therefore, the Project, in conjunction with other future projects, would not result in any cumulatively considerable impacts.

XXI c) **Less Than Significant with Mitigation Incorporated.** Based on the analysis of the Project's impacts in the responses to items 4.1 thru 4.18, there is no indication that the proposed warehouse could result in substantial adverse effects on human beings. Long-term effects include increased vehicular traffic, traffic-related noise, use of household hazardous materials, emissions of criteria pollutants and greenhouse gas emissions, and increased demand on emergency response services. The analysis herein concludes that direct and indirect environmental effects would at worst require mitigation to reduce to less than significant levels. Environmental effects would result in less than significant impacts. Based on the analysis in this Initial Study, the City finds that direct and indirect impacts to human beings would be less than significant with mitigation incorporated.

MITIGATION MEASURES

I. BIOLOGICAL RESOURCES

BIO-1 If vegetation removal is scheduled during the nesting season (typically February 1 to September 1), then a focused survey for active nests shall be conducted by a qualified biologist no more than five (5) days prior to the beginning of project-related activities (e.g., excavation, grading and vegetation removal). Surveys shall be conducted in proposed work areas, staging and storage areas, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys shall be conducted within a 250-foot radius surrounding the work area (in non-developed areas and where access is feasible). For larger raptors, such as those from the genus *Buteo*, the survey area shall encompass a 500-foot radius. Surveys shall be conducted during weather conditions suited to maximize the observation of possible nests and shall concentrate on areas of suitable habitat. If a lapse in project-related work of five (5) days or longer occurs, an additional nest survey shall be required before work can be reinitiated. If nests are encountered during any preconstruction survey, a qualified biologist shall determine if it may be feasible for construction to continue as planned without impacting the success of the nest, depending on conditions specific to each nest and the relative location and rate of construction activities. Any nest(s) within the Project site shall be monitored by a qualified biologist during active construction if work is occurring directly adjacent to the pre-determined no-work buffer. If the qualified biologist determines construction activities have potential to adversely affect a nest, the biologist shall immediately inform the construction manager to halt construction activities within minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on species and location. Construction activities within the no-work buffer may proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g. young have fledged, predation, or other non-anthropogenic nest failure).

BIO-2 A pre-construction survey shall be conducted in suitable habitat (e.g. trees) for roosting bats within 14 days prior to activities that remove vegetation or suitable structures. If an occupied maternity or colony roost is detected, CDFW shall be contacted about how to proceed. Typically, a buffer exclusion zone would be established around each occupied roost until bat activities have ceased. The size of the buffer would take into account:

- Proximity and noise level of project activities;
- Distance and amount of vegetation or screening between the roost and construction activities;
- Species-specific needs, if known, such as sensitivity to disturbance.

Due to restrictions of the California Health Department, direct contact by workers with any bat is not allowed. A qualified bat biologist will be contacted immediately if a bat roost is discovered during project construction.

BIO-3 To avoid potential adverse impacts to Santa Ana sucker, arroyo chub, and Santa Ana speckled dace in the event that these species are washed into the Project site during a storm or river flooding event, the timing of storm drain construction work within the Lytle Creek Channel will be restricted to the dry season when standing water is no greater than one (1) inch. No work shall be conducted when water is flowing in the channel. Prior to any work where ponded water is present within the channel, a qualified aquatic biologist shall conduct surveys for special status fish. If Santa Ana suckers occur in portions of the channel where construction activities are scheduled to occur, the applicant shall retain a biologist holding a USFWS permit for the Santa Ana sucker to monitor all construction activities in the channel thereafter. The resumes of the proposed biologists will be provided to the USFWS for concurrence. This biologist will be

referred to as the permitted biologist hereafter. The permitted biologist will have the authority to stop all activities until appropriate corrective measures have been completed. The permitted biologist shall inspect the channel a minimum of three times a day from October 1 to April 30 and one time a day from May 1 through September 30 (unless otherwise approved by the CDFW and USFWS during construction to inspect for leaks, spills, or other debris that may enter the Lytle Creek Channel).

A complete Hazardous Material Spill kit capable of containing the largest potential vehicle spill of gasoline, diesel, or other hazardous materials will be kept on the Project site. The kit shall be located and maintained in areas accessible to crews. Spills on the roadway will be logged and reported to the biological monitor weekly and cleaned up immediately. Any spills will be reported to CDFW and USFWS within one hour. No refueling or equipment staging shall occur within the channel.

BIO-4 Any alterations of, or discharges into, waters of the United States, including Section 404 wetlands shall be in conformance with the Sections 404 and 401 of the CWA via certification and permitting prior to any demolition, grading, or construction that may impact jurisdictional area(s), as applicable. Activities that usually involve a regulated discharge of dredged or fill materials include (but are not limited to) grading, placing of riprap for erosion control, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments), stockpiling excavated material, mechanized removal of vegetation, and driving of piles for certain types of structures. If avoidance of federally protected wetlands is not feasible, securing 404 and 401 permits under the Clean Water Act and compliance with the federal and state "no net loss of wetlands" policy shall be required in accordance with USACE and RWQCB regulations.

Prior to the start of demolition, the applicant shall submit a jurisdictional delineation of waters of the U.S. to the USACE in order to request a formal verification of the limits of their jurisdiction and to identify potential impacts to waters of the U.S. If the USACE determines that jurisdictional waters of the U.S. will be impacted by the Project, the appropriate CWA Section 404 permit shall be acquired by the applicant prior to the start of demolition of the Project. In addition, the Applicant shall be required to submit a Section 401 Water Quality Certification application to the Santa Ana RWQCB. If the USACE does not assert regulatory jurisdiction, then the applicant may be required to submit a Notice of Intent to the RWQCB for their General Permit R6T-2003-0004 for minor impact projects. If required, all regulatory permits shall be obtained, and all conditions shall be agreed upon to prior to demolition. The Project Applicant shall be responsible for complying with all conditions outlined in the applicable USACE, and/or RWQCB. Impact minimization measures associated with permit conditions of approval may include implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, as appropriate. Impacts to jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.

Storm water drainage plans and erosion and sediment control plans will be designed to avoid and minimize erosion and runoff to the work area within Lytle Creek Channel. To minimize indirect effects on water quality and wetland hydrology, the applicant will obtain a National Pollutant Discharge Elimination System Stormwater Permit (NPDES) and comply with drainage and storm water quality standards to avoid and minimize erosion and runoff to all wetlands that would avoided by the Project. As part of the Project design, the applicant will implement storm water quality treatment controls such as berms, off-stream detention basins, overflow collection areas, filtration systems, and sediment traps to control siltation and the potential discharge of pollutants to minimize impacts on water quality. The applicant will obtain a General

Construction Storm Water Permit from the RWQCB, prepare a Storm Water Pollution Prevention Plan (SWPPP), and implement Best Management Practices (BMPs) to reduce water quality effects during and after construction. These BMPs include standard sediment and erosion control measures (e.g., installing orange construction fencing buffers, straw waddles, silt fencing, etc. around the perimeter of the construction zone) that will be implemented to protect jurisdictional wetlands and other waters that are being avoided during construction.

BIO-5 Prior to the removal of five or more trees, a tree removal permit will be obtained from the Development Services Department of the City of San Bernardino (MC 15.34.020).

II. CULTURAL RESOURCES

GBMI-KN-CUL-1 *Retain a Native American Monitor/Consultant.* The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians - Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the Project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

GBMI-KN-CUL-2 *Unanticipated Discovery of Tribal Cultural and Archeological Resources.* Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources.

GBMI-KN-CUL-3 *Public Resources Code Sections 21083.2(b) for Unique Archaeological Resources.* Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native

American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

SMBMI-CUL-1 *Archaeological Monitoring.* Due to the heightened cultural sensitivity of the proposed project area, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

SMBMI-CUL-2 *Tribal Monitoring.* Due to the heightened cultural sensitivity of the proposed project area, Tribal monitors representing the San Manuel Band of Mission Indians shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of Tribal monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist, as detailed within SMBMI-CUL-1, and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and agree to the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

SMBMI-CUL-3 *Treatment of Cultural Resources.* If a pre-contact cultural resource is discovered during project implementation, ground disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Archaeological

Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the Monitoring and Treatment Plan. A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all finds are subject, if feasible, to avoidance/preservation in place as treatment. Should any resource(s) not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by SMBMI. All plans for analysis shall be reviewed and approved by the applicant and SMBMI prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of SMBMI that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by SMBMI, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and SMBMI. All reburials are subject to a reburial agreement that shall be developed between the landowner and SMBMI outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with SMBMI to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees. All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and SMBMI for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and SMBMI.

GBMI-KN-CUL-4 *Unanticipated Discovery of Human Remains and Associated Funerary Objects*. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has

reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

GBMI-KN-CUL-5 *Resource Assessment and Continuation of Work Protocol.* Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

GBMI-KN-CUL-6 *Kizh-Gabrieleno Procedures for Burials and Funerary Remains*. If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

GBMI-KN-CUL-7 *Treatment Measures*. Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of

recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

GBMI-KN-CUL-8 *Professional Standards.* Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

SMBMI-CUL-4 Inadvertent Discoveries of Human Remains/Funerary Objects. In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately who shall notify SMBMI, the applicant/developer, and the Lead Agency. The Lead Agency and the applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98. Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties. It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

III. GEOLOGY AND SOILS

GEO-1 *Conduct Paleontological Sensitivity Training for Construction Personnel.* The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training will include a handout and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and, the general steps a qualified professional paleontologist would follow in conducting a salvage investigation if one is necessary.

GEO-2 *Conduct Periodic Paleontological Spot Checks during grading and earth-moving activities.* The Applicant shall retain a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, shall conduct periodic Paleontological Spot Checks beginning at depths below six (6) feet to determine if construction excavations have extended into older Quaternary deposits. After the initial Paleontological Spot Check, further periodic checks will be conducted at the discretion of the qualified paleontologist. If the qualified paleontologist determines that construction excavations have extended into the older Quaternary deposits, construction monitoring for Paleontological Resources will be required. The Applicant shall retain a qualified paleontological monitor, who will work under the guidance and direction of a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology. The paleontological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into the older Pleistocene alluvial deposits. Multiple earth-moving construction activities may require multiple paleontological monitors. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known paleontological resources and/or unique geological features, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of paleontological resources and/or unique geological features encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the qualified professional paleontologist.

GEO-3 *Cease Ground-Disturbing Activities and Implement Treatment Plan if Paleontological Resources Are Encountered.* In the event that paleontological resources and or unique geological features are unearthed during ground-disturbing activities, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until appropriate paleontological treatment plan has been approved by the Applicant and the City. Work shall be allowed to continue outside of the buffer area. The Applicant and City shall coordinate with a professional paleontologist, who meets the qualifications set forth by the Society of Vertebrate Paleontology, to develop an appropriate treatment plan for the resources. Treatment may include implementation of paleontological salvage excavations to remove the resource along with subsequent laboratory processing and analysis or preservation in place. At the paleontologist's discretion and to reduce construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing.

GEO-4 *Prepare Report Upon Completion of Monitoring Services.* Upon completion of the above activities, the professional paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted to the Applicant, the City, the Natural History Museums of Los Angeles County, and representatives of other appropriate or

concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.

IV. TRANSPORTATION/TRAFFIC

TRA-1 Improvement to the impacted intersections will be performed as follows at the time the City determines that such improvements are needed to maintain desired service levels:

- Scenic Drive/ Inland Center Drive: New traffic signal.

Prior to the issuance of a certificate of occupancy the project proponent shall be required to pay to the City of San Bernardino a fair-share contribution for the above improvements.

TRA-2 Improvement to the impacted intersections will be performed as follows at the time the City determines that such improvements are needed to maintain desired service levels:

- I-215 Southbound Ramps/ Inland Center Drive: Restripe the southbound off-ramp approach from one left-turn lane, one shared left-turn/ through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane.

Prior to the issuance of a certificate of occupancy the project proponent shall be required to pay to the City of San Bernardino a fair-share contribution for the above improvements.

TRA-3 Improvement to the impacted intersections will be performed as follows at the time the City determines that such improvements are needed to maintain desired service levels:

- I-215 Northbound Ramps/ Inland Center Drive: Restripe the northbound off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane.

Prior to the issuance of a certificate of occupancy the project proponent shall be required to pay to the City of San Bernardino a fair-share contribution for the above improvements.

V. TRIBAL CULTURAL RESOURCES

GBMI-KN-TCR-1 *Retain a Native American Monitor/Consultant.* The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians - Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the Project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

GBMI-KN-TCR-2 *Unanticipated Discovery of Tribal Cultural and Archeological Resources.* Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources.

GBMI-KN-TCR-3 *Public Resources Code Sections 21083.2(b) for Unique Archaeological Resources.* Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

GBMI-KN-TCR-4 *Unanticipated Discovery of Human Remains and Associated Funerary Objects.* Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

GBMI-KN-TCR-5 *Resource Assessment and Continuation of Work Protocol.* Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will

notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

GBMI-KN-TCR-6 *Kizh-Gabrieleno Procedures for Burials and Funerary Remains*. If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

GBMI-KN-TCR-7 *Treatment Measures*. Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

GBMI-KN-TCR-8 *Professional Standards*. Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern

California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

SMBMI-TCR-1 *Archaeological Monitoring.* Due to the heightened cultural sensitivity of the proposed project area, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

SMBMI-TCR-2 *Tribal Monitoring.* Due to the heightened cultural sensitivity of the proposed project area, Tribal monitors representing the San Manuel Band of Mission Indians shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of Tribal monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist, as detailed within SMBMI-TCR-1, and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and agree to the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

SMBMI-TCR-3 *Treatment of Cultural Resources.* If a pre-contact cultural resource is discovered during project implementation, ground disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Archaeological Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the Monitoring and Treatment Plan. A research design shall be developed and will include a plan to evaluate the resource

for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all finds are subject, if feasible, to avoidance/preservation in place as treatment. Should any resource(s) not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by SMBMI. All plans for analysis shall be reviewed and approved by the applicant and SMBMI prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of SMBMI that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by SMBMI, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and SMBMI. All reburials are subject to a reburial agreement that shall be developed between the landowner and SMBMI outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with SMBMI to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees. All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and SMBMI for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and SMBMI.

SMBMI-TCR-4 Inadvertent Discoveries of Human Remains/Funerary Objects. In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately who shall notify SMBMI, the applicant/developer, and the Lead Agency. The Lead Agency and the applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code §

7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98. Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties. It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

REFERENCES. The following references cited in the Initial Study are on file in the Development Services Department or readily available to the public via the referenced agency.

1 City of San Bernardino. General Plan Update and Associated Specific Plans EIR. P. 55. January, 2012. http://www.sbcity.org/civicax/filebank/blobdload.aspx?BlobID=12560 [Accessed August 2018].

2 City of San Bernardino. General Plan. "*Land Use Designations*". P. 2-15. November 1, 2005.

3 State of California Department of Transportation. California Scenic Highway Mapping System. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ [Accessed August 2018].

4 California Important Farmland Maps. 2010. South San Bernardino County ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/ [Accessed August 2018].

5 Department of Conservation. Division of Land Resources Protection. Map of San Bernardino County Williamson Act Lands. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/sanbernardino_so_12_13_WA.pdf [Accessed August 2018].

6 California Department of Forestry and Fire Protection. Fire and Resource Assessment Program. http://frap.fire.ca.gov/data/frapgismaps/pdfs/fvegwhr13b_map.pdf [Accessed August 2018].

7 South Coast Air Quality Management District (SCAQMD) 2016. *Final 2016 Air Quality Management Plan.* Diamon Bar, CA. March 2017.

8 SCAQMD 2018. "Air Quality Analysis Handbook." 1993 Air Quality Analysis Handbook (Updated). SCAQMD, Regulations, CEQA., n.d. Web. Accessed August 21, 2017. <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>

9 SCAQMD 2018. *National Ambient Air Quality Standards and California Ambient Air Quality Standards Attainment Status for South Coast Air Basin.* SCAQMD, Air Quality., September 2018. Web. November 2018. <http://www.aqmd.gov/home/air-quality/clean-air-plans>

10 SCAQMD. *Final Localized Significance Threshold Methodology*. 2008.: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2>

11 SCAQMD 2016. *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*. Available online at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

12 SCAQMD *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution.* Diamond Bar, CA. August 2003.

13 See note 8.

14 SCAQMD. Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis. Diamond Bar, CA. August 2003.

15 Office of Environmental Health Hazard Assessment (OEHHA). *Air Toxics Hot Spots Program Guidance Manual.* Sacramento, CA. February 2015.

16 Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. San Francisco, CA. June 2010, updated May 2017.

17 SCAQMD 2003 Air Quality Management Plan. 1993. Available online at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/2003-aqmp>

18 City of San Bernardino. General Plan Update and Associated Specific Plans EIR. January, 2012. https://www.ci.san-bernardino.ca.us/DC-HANDS%20OFF/19.17/Hillside%20Management.pdf [Accessed August 2018].

19 California Department of Conservation. Regional Geologic Hazards and Mapping Program. http://www.conservation.ca.gov/cgs/rghm/ap/Pages/Index.aspx [Accessed August 2018].

20 SCAQMD. *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15*. Diamond Bar, CA. September 28, 2010. Available online at: < http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf>

21 California Air Resources Board (CARB) *2017 Climate Change Scoping Plan*. Sacramento, CA. December 2017.

22 California Environmental Protection Agency. Cortese List Data Resources. https://calepa.ca.gov/sitecleanup/corteselist/ [Accessed August 2018].

[23] California Department of Toxic Substances Control. Hazardous Waste and Substances Site List. https://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm [Accessed August 2018].
[24] California State Water Resources Control Board. Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit. www.calepa.ca.gov/SiteCleanup/CorteseList/CurrentList.pdf [Accessed August 2018].
[25] California State Water Resources Control Board. List of Active CDO and CAO. www.calepa.ca.gov/SiteCleanup/CorteseList/CDOCAOList.xls [Accessed August 2018].
[26] California Department of Toxic Substances Control. Hazardous Facilities Subject to Corrective Action. www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm#Facilities [Accessed August 2018].
[27] California State Water Resources Control Board. GeoTracker. geotracker.waterboards.ca.gov [Accessed August 2018].
[28] California Department of Forestry and Fire. San Bernardino South West Fire Hazards Safety Zones, Local responsibility Area. November 2008.
[29] Huitt-Zollars, Inc. Water Quality Management Plan for: Inland Center Industrial. 2014.
[30] Huitt-Zollars, Inc. Preliminary Hydrology Report for Inland Center Industrial. January 15, 2015.
[31] Federal Emergency Management Agency. Flood Insurance Rate Map. Map Number 06071C8683J. http://msc.fema.gov/portal [Accessed August 2018].
[32] City of San Bernardino. General Plan: Safety Element. Figure S-2: Seven Oaks Dam Inundation Map. November 2005. [Accessed August 2018].
[33] San Bernardino County Flood Control District. Flood Control System Number Index and General File Codes. October 2011. http://www.sbcounty.gov/dpw/floodcontrol/pdf/district_facilities_list.pdf [Accessed August 2018].
[34] U.S. Fish and Wildlife Service. Conservation Plans and Agreements Database. http://ecos.fws.gov/conserv_plans/PlanReportSelect?region=8&type=HCP [Accessed August 2018].
[35] City of San Bernardino. General Plan Update and Associated Specific Plans EIR. January, 2012. https://www.ci.san-bernardino.ca.us/DC-HANDS%20OFF/19.17/Hillside%20Management.pdf [Accessed August 2018].
[36] Caltrans. Technical Noise Supplement to the Traffic Analysis Protocol. Sacramento, CA. September 2013.
[37] Ibid.
[38] City of San Bernardino. General Plan Noise Element. San Bernardino, CA. November 1, 2005.
[39] Caltrans. *Transportation and Construction Vibration Guidance Manual*. Prepared by the California Department of Transportation: Division of Environmental Analysis Environmental Engineering – Hazardous Waste, Air, Noise, Paleontology Office. Report No. CT-HWANP-RT-13-069.25.3. Sacramento, CA. September 2013.
[40] See note 39.
[41] Ibid.
[42] See note 42.
[43] Federal Transit Administration. *Transit Noise and Vibration Assessment*. FTA-VA-90-1003-06. Washington, DC. May 2006.
[44] See note 39.
[45] See note 39.
[46] Federal Highway Works Administration. "Construction Noise Handbook, Chapter 9 Construction Equipment Noise Levels and Ranges." *U.S. Department of Transportation FHWA*. August 24, 2017. Accessed April 2018 at: http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm
[47] RK Engineering Group, Inc. Olympic Real Estate Holdings Light Industrial Project Traffic Impact Study. October 8, 2018.
[48] City of San Bernardino. Traffic Impact Study Guidelines. September 24, 2004.
[49] City of San Bernardino Website. Water Reclamation and Treatment Information. https://www.ci.san-bernardino.ca.us/sbmwd_divisions/water_reclamation/ [Accessed September 2018].
[50] San Bernardino Municipal Water District. 2015 San Bernardino Valley Regional Urban Water Quality Management Plan. June 2016.

[51] CalRecycle. Jurisdiction Disposal by Facility. http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx [Accessed September 2018].

[52] CalRecycle. Facility/Site Summary Details: Olinda Alpha Sanitary Landfill (30-AB-0035) http://www.calrecycle.ca.gov/SWFacilities/Directory/30-AB-0035/ [Accessed September 2018].

[53] CalRecycle. Facility/Site Summary Details: Lamb Canyon Sanitary Landfill (33-AA-0007) http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0007/ [Accessed September 2018].

[54] CalFire: Office of the State Fire Marshall. Fire Hazard Severity Zones Maps. https://osfm.fire.ca.gov/media/5951/san_bernardino.pdf [Accessed September 2018].

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Olympic Holdings Inland Center Warehouse

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
General Light Industry	96.38	1000sqft	2.21	96,375.00	0
Other Non-Asphalt Surfaces	22.98	1000sqft	0.53	22,984.00	0
Parking Lot	103.15	1000sqft	2.37	103,151.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Olympic Holdings Inland Center Warehouse - South Coast Air Basin, Annual

Project Characteristics -

Land Use -

Construction Phase - No Demolition; Trenching for Drainage Connection.

Grading - 5.25-Acre Site

Vehicle Trips - Trip Gen Rates per Project TIA. 25 Mile Trip Length

Operational Off-Road Equipment - One Forklift

Fleet Mix - Fleet Mix per Project TIA

Construction Off-road Equipment Mitigation - 3x Daily Watering

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	67
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	67
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LDT2	0.20	0.20

tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	OBUS	2.0270e-003	0.00

tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblGrading	AcresOfGrading	10.00	5.25
tblGrading	AcresOfGrading	0.00	5.25
tblLandUse	LandUseSquareFeet	96,380.00	96,375.00
tblLandUse	LandUseSquareFeet	22,980.00	22,984.00
tblLandUse	LandUseSquareFeet	103,150.00	103,151.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	CW_TL	16.60	25.00

tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	ST_TR	1.32	4.96
tblVehicleTrips	ST_TR	2.46	4.96
tblVehicleTrips	SU_TR	0.68	4.96
tblVehicleTrips	SU_TR	1.05	4.96
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	4.96

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3943	3.5397	2.8538	5.9100e-003	0.3005	0.1815	0.4820	0.1223	0.1701	0.2924	0.0000	531.8130	531.8130	0.0925	0.0000	534.1246
2020	0.5247	0.2643	0.2743	5.0000e-004	9.4700e-003	0.0138	0.0233	2.5400e-003	0.0129	0.0154	0.0000	44.6650	44.6650	9.7100e-003	0.0000	44.9077
Maximum	**0.5247**	**3.5397**	**2.8538**	**5.9100e-003**	**0.3005**	**0.1815**	**0.4820**	**0.1223**	**0.1701**	**0.2924**	**0.0000**	**531.8130**	**531.8130**	**0.0925**	**0.0000**	**534.1246**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3943	3.5397	2.8537	5.9100e-003	0.1959	0.1815	0.3774	0.0665	0.1701	0.2365	0.0000	531.8127	531.8127	0.0925	0.0000	534.1242
2020	0.5247	0.2643	0.2743	5.0000e-004	9.4700e-003	0.0138	0.0233	2.5400e-003	0.0129	0.0154	0.0000	44.6650	44.6650	9.7100e-003	0.0000	44.9077
Maximum	**0.5247**	**3.5397**	**2.8537**	**5.9100e-003**	**0.1959**	**0.1815**	**0.3774**	**0.0665**	**0.1701**	**0.2365**	**0.0000**	**531.8127**	**531.8127**	**0.0925**	**0.0000**	**534.1242**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.74**	**0.00**	**20.70**	**44.74**	**0.00**	**18.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	1.1067	1.1067
2	4-1-2019	6-30-2019	0.9300	0.9300
3	7-1-2019	9-30-2019	0.9402	0.9402
4	10-1-2019	12-31-2019	0.9431	0.9431
5	1-1-2020	3-31-2020	0.7927	0.7927
		Highest	1.1067	1.1067

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4276	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0500e-003
Energy	0.0170	0.1545	0.1298	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	509.5853	509.5853	0.0173	6.0000e-003	511.8062
Mobile	0.3143	3.6694	5.0521	0.0236	1.6380	0.0272	1.6652	0.4395	0.0257	0.4652	0.0000	2,205.3744	2,205.3744	0.0945	0.0000	2,207.7364
Offroad	0.0187	0.1687	0.1534	2.0000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	17.4579	17.4579	5.6500e-003	0.0000	17.5990
Waste						0.0000	0.0000		0.0000	0.0000	25.3921	0.0000	25.3921	1.5006	0.0000	62.9080
Water						0.0000	0.0000		0.0000	0.0000	7.4092	99.2052	106.6144	0.7651	0.0188	131.3490
Total	**0.7776**	**3.9926**	**5.3383**	**0.0247**	**1.6380**	**0.0515**	**1.6896**	**0.4395**	**0.0490**	**0.4885**	**32.8014**	**2,831.6284**	**2,864.4298**	**2.3832**	**0.0248**	**2,931.4047**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4276	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0500e-003
Energy	0.0170	0.1545	0.1298	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	509.5853	509.5853	0.0173	6.0000e-003	511.8062
Mobile	0.3143	3.6694	5.0521	0.0236	1.6380	0.0272	1.6652	0.4395	0.0257	0.4652	0.0000	2,205.3744	2,205.3744	0.0945	0.0000	2,207.7364
Offroad	0.0187	0.1687	0.1534	2.0000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	17.4579	17.4579	5.6500e-003	0.0000	17.5990
Waste						0.0000	0.0000		0.0000	0.0000	25.3921	0.0000	25.3921	1.5006	0.0000	62.9080
Water						0.0000	0.0000		0.0000	0.0000	7.4092	99.2052	106.6144	0.7651	0.0188	131.3490
Total	**0.7776**	**3.9926**	**5.3383**	**0.0247**	**1.6380**	**0.0515**	**1.6896**	**0.4395**	**0.0490**	**0.4885**	**32.8014**	**2,831.6284**	**2,864.4298**	**2.3832**	**0.0248**	**2,931.4047**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Drainage Trenching	Trenching	1/1/2019	1/14/2019	5	10	
2	Site Preparation	Site Preparation	1/15/2019	1/28/2019	5	10	
3	Grading	Grading	1/29/2019	2/25/2019	5	20	
4	Building Construction	Building Construction	2/26/2019	1/13/2020	5	230	
5	Paving	Paving	1/14/2020	2/10/2020	5	20	
6	Architectural Coating	Architectural Coating	2/11/2020	3/9/2020	5	20	

Acres of Grading (Site Preparation Phase): 5.25

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 2.9

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 153,563; Non-Residential Outdoor: 51,188; Striped Parking Area: 7,568 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Drainage Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Drainage Trenching	Excavators	3	8.00	158	0.38
Drainage Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Drainage Trenching	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	95.00	37.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Drainage Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0176	0.1789	0.1103	1.9000e-004		8.9700e-003	8.9700e-003		8.3500e-003	8.3500e-003	0.0000	17.3132	17.3132	4.8200e-003	0.0000	17.4336
Total	**0.0176**	**0.1789**	**0.1103**	**1.9000e-004**		**8.9700e-003**	**8.9700e-003**		**8.3500e-003**	**8.3500e-003**	**0.0000**	**17.3132**	**17.3132**	**4.8200e-003**	**0.0000**	**17.4336**

3.2 Drainage Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.9000e-004	3.1300e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7652	0.7652	2.0000e-005	0.0000	0.7658
Total	**3.6000e-004**	**2.9000e-004**	**3.1300e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7652**	**0.7652**	**2.0000e-005**	**0.0000**	**0.7658**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0176	0.1789	0.1103	1.9000e-004		8.9700e-003	8.9700e-003		8.3500e-003	8.3500e-003	0.0000	17.3131	17.3131	4.8200e-003	0.0000	17.4336
Total	**0.0176**	**0.1789**	**0.1103**	**1.9000e-004**		**8.9700e-003**	**8.9700e-003**		**8.3500e-003**	**8.3500e-003**	**0.0000**	**17.3131**	**17.3131**	**4.8200e-003**	**0.0000**	**17.4336**

3.2 Drainage Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.9000e-004	3.1300e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7652	0.7652	2.0000e-005	0.0000	0.7658
Total	**3.6000e-004**	**2.9000e-004**	**3.1300e-003**	**1.0000e-005**	**8.2000e-004**	**1.0000e-005**	**8.3000e-004**	**2.2000e-004**	**1.0000e-005**	**2.2000e-004**	**0.0000**	**0.7652**	**0.7652**	**2.0000e-005**	**0.0000**	**0.7658**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0931	0.0000	0.0931	0.0500	0.0000	0.0500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0931**	**0.0120**	**0.1051**	**0.0500**	**0.0110**	**0.0610**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.5000e-004	3.7600e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9182	0.9182	3.0000e-005	0.0000	0.9189
Total	**4.3000e-004**	**3.5000e-004**	**3.7600e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9182**	**0.9182**	**3.0000e-005**	**0.0000**	**0.9189**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0307	0.0000	0.0307	0.0165	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0307**	**0.0120**	**0.0427**	**0.0165**	**0.0110**	**0.0275**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	3.5000e-004	3.7600e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9182	0.9182	3.0000e-005	0.0000	0.9189
Total	**4.3000e-004**	**3.5000e-004**	**3.7600e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9182**	**0.9182**	**3.0000e-005**	**0.0000**	**0.9189**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0630	0.0000	0.0630	0.0334	0.0000	0.0334	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530
Total	**0.0258**	**0.2835**	**0.1629**	**3.0000e-004**	**0.0630**	**0.0140**	**0.0770**	**0.0334**	**0.0129**	**0.0463**	**0.0000**	**26.6423**	**26.6423**	**8.4300e-003**	**0.0000**	**26.8530**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316
Total	**7.2000e-004**	**5.8000e-004**	**6.2600e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5304**	**1.5304**	**5.0000e-005**	**0.0000**	**1.5316**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0208	0.0000	0.0208	0.0110	0.0000	0.0110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530
Total	**0.0258**	**0.2835**	**0.1629**	**3.0000e-004**	**0.0208**	**0.0140**	**0.0348**	**0.0110**	**0.0129**	**0.0239**	**0.0000**	**26.6422**	**26.6422**	**8.4300e-003**	**0.0000**	**26.8530**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316
Total	**7.2000e-004**	**5.8000e-004**	**6.2600e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.5304**	**1.5304**	**5.0000e-005**	**0.0000**	**1.5316**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2609	2.3292	1.8966	2.9700e-003		0.1425	0.1425		0.1340	0.1340	0.0000	259.7901	259.7901	0.0633	0.0000	261.3723
Total	**0.2609**	**2.3292**	**1.8966**	**2.9700e-003**		**0.1425**	**0.1425**		**0.1340**	**0.1340**	**0.0000**	**259.7901**	**259.7901**	**0.0633**	**0.0000**	**261.3723**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0162	0.4787	0.1221	1.0400e-003	0.0258	3.1300e-003	0.0289	7.4300e-003	3.0000e-003	0.0104	0.0000	100.6687	100.6687	7.0600e-003	0.0000	100.8453
Worker	0.0506	0.0403	0.4384	1.1900e-003	0.1152	9.2000e-004	0.1161	0.0306	8.5000e-004	0.0314	0.0000	107.1007	107.1007	3.3600e-003	0.0000	107.1846
Total	**0.0668**	**0.5191**	**0.5605**	**2.2300e-003**	**0.1409**	**4.0500e-003**	**0.1450**	**0.0380**	**3.8500e-003**	**0.0419**	**0.0000**	**207.7694**	**207.7694**	**0.0104**	**0.0000**	**208.0299**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2609	2.3292	1.8966	2.9700e-003		0.1425	0.1425		0.1340	0.1340	0.0000	259.7898	259.7898	0.0633	0.0000	261.3720
Total	**0.2609**	**2.3292**	**1.8966**	**2.9700e-003**		**0.1425**	**0.1425**		**0.1340**	**0.1340**	**0.0000**	**259.7898**	**259.7898**	**0.0633**	**0.0000**	**261.3720**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0162	0.4787	0.1221	1.0400e-003	0.0258	3.1300e-003	0.0289	7.4300e-003	3.0000e-003	0.0104	0.0000	100.6687	100.6687	7.0600e-003	0.0000	100.8453
Worker	0.0506	0.0403	0.4384	1.1900e-003	0.1152	9.2000e-004	0.1161	0.0306	8.5000e-004	0.0314	0.0000	107.1007	107.1007	3.3600e-003	0.0000	107.1846
Total	**0.0668**	**0.5191**	**0.5605**	**2.2300e-003**	**0.1409**	**4.0500e-003**	**0.1450**	**0.0380**	**3.8500e-003**	**0.0419**	**0.0000**	**207.7694**	**207.7694**	**0.0104**	**0.0000**	**208.0299**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.5400e-003	0.0863	0.0758	1.2000e-004		5.0300e-003	5.0300e-003		4.7300e-003	4.7300e-003	0.0000	10.4225	10.4225	2.5400e-003	0.0000	10.4860
Total	**9.5400e-003**	**0.0863**	**0.0758**	**1.2000e-004**		**5.0300e-003**	**5.0300e-003**		**4.7300e-003**	**4.7300e-003**	**0.0000**	**10.4225**	**10.4225**	**2.5400e-003**	**0.0000**	**10.4860**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0179	4.5000e-003	4.0000e-005	1.0500e-003	9.0000e-005	1.1400e-003	3.0000e-004	8.0000e-005	3.9000e-004	0.0000	4.0734	4.0734	2.7000e-004	0.0000	4.0802
Worker	1.9000e-003	1.4600e-003	0.0162	5.0000e-005	4.6900e-003	4.0000e-005	4.7300e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.2264	4.2264	1.2000e-004	0.0000	4.2294
Total	**2.4600e-003**	**0.0193**	**0.0207**	**9.0000e-005**	**5.7400e-003**	**1.3000e-004**	**5.8700e-003**	**1.5500e-003**	**1.1000e-004**	**1.6700e-003**	**0.0000**	**8.2998**	**8.2998**	**3.9000e-004**	**0.0000**	**8.3096**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.5400e-003	0.0863	0.0758	1.2000e-004		5.0300e-003	5.0300e-003		4.7300e-003	4.7300e-003	0.0000	10.4224	10.4224	2.5400e-003	0.0000	10.4860
Total	**9.5400e-003**	**0.0863**	**0.0758**	**1.2000e-004**		**5.0300e-003**	**5.0300e-003**		**4.7300e-003**	**4.7300e-003**	**0.0000**	**10.4224**	**10.4224**	**2.5400e-003**	**0.0000**	**10.4860**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-004	0.0179	4.5000e-003	4.0000e-005	1.0500e-003	9.0000e-005	1.1400e-003	3.0000e-004	8.0000e-005	3.9000e-004	0.0000	4.0734	4.0734	2.7000e-004	0.0000	4.0802
Worker	1.9000e-003	1.4600e-003	0.0162	5.0000e-005	4.6900e-003	4.0000e-005	4.7300e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	4.2264	4.2264	1.2000e-004	0.0000	4.2294
Total	**2.4600e-003**	**0.0193**	**0.0207**	**9.0000e-005**	**5.7400e-003**	**1.3000e-004**	**5.8700e-003**	**1.5500e-003**	**1.1000e-004**	**1.6700e-003**	**0.0000**	**8.2998**	**8.2998**	**3.9000e-004**	**0.0000**	**8.3096**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	3.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1902**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	5.1000e-004	5.6900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4829	1.4829	4.0000e-005	0.0000	1.4840
Total	**6.7000e-004**	**5.1000e-004**	**5.6900e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4829**	**1.4829**	**4.0000e-005**	**0.0000**	**1.4840**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	3.1000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0167**	**0.1407**	**0.1465**	**2.3000e-004**		**7.5300e-003**	**7.5300e-003**		**6.9300e-003**	**6.9300e-003**	**0.0000**	**20.0282**	**20.0282**	**6.4800e-003**	**0.0000**	**20.1901**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	5.1000e-004	5.6900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4829	1.4829	4.0000e-005	0.0000	1.4840
Total	**6.7000e-004**	**5.1000e-004**	**5.6900e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4829**	**1.4829**	**4.0000e-005**	**0.0000**	**1.4840**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4921					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**0.4945**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	6.5000e-004	7.2100e-003	2.0000e-005	2.0800e-003	2.0000e-005	2.1000e-003	5.5000e-004	1.0000e-005	5.7000e-004	0.0000	1.8784	1.8784	5.0000e-005	0.0000	1.8798
Total	**8.5000e-004**	**6.5000e-004**	**7.2100e-003**	**2.0000e-005**	**2.0800e-003**	**2.0000e-005**	**2.1000e-003**	**5.5000e-004**	**1.0000e-005**	**5.7000e-004**	**0.0000**	**1.8784**	**1.8784**	**5.0000e-005**	**0.0000**	**1.8798**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4921					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	**0.4945**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5582**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5000e-004	6.5000e-004	7.2100e-003	2.0000e-005	2.0800e-003	2.0000e-005	2.1000e-003	5.5000e-004	1.0000e-005	5.7000e-004	0.0000	1.8784	1.8784	5.0000e-005	0.0000	1.8798
Total	**8.5000e-004**	**6.5000e-004**	**7.2100e-003**	**2.0000e-005**	**2.0800e-003**	**2.0000e-005**	**2.1000e-003**	**5.5000e-004**	**1.0000e-005**	**5.7000e-004**	**0.0000**	**1.8784**	**1.8784**	**5.0000e-005**	**0.0000**	**1.8798**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3143	3.6694	5.0521	0.0236	1.6380	0.0272	1.6652	0.4395	0.0257	0.4652	0.0000	2,205.3744	2,205.3744	0.0945	0.0000	2,207.7364
Unmitigated	0.3143	3.6694	5.0521	0.0236	1.6380	0.0272	1.6652	0.4395	0.0257	0.4652	0.0000	2,205.3744	2,205.3744	0.0945	0.0000	2,207.7364

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	478.04	478.04	478.04	4,057,091	4,057,091
General Office Building	29.76	29.76	29.76	221,435	221,435
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	507.80	507.80	507.80	4,278,526	4,278,526

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	25.00	25.00	25.00	59.00	28.00	13.00	92	5	3
General Office Building	25.00	25.00	25.00	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	25.00	25.00	25.00	0.00	0.00	0.00	0	0	0
Parking Lot	25.00	25.00	25.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
General Office Building	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
Other Non-Asphalt Surfaces	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
Parking Lot	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	341.3803	341.3803	0.0141	2.9200e-003	342.6016
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	341.3803	341.3803	0.0141	2.9200e-003	342.6016
NaturalGas Mitigated	0.0170	0.1545	0.1298	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	168.2051	168.2051	3.2200e-003	3.0800e-003	169.2046
NaturalGas Unmitigated	0.0170	0.1545	0.1298	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	168.2051	168.2051	3.2200e-003	3.0800e-003	169.2046

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.13122e+006	0.0169	0.1535	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	167.0940	167.0940	3.2000e-003	3.0600e-003	168.0870
General Office Building	20820	1.1000e-004	1.0200e-003	8.6000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1110	1.1110	2.0000e-005	2.0000e-005	1.1176
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0170**	**0.1545**	**0.1298**	**9.3000e-004**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**168.2051**	**168.2051**	**3.2200e-003**	**3.0800e-003**	**169.2046**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.13122e+006	0.0169	0.1535	0.1289	9.2000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	167.0940	167.0940	3.2000e-003	3.0600e-003	168.0870
General Office Building	20820	1.1000e-004	1.0200e-003	8.6000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1110	1.1110	2.0000e-005	2.0000e-005	1.1176
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0170**	**0.1545**	**0.1298**	**9.3000e-004**		**0.0118**	**0.0118**		**0.0118**	**0.0118**	**0.0000**	**168.2051**	**168.2051**	**3.2200e-003**	**3.0800e-003**	**169.2046**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	978206	311.6775	0.0129	2.6600e-003	312.7925
General Office Building	57120	18.1997	7.5000e-004	1.6000e-004	18.2648
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	36102.8	11.5031	4.7000e-004	1.0000e-004	11.5443
Total		**341.3803**	**0.0141**	**2.9200e-003**	**342.6016**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	978206	311.6775	0.0129	2.6600e-003	312.7925
General Office Building	57120	18.1997	7.5000e-004	1.6000e-004	18.2648
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	36102.8	11.5031	4.7000e-004	1.0000e-004	11.5443
Total		**341.3803**	**0.0141**	**2.9200e-003**	**342.6016**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4276	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0500e-003
Unmitigated	0.4276	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0492					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3781					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0500e-003
Total	**0.4276**	**3.0000e-005**	**2.9400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.6700e-003**	**5.6700e-003**	**2.0000e-005**	**0.0000**	**6.0500e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0492					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3781					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.6700e-003	5.6700e-003	2.0000e-005	0.0000	6.0500e-003
Total	**0.4276**	**3.0000e-005**	**2.9400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.6700e-003**	**5.6700e-003**	**2.0000e-005**	**0.0000**	**6.0500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	106.6144	0.7651	0.0188	131.3490
Unmitigated	106.6144	0.7651	0.0188	131.3490

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	22.2879 / 0	99.5382	0.7301	0.0179	123.1355
General Office Building	1.0664 / 0.653602	7.0763	0.0350	8.8000e-004	8.2136
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**106.6144**	**0.7651**	**0.0188**	**131.3490**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	22.2879 / 0	99.5382	0.7301	0.0179	123.1355
General Office Building	1.0664 / 0.653602	7.0763	0.0350	8.8000e-004	8.2136
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**106.6144**	**0.7651**	**0.0188**	**131.3490**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	25.3921	1.5006	0.0000	62.9080
Unmitigated	25.3921	1.5006	0.0000	62.9080

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	119.51	24.2595	1.4337	0.0000	60.1018
General Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**25.3921**	**1.5006**	**0.0000**	**62.9080**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	119.51	24.2595	1.4337	0.0000	60.1018
General Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**25.3921**	**1.5006**	**0.0000**	**62.9080**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	1	8.00	260	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.0187	0.1687	0.1534	2.0000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	17.4579	17.4579	5.6500e-003	0.0000	17.5990
Total	**0.0187**	**0.1687**	**0.1534**	**2.0000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**17.4579**	**17.4579**	**5.6500e-003**	**0.0000**	**17.5990**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Olympic Holdings Inland Center Warehouse

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
General Light Industry	96.38	1000sqft	2.21	96,375.00	0
Other Non-Asphalt Surfaces	22.98	1000sqft	0.53	22,984.00	0
Parking Lot	103.15	1000sqft	2.37	103,151.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Olympic Holdings Inland Center Warehouse - South Coast Air Basin, Summer

Project Characteristics -

Land Use -

Construction Phase - No Demolition; Trenching for Drainage Connection.

Grading - 5.25-Acre Site

Vehicle Trips - Trip Gen Rates per Project TIA. 25 Mile Trip Length

Operational Off-Road Equipment - One Forklift

Fleet Mix - Fleet Mix per Project TIA

Construction Off-road Equipment Mitigation - 3x Daily Watering

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	67
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	67
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LDT2	0.20	0.20

tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	OBUS	2.0270e-003	0.00

tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblGrading	AcresOfGrading	10.00	5.25
tblGrading	AcresOfGrading	0.00	5.25
tblLandUse	LandUseSquareFeet	96,380.00	96,375.00
tblLandUse	LandUseSquareFeet	22,980.00	22,984.00
tblLandUse	LandUseSquareFeet	103,150.00	103,151.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	CW_TL	16.60	25.00

tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	ST_TR	1.32	4.96
tblVehicleTrips	ST_TR	2.46	4.96
tblVehicleTrips	SU_TR	0.68	4.96
tblVehicleTrips	SU_TR	1.05	4.96
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	4.96

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4224	45.6339	22.8693	0.0477	18.8242	2.3919	21.2162	10.0442	2.2006	12.2447	0.0000	4,728.6186	4,728.6186	1.1983	0.0000	4,746.9890
2020	49.5323	23.3710	21.6684	0.0473	1.2986	1.1444	2.4431	0.3498	1.0763	1.4260	0.0000	4,649.0354	4,649.0354	0.7190	0.0000	4,667.0048
Maximum	**49.5323**	**45.6339**	**22.8693**	**0.0477**	**18.8242**	**2.3919**	**21.2162**	**10.0442**	**2.2006**	**12.2447**	**0.0000**	**4,728.6186**	**4,728.6186**	**1.1983**	**0.0000**	**4,746.9890**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4224	45.6339	22.8693	0.0477	6.3468	2.3919	8.7387	3.3503	2.2006	5.5509	0.0000	4,728.6186	4,728.6186	1.1983	0.0000	4,746.9890
2020	49.5323	23.3710	21.6684	0.0473	1.2986	1.1444	2.4431	0.3498	1.0763	1.4260	0.0000	4,649.0354	4,649.0354	0.7190	0.0000	4,667.0048
Maximum	**49.5323**	**45.6339**	**22.8693**	**0.0477**	**6.3468**	**2.3919**	**8.7387**	**3.3503**	**2.2006**	**5.5509**	**0.0000**	**4,728.6186**	**4,728.6186**	**1.1983**	**0.0000**	**4,746.9890**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**62.01**	**0.00**	**52.74**	**64.40**	**0.00**	**48.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3435	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Energy	0.0931	0.8466	0.7112	5.0800e-003		0.0643	0.0643		0.0643	0.0643		1,015.9690	1,015.9690	0.0195	0.0186	1,022.0064
Mobile	1.7899	19.2994	29.4543	0.1339	9.1651	0.1494	9.3145	2.4553	0.1411	2.5965		13,776.3232	13,776.3232	0.5767		13,790.7405
Offroad	0.1440	1.2975	1.1803	1.5300e-003		0.0967	0.0967		0.0889	0.0889		148.0308	148.0308	0.0479		149.2277
Total	**4.3706**	**21.4438**	**31.3692**	**0.1405**	**9.1651**	**0.3105**	**9.4756**	**2.4553**	**0.2945**	**2.7498**		**14,940.3730**	**14,940.3730**	**0.6442**	**0.0186**	**14,962.0279**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3435	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Energy	0.0931	0.8466	0.7112	5.0800e-003		0.0643	0.0643		0.0643	0.0643		1,015.9690	1,015.9690	0.0195	0.0186	1,022.0064
Mobile	1.7899	19.2994	29.4543	0.1339	9.1651	0.1494	9.3145	2.4553	0.1411	2.5965		13,776.3232	13,776.3232	0.5767		13,790.7405
Offroad	0.1440	1.2975	1.1803	1.5300e-003		0.0967	0.0967		0.0889	0.0889		148.0308	148.0308	0.0479		149.2277
Total	**4.3706**	**21.4438**	**31.3692**	**0.1405**	**9.1651**	**0.3105**	**9.4756**	**2.4553**	**0.2945**	**2.7498**		**14,940.3730**	**14,940.3730**	**0.6442**	**0.0186**	**14,962.0279**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Olympic Holdings Inland Center Warehouse - South Coast Air Basin, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Drainage Trenching	Trenching	1/1/2019	1/14/2019	5	10	
2	Site Preparation	Site Preparation	1/15/2019	1/28/2019	5	10	
3	Grading	Grading	1/29/2019	2/25/2019	5	20	
4	Building Construction	Building Construction	2/26/2019	1/13/2020	5	230	
5	Paving	Paving	1/14/2020	2/10/2020	5	20	
6	Architectural Coating	Architectural Coating	2/11/2020	3/9/2020	5	20	

Acres of Grading (Site Preparation Phase): 5.25

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 2.9

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 153,563; Non-Residential Outdoor: 51,188; Striped Parking Area: 7,568 (Architectural Coating – sqft)

OffRoad Equipment

Olympic Holdings Inland Center Warehouse - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Drainage Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Drainage Trenching	Excavators	3	8.00	158	0.38
Drainage Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Drainage Trenching	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	95.00	37.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Drainage Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**		**1.7949**	**1.7949**		**1.6697**	**1.6697**		**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Drainage Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	**0.0728**	**0.0510**	**0.6719**	**1.7800e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**177.0542**	**177.0542**	**5.5500e-003**		**177.1930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**		**1.7949**	**1.7949**		**1.6697**	**1.6697**	**0.0000**	**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Drainage Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	**0.0728**	**0.0510**	**0.6719**	**1.7800e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**177.0542**	**177.0542**	**5.5500e-003**		**177.1930**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.6230	0.0000	18.6230	9.9908	0.0000	9.9908			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.6230**	**2.3904**	**21.0134**	**9.9908**	**2.1991**	**12.1899**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315
Total	**0.0874**	**0.0612**	**0.8063**	**2.1300e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4500e-003**	**0.0548**		**212.4651**	**212.4651**	**6.6600e-003**		**212.6315**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1456	0.0000	6.1456	3.2970	0.0000	3.2970			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**6.1456**	**2.3904**	**8.5360**	**3.2970**	**2.1991**	**5.4961**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315
Total	**0.0874**	**0.0612**	**0.8063**	**2.1300e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4500e-003**	**0.0548**		**212.4651**	**212.4651**	**6.6600e-003**		**212.6315**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3005	0.0000	6.3005	3.3403	0.0000	3.3403			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	**2.5805**	**28.3480**	**16.2934**	**0.0297**	**6.3005**	**1.3974**	**7.6978**	**3.3403**	**1.2856**	**4.6259**		**2,936.8068**	**2,936.8068**	**0.9292**		**2,960.0361**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	**0.0728**	**0.0510**	**0.6719**	**1.7800e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**177.0542**	**177.0542**	**5.5500e-003**		**177.1930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0792	0.0000	2.0792	1.1023	0.0000	1.1023			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	**2.5805**	**28.3480**	**16.2934**	**0.0297**	**2.0792**	**1.3974**	**3.4765**	**1.1023**	**1.2856**	**2.3879**	**0.0000**	**2,936.8068**	**2,936.8068**	**0.9292**		**2,960.0361**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	**0.0728**	**0.0510**	**0.6719**	**1.7800e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**177.0542**	**177.0542**	**5.5500e-003**		**177.1930**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1442	4.2473	1.0474	9.5100e-003	0.2368	0.0282	0.2649	0.0682	0.0269	0.0951		1,015.6950	1,015.6950	0.0683		1,017.4035
Worker	0.4612	0.3228	4.2554	0.0113	1.0619	8.3100e-003	1.0702	0.2816	7.6600e-003	0.2893		1,121.3434	1,121.3434	0.0352		1,122.2220
Total	**0.6054**	**4.5701**	**5.3027**	**0.0208**	**1.2986**	**0.0365**	**1.3351**	**0.3498**	**0.0346**	**0.3844**		**2,137.0384**	**2,137.0384**	**0.1035**		**2,139.6255**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1442	4.2473	1.0474	9.5100e-003	0.2368	0.0282	0.2649	0.0682	0.0269	0.0951		1,015.6950	1,015.6950	0.0683		1,017.4035
Worker	0.4612	0.3228	4.2554	0.0113	1.0619	8.3100e-003	1.0702	0.2816	7.6600e-003	0.2893		1,121.3434	1,121.3434	0.0352		1,122.2220
Total	**0.6054**	**4.5701**	**5.3027**	**0.0208**	**1.2986**	**0.0365**	**1.3351**	**0.3498**	**0.0346**	**0.3844**		**2,137.0384**	**2,137.0384**	**0.1035**		**2,139.6255**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1228	3.8969	0.9479	9.4400e-003	0.2368	0.0193	0.2561	0.0682	0.0185	0.0866		1,009.3279	1,009.3279	0.0646		1,010.9429
Worker	0.4261	0.2881	3.8720	0.0109	1.0619	8.1000e-003	1.0700	0.2816	7.4600e-003	0.2891		1,086.6445	1,086.6445	0.0313		1,087.4274
Total	**0.5490**	**4.1850**	**4.8199**	**0.0204**	**1.2986**	**0.0274**	**1.3260**	**0.3498**	**0.0259**	**0.3757**		**2,095.9724**	**2,095.9724**	**0.0959**		**2,098.3703**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1228	3.8969	0.9479	9.4400e-003	0.2368	0.0193	0.2561	0.0682	0.0185	0.0866		1,009.3279	1,009.3279	0.0646		1,010.9429
Worker	0.4261	0.2881	3.8720	0.0109	1.0619	8.1000e-003	1.0700	0.2816	7.4600e-003	0.2891		1,086.6445	1,086.6445	0.0313		1,087.4274
Total	**0.5490**	**4.1850**	**4.8199**	**0.0204**	**1.2986**	**0.0274**	**1.3260**	**0.3498**	**0.0259**	**0.3757**		**2,095.9724**	**2,095.9724**	**0.0959**		**2,098.3703**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.3105					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6670**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0673	0.0455	0.6114	1.7200e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1800e-003	0.0456		171.5755	171.5755	4.9400e-003		171.6991
Total	**0.0673**	**0.0455**	**0.6114**	**1.7200e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1800e-003**	**0.0456**		**171.5755**	**171.5755**	**4.9400e-003**		**171.6991**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.3105					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6670**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0673	0.0455	0.6114	1.7200e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1800e-003	0.0456		171.5755	171.5755	4.9400e-003		171.6991
Total	**0.0673**	**0.0455**	**0.6114**	**1.7200e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1800e-003**	**0.0456**		**171.5755**	**171.5755**	**4.9400e-003**		**171.6991**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.2049					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**49.4471**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0852	0.0576	0.7744	2.1800e-003	0.2124	1.6200e-003	0.2140	0.0563	1.4900e-003	0.0578		217.3289	217.3289	6.2600e-003		217.4855
Total	**0.0852**	**0.0576**	**0.7744**	**2.1800e-003**	**0.2124**	**1.6200e-003**	**0.2140**	**0.0563**	**1.4900e-003**	**0.0578**		**217.3289**	**217.3289**	**6.2600e-003**		**217.4855**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.2049					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**49.4471**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0852	0.0576	0.7744	2.1800e-003	0.2124	1.6200e-003	0.2140	0.0563	1.4900e-003	0.0578		217.3289	217.3289	6.2600e-003		217.4855
Total	**0.0852**	**0.0576**	**0.7744**	**2.1800e-003**	**0.2124**	**1.6200e-003**	**0.2140**	**0.0563**	**1.4900e-003**	**0.0578**		**217.3289**	**217.3289**	**6.2600e-003**		**217.4855**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7899	19.2994	29.4543	0.1339	9.1651	0.1494	9.3145	2.4553	0.1411	2.5965		13,776.3232	13,776.3232	0.5767		13,790.7405
Unmitigated	1.7899	19.2994	29.4543	0.1339	9.1651	0.1494	9.3145	2.4553	0.1411	2.5965		13,776.3232	13,776.3232	0.5767		13,790.7405

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	478.04	478.04	478.04	4,057,091	4,057,091
General Office Building	29.76	29.76	29.76	221,435	221,435
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	507.80	507.80	507.80	4,278,526	4,278,526

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	25.00	25.00	25.00	59.00	28.00	13.00	92	5	3
General Office Building	25.00	25.00	25.00	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	25.00	25.00	25.00	0.00	0.00	0.00	0	0	0
Parking Lot	25.00	25.00	25.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
General Office Building	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
Other Non-Asphalt Surfaces	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
Parking Lot	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0931	0.8466	0.7112	5.0800e-003		0.0643	0.0643		0.0643	0.0643		1,015.9690	1,015.9690	0.0195	0.0186	1,022.0064
NaturalGas Unmitigated	0.0931	0.8466	0.7112	5.0800e-003		0.0643	0.0643		0.0643	0.0643		1,015.9690	1,015.9690	0.0195	0.0186	1,022.0064

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	8578.7	0.0925	0.8411	0.7065	5.0500e-003		0.0639	0.0639		0.0639	0.0639		1,009.2583	1,009.2583	0.0193	0.0185	1,015.2558
General Office Building	57.0411	6.2000e-004	5.5900e-003	4.7000e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7107	6.7107	1.3000e-004	1.2000e-004	6.7506
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0931**	**0.8466**	**0.7112**	**5.0800e-003**		**0.0644**	**0.0644**		**0.0644**	**0.0644**		**1,015.9690**	**1,015.9690**	**0.0195**	**0.0186**	**1,022.0064**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	8.5787	0.0925	0.8411	0.7065	5.0500e-003		0.0639	0.0639		0.0639	0.0639		1,009.2583	1,009.2583	0.0193	0.0185	1,015.2558
General Office Building	0.0570411	6.2000e-004	5.5900e-003	4.7000e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7107	6.7107	1.3000e-004	1.2000e-004	6.7506
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0931**	**0.8466**	**0.7112**	**5.0800e-003**		**0.0644**	**0.0644**		**0.0644**	**0.0644**		**1,015.9690**	**1,015.9690**	**0.0195**	**0.0186**	**1,022.0064**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3435	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Unmitigated	2.3435	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0717					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2100e-003	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Total	**2.3435**	**2.2000e-004**	**0.0235**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0500**	**0.0500**	**1.3000e-004**		**0.0534**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0717					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2100e-003	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Total	**2.3435**	**2.2000e-004**	**0.0235**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0500**	**0.0500**	**1.3000e-004**		**0.0534**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	1	8.00	260	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.1440	1.2975	1.1803	1.5300e-003		0.0967	0.0967		0.0889	0.0889		148.0308	148.0308	0.0479		149.2277
Total	**0.1440**	**1.2975**	**1.1803**	**1.5300e-003**		**0.0967**	**0.0967**		**0.0889**	**0.0889**		**148.0308**	**148.0308**	**0.0479**		**149.2277**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Olympic Holdings Inland Center Warehouse

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	6.00	1000sqft	0.14	6,000.00	0
General Light Industry	96.38	1000sqft	2.21	96,375.00	0
Other Non-Asphalt Surfaces	22.98	1000sqft	0.53	22,984.00	0
Parking Lot	103.15	1000sqft	2.37	103,151.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Olympic Holdings Inland Center Warehouse - South Coast Air Basin, Winter

Project Characteristics -

Land Use -

Construction Phase - No Demolition; Trenching for Drainage Connection.

Grading - 5.25-Acre Site

Vehicle Trips - Trip Gen Rates per Project TIA. 25 Mile Trip Length

Operational Off-Road Equipment - One Forklift

Fleet Mix - Fleet Mix per Project TIA

Construction Off-road Equipment Mitigation - 3x Daily Watering

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	67
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	67
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	HHD	0.03	0.10
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LDT2	0.20	0.20

tblFleetMix	LDT2	0.20	0.20
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD1	0.02	9.0860e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	LHD2	5.8710e-003	3.2970e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MCY	4.7260e-003	4.6470e-003
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MDV	0.12	0.07
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MH	9.5500e-004	0.00
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	MHD	0.02	0.04
tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	OBUS	2.0270e-003	0.00

tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	OBUS	2.0270e-003	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	SBUS	7.0400e-004	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblFleetMix	UBUS	1.9320e-003	0.00
tblGrading	AcresOfGrading	10.00	5.25
tblGrading	AcresOfGrading	0.00	5.25
tblLandUse	LandUseSquareFeet	96,380.00	96,375.00
tblLandUse	LandUseSquareFeet	22,980.00	22,984.00
tblLandUse	LandUseSquareFeet	103,150.00	103,151.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CC_TL	8.40	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CNW_TL	6.90	25.00
tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	CW_TL	16.60	25.00

tblVehicleTrips	CW_TL	16.60	25.00
tblVehicleTrips	ST_TR	1.32	4.96
tblVehicleTrips	ST_TR	2.46	4.96
tblVehicleTrips	SU_TR	0.68	4.96
tblVehicleTrips	SU_TR	1.05	4.96
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.03	4.96

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4310	45.6399	22.7956	0.0467	18.8242	2.3919	21.2162	10.0442	2.2006	12.2447	0.0000	4,631.8032	4,631.8032	1.1979	0.0000	4,650.2382
2020	49.5409	23.3979	21.4099	0.0463	1.2986	1.1447	2.4434	0.3498	1.0765	1.4263	0.0000	4,554.1681	4,554.1681	0.7213	0.0000	4,572.1991
Maximum	**49.5409**	**45.6399**	**22.7956**	**0.0467**	**18.8242**	**2.3919**	**21.2162**	**10.0442**	**2.2006**	**12.2447**	**0.0000**	**4,631.8032**	**4,631.8032**	**1.1979**	**0.0000**	**4,650.2382**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4310	45.6399	22.7956	0.0467	6.3468	2.3919	8.7387	3.3503	2.2006	5.5509	0.0000	4,631.8032	4,631.8032	1.1979	0.0000	4,650.2382
2020	49.5409	23.3979	21.4099	0.0463	1.2986	1.1447	2.4434	0.3498	1.0765	1.4263	0.0000	4,554.1681	4,554.1681	0.7213	0.0000	4,572.1991
Maximum	**49.5409**	**45.6399**	**22.7956**	**0.0467**	**6.3468**	**2.3919**	**8.7387**	**3.3503**	**2.2006**	**5.5509**	**0.0000**	**4,631.8032**	**4,631.8032**	**1.1979**	**0.0000**	**4,650.2382**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**62.01**	**0.00**	**52.74**	**64.40**	**0.00**	**48.96**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3435	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Energy	0.0931	0.8466	0.7112	5.0800e-003		0.0643	0.0643		0.0643	0.0643		1,015.9690	1,015.9690	0.0195	0.0186	1,022.0064
Mobile	1.7480	19.7987	27.2996	0.1283	9.1651	0.1501	9.3152	2.4553	0.1418	2.5971		13,215.9701	13,215.9701	0.5764		13,230.3788
Offroad	0.1440	1.2975	1.1803	1.5300e-003		0.0967	0.0967		0.0889	0.0889		148.0308	148.0308	0.0479		149.2277
Total	**4.3287**	**21.9430**	**29.2145**	**0.1349**	**9.1651**	**0.3112**	**9.4763**	**2.4553**	**0.2952**	**2.7505**		**14,380.0199**	**14,380.0199**	**0.6438**	**0.0186**	**14,401.6662**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.3435	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Energy	0.0931	0.8466	0.7112	5.0800e-003		0.0643	0.0643		0.0643	0.0643		1,015.9690	1,015.9690	0.0195	0.0186	1,022.0064
Mobile	1.7480	19.7987	27.2996	0.1283	9.1651	0.1501	9.3152	2.4553	0.1418	2.5971		13,215.9701	13,215.9701	0.5764		13,230.3788
Offroad	0.1440	1.2975	1.1803	1.5300e-003		0.0967	0.0967		0.0889	0.0889		148.0308	148.0308	0.0479		149.2277
Total	**4.3287**	**21.9430**	**29.2145**	**0.1349**	**9.1651**	**0.3112**	**9.4763**	**2.4553**	**0.2952**	**2.7505**		**14,380.0199**	**14,380.0199**	**0.6438**	**0.0186**	**14,401.6662**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Olympic Holdings Inland Center Warehouse - South Coast Air Basin, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Drainage Trenching	Trenching	1/1/2019	1/14/2019	5	10	
2	Site Preparation	Site Preparation	1/15/2019	1/28/2019	5	10	
3	Grading	Grading	1/29/2019	2/25/2019	5	20	
4	Building Construction	Building Construction	2/26/2019	1/13/2020	5	230	
5	Paving	Paving	1/14/2020	2/10/2020	5	20	
6	Architectural Coating	Architectural Coating	2/11/2020	3/9/2020	5	20	

Acres of Grading (Site Preparation Phase): 5.25

Acres of Grading (Grading Phase): 5.25

Acres of Paving: 2.9

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 153,563; Non-Residential Outdoor: 51,188; Striped Parking Area: 7,568 (Architectural Coating – sqft)

OffRoad Equipment

Olympic Holdings Inland Center Warehouse - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Drainage Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Drainage Trenching	Excavators	3	8.00	158	0.38
Drainage Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Drainage Trenching	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	95.00	37.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	19.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Drainage Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**		**1.7949**	**1.7949**		**1.6697**	**1.6697**		**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Drainage Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	**0.0800**	**0.0560**	**0.6105**	**1.6700e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**166.0751**	**166.0751**	**5.2100e-003**		**166.2053**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**		**1.7949**	**1.7949**		**1.6697**	**1.6697**	**0.0000**	**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

3.2 Drainage Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	**0.0800**	**0.0560**	**0.6105**	**1.6700e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**166.0751**	**166.0751**	**5.2100e-003**		**166.2053**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.6230	0.0000	18.6230	9.9908	0.0000	9.9908			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.6230**	**2.3904**	**21.0134**	**9.9908**	**2.1991**	**12.1899**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463
Total	**0.0960**	**0.0672**	**0.7326**	**2.0000e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4500e-003**	**0.0548**		**199.2901**	**199.2901**	**6.2500e-003**		**199.4463**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1456	0.0000	6.1456	3.2970	0.0000	3.2970			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**6.1456**	**2.3904**	**8.5360**	**3.2970**	**2.1991**	**5.4961**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463
Total	**0.0960**	**0.0672**	**0.7326**	**2.0000e-003**	**0.2012**	**1.5700e-003**	**0.2028**	**0.0534**	**1.4500e-003**	**0.0548**		**199.2901**	**199.2901**	**6.2500e-003**		**199.4463**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3005	0.0000	6.3005	3.3403	0.0000	3.3403			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	**2.5805**	**28.3480**	**16.2934**	**0.0297**	**6.3005**	**1.3974**	**7.6978**	**3.3403**	**1.2856**	**4.6259**		**2,936.8068**	**2,936.8068**	**0.9292**		**2,960.0361**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	**0.0800**	**0.0560**	**0.6105**	**1.6700e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**166.0751**	**166.0751**	**5.2100e-003**		**166.2053**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0792	0.0000	2.0792	1.1023	0.0000	1.1023			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	**2.5805**	**28.3480**	**16.2934**	**0.0297**	**2.0792**	**1.3974**	**3.4765**	**1.1023**	**1.2856**	**2.3879**	**0.0000**	**2,936.8068**	**2,936.8068**	**0.9292**		**2,960.0361**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	**0.0800**	**0.0560**	**0.6105**	**1.6700e-003**	**0.1677**	**1.3100e-003**	**0.1690**	**0.0445**	**1.2100e-003**	**0.0457**		**166.0751**	**166.0751**	**5.2100e-003**		**166.2053**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1504	4.2525	1.1599	9.2600e-003	0.2368	0.0286	0.2654	0.0682	0.0274	0.0955		988.4140	988.4140	0.0731		990.2413
Worker	0.5065	0.3547	3.8662	0.0106	1.0619	8.3100e-003	1.0702	0.2816	7.6600e-003	0.2893		1,051.8090	1,051.8090	0.0330		1,052.6334
Total	**0.6570**	**4.6072**	**5.0262**	**0.0198**	**1.2986**	**0.0369**	**1.3356**	**0.3498**	**0.0350**	**0.3848**		**2,040.2230**	**2,040.2230**	**0.1061**		**2,042.8747**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1504	4.2525	1.1599	9.2600e-003	0.2368	0.0286	0.2654	0.0682	0.0274	0.0955		988.4140	988.4140	0.0731		990.2413
Worker	0.5065	0.3547	3.8662	0.0106	1.0619	8.3100e-003	1.0702	0.2816	7.6600e-003	0.2893		1,051.8090	1,051.8090	0.0330		1,052.6334
Total	**0.6570**	**4.6072**	**5.0262**	**0.0198**	**1.2986**	**0.0369**	**1.3356**	**0.3498**	**0.0350**	**0.3848**		**2,040.2230**	**2,040.2230**	**0.1061**		**2,042.8747**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1285	3.8955	1.0504	9.1900e-003	0.2368	0.0196	0.2563	0.0682	0.0187	0.0869		981.8964	981.8964	0.0691		983.6225
Worker	0.4688	0.3164	3.5110	0.0102	1.0619	8.1000e-003	1.0700	0.2816	7.4600e-003	0.2891		1,019.2087	1,019.2087	0.0293		1,019.9421
Total	**0.5972**	**4.2119**	**4.5614**	**0.0194**	**1.2986**	**0.0277**	**1.3263**	**0.3498**	**0.0262**	**0.3760**		**2,001.1051**	**2,001.1051**	**0.0984**		**2,003.5646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1285	3.8955	1.0504	9.1900e-003	0.2368	0.0196	0.2563	0.0682	0.0187	0.0869		981.8964	981.8964	0.0691		983.6225
Worker	0.4688	0.3164	3.5110	0.0102	1.0619	8.1000e-003	1.0700	0.2816	7.4600e-003	0.2891		1,019.2087	1,019.2087	0.0293		1,019.9421
Total	**0.5972**	**4.2119**	**4.5614**	**0.0194**	**1.2986**	**0.0277**	**1.3263**	**0.3498**	**0.0262**	**0.3760**		**2,001.1051**	**2,001.1051**	**0.0984**		**2,003.5646**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.3105					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6670**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**		**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5544	1.6200e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1800e-003	0.0456		160.9277	160.9277	4.6300e-003		161.0435
Total	**0.0740**	**0.0500**	**0.5544**	**1.6200e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1800e-003**	**0.0456**		**160.9277**	**160.9277**	**4.6300e-003**		**161.0435**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.3105					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.6670**	**14.0656**	**14.6521**	**0.0228**		**0.7528**	**0.7528**		**0.6926**	**0.6926**	**0.0000**	**2,207.7334**	**2,207.7334**	**0.7140**		**2,225.5841**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5544	1.6200e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1800e-003	0.0456		160.9277	160.9277	4.6300e-003		161.0435
Total	**0.0740**	**0.0500**	**0.5544**	**1.6200e-003**	**0.1677**	**1.2800e-003**	**0.1689**	**0.0445**	**1.1800e-003**	**0.0456**		**160.9277**	**160.9277**	**4.6300e-003**		**161.0435**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.2049					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**49.4471**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0938	0.0633	0.7022	2.0500e-003	0.2124	1.6200e-003	0.2140	0.0563	1.4900e-003	0.0578		203.8417	203.8417	5.8700e-003		203.9884
Total	**0.0938**	**0.0633**	**0.7022**	**2.0500e-003**	**0.2124**	**1.6200e-003**	**0.2140**	**0.0563**	**1.4900e-003**	**0.0578**		**203.8417**	**203.8417**	**5.8700e-003**		**203.9884**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.2049					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**49.4471**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0938	0.0633	0.7022	2.0500e-003	0.2124	1.6200e-003	0.2140	0.0563	1.4900e-003	0.0578		203.8417	203.8417	5.8700e-003		203.9884
Total	**0.0938**	**0.0633**	**0.7022**	**2.0500e-003**	**0.2124**	**1.6200e-003**	**0.2140**	**0.0563**	**1.4900e-003**	**0.0578**		**203.8417**	**203.8417**	**5.8700e-003**		**203.9884**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7480	19.7987	27.2996	0.1283	9.1651	0.1501	9.3152	2.4553	0.1418	2.5971		13,215.9701	13,215.9701	0.5764		13,230.3788
Unmitigated	1.7480	19.7987	27.2996	0.1283	9.1651	0.1501	9.3152	2.4553	0.1418	2.5971		13,215.9701	13,215.9701	0.5764		13,230.3788

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	478.04	478.04	478.04	4,057,091	4,057,091
General Office Building	29.76	29.76	29.76	221,435	221,435
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	507.80	507.80	507.80	4,278,526	4,278,526

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	25.00	25.00	25.00	59.00	28.00	13.00	92	5	3
General Office Building	25.00	25.00	25.00	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	25.00	25.00	25.00	0.00	0.00	0.00	0	0	0
Parking Lot	25.00	25.00	25.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
General Office Building	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
Other Non-Asphalt Surfaces	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000
Parking Lot	0.543017	0.042315	0.196022	0.067617	0.009086	0.003297	0.039000	0.095000	0.000000	0.000000	0.004647	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0931	0.8466	0.7112	5.0800e-003		0.0643	0.0643		0.0643	0.0643		1,015.9690	1,015.9690	0.0195	0.0186	1,022.0064
NaturalGas Unmitigated	0.0931	0.8466	0.7112	5.0800e-003		0.0643	0.0643		0.0643	0.0643		1,015.9690	1,015.9690	0.0195	0.0186	1,022.0064

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	8578.7	0.0925	0.8411	0.7065	5.0500e-003		0.0639	0.0639		0.0639	0.0639		1,009.2583	1,009.2583	0.0193	0.0185	1,015.2558
General Office Building	57.0411	6.2000e-004	5.5900e-003	4.7000e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7107	6.7107	1.3000e-004	1.2000e-004	6.7506
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0931**	**0.8466**	**0.7112**	**5.0800e-003**		**0.0644**	**0.0644**		**0.0644**	**0.0644**		**1,015.9690**	**1,015.9690**	**0.0195**	**0.0186**	**1,022.0064**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	8.5787	0.0925	0.8411	0.7065	5.0500e-003		0.0639	0.0639		0.0639	0.0639		1,009.2583	1,009.2583	0.0193	0.0185	1,015.2558
General Office Building	0.0570411	6.2000e-004	5.5900e-003	4.7000e-003	3.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004		6.7107	6.7107	1.3000e-004	1.2000e-004	6.7506
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0931**	**0.8466**	**0.7112**	**5.0800e-003**		**0.0644**	**0.0644**		**0.0644**	**0.0644**		**1,015.9690**	**1,015.9690**	**0.0195**	**0.0186**	**1,022.0064**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.3435	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Unmitigated	2.3435	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0717					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2100e-003	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Total	**2.3435**	**2.2000e-004**	**0.0235**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0500**	**0.0500**	**1.3000e-004**		**0.0534**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0717					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2100e-003	2.2000e-004	0.0235	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0500	0.0500	1.3000e-004		0.0534
Total	**2.3435**	**2.2000e-004**	**0.0235**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0500**	**0.0500**	**1.3000e-004**		**0.0534**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	1	8.00	260	89	0.20	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.1440	1.2975	1.1803	1.5300e-003		0.0967	0.0967		0.0889	0.0889		148.0308	148.0308	0.0479		149.2277
Total	**0.1440**	**1.2975**	**1.1803**	**1.5300e-003**		**0.0967**	**0.0967**		**0.0889**	**0.0889**		**148.0308**	**148.0308**	**0.0479**		**149.2277**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Control Pathway

Dispersion Options

Titles

C:\Lakes\ICD_OpsHRA_DR_V1A\ICD_OpsHRA_DR_V1A.isc

Dispersion Options

☑ Regulatory Default ☐ Non-Default Options

Dispersion Coefficient

Urban

Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☑ Period ☐ Annual

Exponential Decay

Half-life of 4 hours will be used

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: ICD_OpsHRA_DR_V1A.err

Source Pathway - Source Inputs

AERMOD

Volume Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dim. [m]	Initial Vertical Dim. [m]
VOLUME	VOL1	471936.32	3771266.87	315.37	4.12	1.10E-6	11.50		2.67	0.96
		South Access 01								
VOLUME	VOL2	471948.08	3771272.70	315.46	4.12	1.10E-6	11.50		2.67	0.96
		South Access 02								
VOLUME	VOL3	471954.02	3771285.01	315.19	4.12	1.10E-6	11.50		2.67	0.96
		South Access 03								
VOLUME	VOL4	471963.92	3771297.11	315.11	4.12	1.10E-6	11.50		2.67	0.96
		South Access 04								
VOLUME	VOL5	471974.47	3771308.77	314.94	4.12	1.10E-6	11.50		2.67	0.96
		South Access 05								
VOLUME	VOL6	471984.81	3771321.52	314.67	4.12	1.98E-6	11.50		2.67	0.96
		South Access 06								
VOLUME	VOL7	471994.93	3771333.40	314.71	4.12	3.66E-7	11.50		2.67	0.96
		North Access 05								
VOLUME	VOL8	472004.16	3771345.27	314.84	4.12	3.66E-7	11.50		2.67	0.96
		North Access 04								
VOLUME	VOL9	472014.72	3771357.59	314.86	4.12	3.66E-7	11.50		2.67	0.96
		North Access 03								
VOLUME	VOL10	472026.34	3771367.04	314.86	4.12	3.66E-7	11.50		2.67	0.96
		North Access 02								
VOLUME	VOL11	472029.42	3771379.35	314.90	4.12	3.66E-7	11.50		2.67	0.96
		North Access 01								
VOLUME	VOL12	471987.01	3771294.91	314.27	4.12	0.00003	28.00	11.28	6.51	5.25
		SouthIDocks1-7								
VOLUME	VOL13	472010.51	3771324.11	314.28	4.12	0.00003	28.00	11.28	6.51	5.25
		NorthDocks8-14								

Source Pathway - Source Inputs

Area Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Length of X Side [m]	Length of Y Side [m]	Orientation Angle from North [deg]	Initial Vertical Dim. [m]
AREA	AREA1	472201.97	3771603.29	314.74	4.12	1.76E-9	18.29	233.00	-140.30	
		ICD - I215 to I St								
AREA	AREA2	472039.29	3771435.15	314.97	4.12	1.75E-9	52.00	18.29	129.05	
		ICD - I St to N Site Access								
AREA	AREA3	472006.89	3771395.26	315.29	4.12	1.32E-9	150.00	18.29	129.46	
		ICD - South of N. Site Access								

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Source Groups

Source Group ID: **OnTravel**	List of Sources in Group (Source Range or Single Sources)
	VOL1
	VOL2
	VOL3
	VOL4
	VOL5
	VOL6
	VOL7
	VOL8
	VOL9
	VOL10
	VOL11

Source Group ID: **OnIdle**	List of Sources in Group (Source Range or Single Sources)
	VOL12
	VOL13

Source Group ID: **OffTrave**	List of Sources in Group (Source Range or Single Sources)
	AREA1
	AREA2
	AREA3

Source Group ID: **ALL**	List of Sources in Group (Source Range or Single Sources)
	All Sources Included

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: T:\CASE\Env\13599_InlandCtrWarehouse\HRA\SCAQMD_MetData\FONT_v9.SFC

Format Type: Default AERMET format

Profile Met Data

Filename: T:\CASE\Env\13599_InlandCtrWarehouse\HRA\SCAQMD_MetData\FONT_v9.PFL

Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 367.00 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2011			
Upper Air		2011			
On-Site		2011			

Data Period

Data Period to Process

Start Date: 1/1/2011 Start Hour: 1 End Date: 12/31/2016 End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Results Summary

C:\Lakes\ICD_OpsHRA_DR_V1A\ICD_OpsHRA_DR_V1A.isc

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.02784	ug/m^3	471972.84	3771325.49	315.06	0.00	315.06	

PM10 - Concentration - Source Group: OFFTRAVE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.00370	ug/m^3	472059.50	3771434.23	314.76	0.00	314.76	

PM10 - Concentration - Source Group: ONIDLE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.01914	ug/m^3	471979.12	3771333.12	315.02	0.00	315.02	

PM10 - Concentration - Source Group: ONTRAVEL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.00607	ug/m^3	471972.84	3771325.49	315.06	0.00	315.06	

HARP2 - HRACalc (dated 16057) 11/19/2018 9:52:42 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home

```
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

**********
TIER 2 SETTINGS
Tier2 not used.

**********

Calculating cancer risk
Cancer risk saved to:
C:\Users\cdugan\Desktop\ICD_RAST\ICD_V1ACancerRisk.csv
HRA ran successfully
```

*HARP - HRACalc v16057 11/19/2018 9:52:42 AM - Cancer Risk

INDEX	GRP1	GRP2	POLID	POLABBRE'	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1			9901	DieselExhP	0.01027	8.89E-06	30YrCancer	*	8.89E-06

SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK	CHICKEN_RISK
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

EGG_RISK	1ST_DRIVE	2ND_DRIVI	PASTURE_(	FISH_CONC	WATER_CONC
0.00E+00	NA	NA	0.00E+00	0.00E+00	0.00E+00

HARP2 - HRACalc (dated 16057) 11/19/2018 11:23:00 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 25

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home

```
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

**********
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Warm

**********
TIER 2 SETTINGS
Tier2 not used.

**********

Calculating cancer risk
Cancer risk saved to:
C:\Users\cdugan\Desktop\ICD_RAST\ICD_V1A_Worker_CancerRisk.csv
HRA ran successfully
```

*HARP - HRACalc v16057 11/19/2018 11:23:00 AM - Cancer Risk

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1			9901	DieselExhP	0.01019	6.31E-07	25YrCancer	*	6.31E-07

SOIL_RISK	DERMAL_R	MMILK_RIS	WATER_RIS	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISI	PIG_RISK
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

CHICKEN_R	EGG_RISK	1ST_DRIVE	2ND_DRIVE	PASTURE_(	FISH_CONC	WATER_CONC
0.00E+00	0.00E+00	NA	NA	0.00E+00	0.00E+00	0.00E+00

**HARP - Health Risk Assessment Module v16057

**11/26/2018

INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	472029.3	3771394	9901	DieselExhP	0.00988	1.04E-05	70YrCancer	*	1.04E-05
2	471922.6	3771265	9901	DieselExhP	0.00942	9.89E-06	70YrCancer	*	9.89E-06
3	472016.2	3771188	9901	DieselExhP	0.00323	3.39E-06	70YrCancer	*	3.39E-06
4	472122.6	3771319	9901	DieselExhP	0.00408	4.28E-06	70YrCancer	*	4.28E-06
5	472028.2	3771395	9901	DieselExhP	0.00973	1.02E-05	70YrCancer	*	1.02E-05
6	472023.1	3771386	9901	DieselExhP	0.01121	1.18E-05	70YrCancer	*	1.18E-05
7	472016.8	3771379	9901	DieselExhP	0.01281	1.34E-05	70YrCancer	*	1.34E-05
8	472010.5	3771371	9901	DieselExhP	0.01468	1.54E-05	70YrCancer	*	1.54E-05
9	472004.2	3771364	9901	DieselExhP	0.01714	1.80E-05	70YrCancer	*	1.80E-05
10	471998	3771356	9901	DieselExhP	0.02023	2.12E-05	70YrCancer	*	2.12E-05
11	471991.7	3771348	9901	DieselExhP	0.02346	2.46E-05	70YrCancer	*	2.46E-05
12	471985.4	3771341	9901	DieselExhP	0.02593	2.72E-05	70YrCancer	*	2.72E-05
13	471979.1	3771333	9901	DieselExhP	0.02738	2.87E-05	70YrCancer	*	2.87E-05
14	471972.8	3771325	9901	DieselExhP	0.02784	2.92E-05	70YrCancer	*	2.92E-05
15	471966.6	3771318	9901	DieselExhP	0.02731	2.87E-05	70YrCancer	*	2.87E-05
16	471960.3	3771310	9901	DieselExhP	0.02559	2.69E-05	70YrCancer	*	2.69E-05
17	471954	3771303	9901	DieselExhP	0.02275	2.39E-05	70YrCancer	*	2.39E-05
18	471947.7	3771295	9901	DieselExhP	0.01965	2.06E-05	70YrCancer	*	2.06E-05
19	471941.5	3771287	9901	DieselExhP	0.01677	1.76E-05	70YrCancer	*	1.76E-05
20	471935.2	3771280	9901	DieselExhP	0.0142	1.49E-05	70YrCancer	*	1.49E-05
21	471928.9	3771272	9901	DieselExhP	0.01168	1.23E-05	70YrCancer	*	1.23E-05
22	471929.8	3771259	9901	DieselExhP	0.01027	1.08E-05	70YrCancer	*	1.08E-05
23	471937	3771253	9901	DieselExhP	0.01006	1.06E-05	70YrCancer	*	1.06E-05
24	471944.2	3771247	9901	DieselExhP	0.00926	9.72E-06	70YrCancer	*	9.72E-06
25	471951.4	3771241	9901	DieselExhP	0.00846	8.88E-06	70YrCancer	*	8.88E-06
26	471958.6	3771235	9901	DieselExhP	0.00772	8.10E-06	70YrCancer	*	8.10E-06
27	471965.8	3771229	9901	DieselExhP	0.007	7.35E-06	70YrCancer	*	7.35E-06
28	471973	3771223	9901	DieselExhP	0.0063	6.61E-06	70YrCancer	*	6.61E-06
29	471980.2	3771217	9901	DieselExhP	0.00564	5.92E-06	70YrCancer	*	5.92E-06
30	471987.4	3771212	9901	DieselExhP	0.00503	5.28E-06	70YrCancer	*	5.28E-06
31	471994.6	3771206	9901	DieselExhP	0.00449	4.71E-06	70YrCancer	*	4.71E-06
32	472001.8	3771200	9901	DieselExhP	0.00401	4.21E-06	70YrCancer	*	4.21E-06
33	472009	3771194	9901	DieselExhP	0.00359	3.77E-06	70YrCancer	*	3.77E-06
34	472022.4	3771196	9901	DieselExhP	0.00347	3.64E-06	70YrCancer	*	3.64E-06
35	472028.7	3771203	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
36	472034.9	3771211	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
37	472041.2	3771219	9901	DieselExhP	0.00424	4.45E-06	70YrCancer	*	4.45E-06
38	472047.5	3771227	9901	DieselExhP	0.00447	4.69E-06	70YrCancer	*	4.69E-06
39	472053.7	3771234	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
40	472060	3771242	9901	DieselExhP	0.00485	5.09E-06	70YrCancer	*	5.09E-06
41	472066.2	3771250	9901	DieselExhP	0.00498	5.23E-06	70YrCancer	*	5.23E-06
42	472072.5	3771258	9901	DieselExhP	0.00507	5.32E-06	70YrCancer	*	5.32E-06
43	472078.7	3771265	9901	DieselExhP	0.0051	5.35E-06	70YrCancer	*	5.35E-06
44	472085	3771273	9901	DieselExhP	0.00507	5.32E-06	70YrCancer	*	5.32E-06
45	472091.3	3771281	9901	DieselExhP	0.005	5.25E-06	70YrCancer	*	5.25E-06
46	472097.5	3771288	9901	DieselExhP	0.00488	5.12E-06	70YrCancer	*	5.12E-06
47	472103.8	3771296	9901	DieselExhP	0.00472	4.95E-06	70YrCancer	*	4.95E-06

48	472110	3771304	9901	DieselExhP	0.00453	4.75E-06	70YrCancer	*	4.75E-06
49	472116.3	3771312	9901	DieselExhP	0.00431	4.52E-06	70YrCancer	*	4.52E-06
50	472115.3	3771325	9901	DieselExhP	0.00458	4.81E-06	70YrCancer	*	4.81E-06
51	472108	3771331	9901	DieselExhP	0.00513	5.38E-06	70YrCancer	*	5.38E-06
52	472100.8	3771337	9901	DieselExhP	0.00575	6.04E-06	70YrCancer	*	6.04E-06
53	472093.5	3771343	9901	DieselExhP	0.00642	6.74E-06	70YrCancer	*	6.74E-06
54	472086.3	3771349	9901	DieselExhP	0.00711	7.46E-06	70YrCancer	*	7.46E-06
55	472079	3771354	9901	DieselExhP	0.0078	8.19E-06	70YrCancer	*	8.19E-06
56	472071.7	3771360	9901	DieselExhP	0.00844	8.86E-06	70YrCancer	*	8.86E-06
57	472064.5	3771366	9901	DieselExhP	0.00897	9.41E-06	70YrCancer	*	9.41E-06
58	472057.2	3771372	9901	DieselExhP	0.0094	9.87E-06	70YrCancer	*	9.87E-06
59	472049.9	3771378	9901	DieselExhP	0.00975	1.02E-05	70YrCancer	*	1.02E-05
60	472042.7	3771384	9901	DieselExhP	0.01006	1.06E-05	70YrCancer	*	1.06E-05
61	472035.4	3771389	9901	DieselExhP	0.01019	1.07E-05	70YrCancer	*	1.07E-05
62	472126.4	3771316	9901	DieselExhP	0.00385	4.04E-06	70YrCancer	*	4.04E-06
63	472120.2	3771308	9901	DieselExhP	0.00404	4.24E-06	70YrCancer	*	4.24E-06
64	472113.9	3771301	9901	DieselExhP	0.00422	4.43E-06	70YrCancer	*	4.43E-06
65	472107.7	3771293	9901	DieselExhP	0.00438	4.60E-06	70YrCancer	*	4.60E-06
66	472101.4	3771285	9901	DieselExhP	0.00451	4.73E-06	70YrCancer	*	4.73E-06
67	472095.2	3771278	9901	DieselExhP	0.00461	4.84E-06	70YrCancer	*	4.84E-06
68	472088.9	3771270	9901	DieselExhP	0.00467	4.90E-06	70YrCancer	*	4.90E-06
69	472082.6	3771262	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
70	472076.4	3771254	9901	DieselExhP	0.00466	4.89E-06	70YrCancer	*	4.89E-06
71	472070.1	3771247	9901	DieselExhP	0.00458	4.81E-06	70YrCancer	*	4.81E-06
72	472063.9	3771239	9901	DieselExhP	0.00447	4.69E-06	70YrCancer	*	4.69E-06
73	472057.6	3771231	9901	DieselExhP	0.00432	4.53E-06	70YrCancer	*	4.53E-06
74	472051.3	3771223	9901	DieselExhP	0.00414	4.35E-06	70YrCancer	*	4.35E-06
75	472045.1	3771216	9901	DieselExhP	0.00394	4.14E-06	70YrCancer	*	4.14E-06
76	472038.8	3771208	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
77	472032.6	3771200	9901	DieselExhP	0.0035	3.67E-06	70YrCancer	*	3.67E-06
78	472026.3	3771193	9901	DieselExhP	0.00327	3.43E-06	70YrCancer	*	3.43E-06
79	472020	3771185	9901	DieselExhP	0.00305	3.20E-06	70YrCancer	*	3.20E-06
80	472130.3	3771313	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
81	472124.1	3771305	9901	DieselExhP	0.00379	3.98E-06	70YrCancer	*	3.98E-06
82	472117.8	3771298	9901	DieselExhP	0.00394	4.14E-06	70YrCancer	*	4.14E-06
83	472111.6	3771290	9901	DieselExhP	0.00407	4.27E-06	70YrCancer	*	4.27E-06
84	472105.3	3771282	9901	DieselExhP	0.00418	4.39E-06	70YrCancer	*	4.39E-06
85	472099	3771274	9901	DieselExhP	0.00426	4.47E-06	70YrCancer	*	4.47E-06
86	472092.8	3771267	9901	DieselExhP	0.00431	4.52E-06	70YrCancer	*	4.52E-06
87	472086.5	3771259	9901	DieselExhP	0.00432	4.53E-06	70YrCancer	*	4.53E-06
88	472080.3	3771251	9901	DieselExhP	0.00429	4.50E-06	70YrCancer	*	4.50E-06
89	472074	3771244	9901	DieselExhP	0.00422	4.43E-06	70YrCancer	*	4.43E-06
90	472067.7	3771236	9901	DieselExhP	0.00413	4.33E-06	70YrCancer	*	4.33E-06
91	472061.5	3771228	9901	DieselExhP	0.00401	4.21E-06	70YrCancer	*	4.21E-06
92	472055.2	3771220	9901	DieselExhP	0.00385	4.04E-06	70YrCancer	*	4.04E-06
93	472049	3771213	9901	DieselExhP	0.00367	3.85E-06	70YrCancer	*	3.85E-06
94	472042.7	3771205	9901	DieselExhP	0.00348	3.65E-06	70YrCancer	*	3.65E-06
95	472036.4	3771197	9901	DieselExhP	0.0033	3.46E-06	70YrCancer	*	3.46E-06
96	472030.2	3771189	9901	DieselExhP	0.00309	3.24E-06	70YrCancer	*	3.24E-06
97	472023.9	3771182	9901	DieselExhP	0.00289	3.03E-06	70YrCancer	*	3.03E-06

98	472135.9	3771315	9901	DieselExhP	0.00342	3.59E-06	70YrCancer	*	3.59E-06
99	472134.7	3771326	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
100	472134.2	3771310	9901	DieselExhP	0.00341	3.58E-06	70YrCancer	*	3.58E-06
101	472128	3771302	9901	DieselExhP	0.00355	3.73E-06	70YrCancer	*	3.73E-06
102	472121.7	3771294	9901	DieselExhP	0.00368	3.86E-06	70YrCancer	*	3.86E-06
103	472115.4	3771287	9901	DieselExhP	0.00379	3.98E-06	70YrCancer	*	3.98E-06
104	472109.2	3771279	9901	DieselExhP	0.00388	4.07E-06	70YrCancer	*	4.07E-06
105	472102.9	3771271	9901	DieselExhP	0.00395	4.15E-06	70YrCancer	*	4.15E-06
106	472096.7	3771264	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
107	472090.4	3771256	9901	DieselExhP	0.00399	4.19E-06	70YrCancer	*	4.19E-06
108	472084.1	3771248	9901	DieselExhP	0.00396	4.16E-06	70YrCancer	*	4.16E-06
109	472077.9	3771240	9901	DieselExhP	0.00391	4.10E-06	70YrCancer	*	4.10E-06
110	472071.6	3771233	9901	DieselExhP	0.00383	4.02E-06	70YrCancer	*	4.02E-06
111	472065.4	3771225	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
112	472059.1	3771217	9901	DieselExhP	0.00359	3.77E-06	70YrCancer	*	3.77E-06
113	472052.8	3771209	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
114	472046.6	3771202	9901	DieselExhP	0.00327	3.43E-06	70YrCancer	*	3.43E-06
115	472040.3	3771194	9901	DieselExhP	0.0031	3.25E-06	70YrCancer	*	3.25E-06
116	472034.1	3771186	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
117	472027.8	3771179	9901	DieselExhP	0.00274	2.88E-06	70YrCancer	*	2.88E-06
118	472140.3	3771314	9901	DieselExhP	0.00323	3.39E-06	70YrCancer	*	3.39E-06
119	472138.8	3771328	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
120	472138.1	3771307	9901	DieselExhP	0.00322	3.38E-06	70YrCancer	*	3.38E-06
121	472131.8	3771299	9901	DieselExhP	0.00334	3.51E-06	70YrCancer	*	3.51E-06
122	472125.6	3771291	9901	DieselExhP	0.00345	3.62E-06	70YrCancer	*	3.62E-06
123	472119.3	3771284	9901	DieselExhP	0.00354	3.72E-06	70YrCancer	*	3.72E-06
124	472113.1	3771276	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
125	472106.8	3771268	9901	DieselExhP	0.00367	3.85E-06	70YrCancer	*	3.85E-06
126	472100.5	3771260	9901	DieselExhP	0.00369	3.87E-06	70YrCancer	*	3.87E-06
127	472094.3	3771253	9901	DieselExhP	0.0037	3.88E-06	70YrCancer	*	3.88E-06
128	472088	3771245	9901	DieselExhP	0.00367	3.85E-06	70YrCancer	*	3.85E-06
129	472081.8	3771237	9901	DieselExhP	0.00363	3.81E-06	70YrCancer	*	3.81E-06
130	472075.5	3771229	9901	DieselExhP	0.00356	3.74E-06	70YrCancer	*	3.74E-06
131	472069.3	3771222	9901	DieselExhP	0.00346	3.63E-06	70YrCancer	*	3.63E-06
132	472063	3771214	9901	DieselExhP	0.00335	3.52E-06	70YrCancer	*	3.52E-06
133	472056.7	3771206	9901	DieselExhP	0.00321	3.37E-06	70YrCancer	*	3.37E-06
134	472050.5	3771199	9901	DieselExhP	0.00307	3.22E-06	70YrCancer	*	3.22E-06
135	472044.2	3771191	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
136	472038	3771183	9901	DieselExhP	0.00276	2.90E-06	70YrCancer	*	2.90E-06
137	472031.7	3771175	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
138	472144.7	3771313	9901	DieselExhP	0.00306	3.21E-06	70YrCancer	*	3.21E-06
139	472142.8	3771330	9901	DieselExhP	0.00328	3.44E-06	70YrCancer	*	3.44E-06
140	472142	3771304	9901	DieselExhP	0.00304	3.19E-06	70YrCancer	*	3.19E-06
141	472135.7	3771296	9901	DieselExhP	0.00314	3.30E-06	70YrCancer	*	3.30E-06
142	472129.5	3771288	9901	DieselExhP	0.00324	3.40E-06	70YrCancer	*	3.40E-06
143	472123.2	3771280	9901	DieselExhP	0.00331	3.47E-06	70YrCancer	*	3.47E-06
144	472117	3771273	9901	DieselExhP	0.00338	3.55E-06	70YrCancer	*	3.55E-06
145	472110.7	3771265	9901	DieselExhP	0.00342	3.59E-06	70YrCancer	*	3.59E-06
146	472104.4	3771257	9901	DieselExhP	0.00344	3.61E-06	70YrCancer	*	3.61E-06
147	472098.2	3771250	9901	DieselExhP	0.00344	3.61E-06	70YrCancer	*	3.61E-06

148	472091.9	3771242	9901	DieselExhP	0.00342	3.59E-06	70YrCancer	*	3.59E-06
149	472085.7	3771234	9901	DieselExhP	0.00338	3.55E-06	70YrCancer	*	3.55E-06
150	472079.4	3771226	9901	DieselExhP	0.00332	3.48E-06	70YrCancer	*	3.48E-06
151	472073.1	3771219	9901	DieselExhP	0.00323	3.39E-06	70YrCancer	*	3.39E-06
152	472066.9	3771211	9901	DieselExhP	0.00313	3.29E-06	70YrCancer	*	3.29E-06
153	472060.6	3771203	9901	DieselExhP	0.00302	3.17E-06	70YrCancer	*	3.17E-06
154	472054.4	3771195	9901	DieselExhP	0.00289	3.03E-06	70YrCancer	*	3.03E-06
155	472048.1	3771188	9901	DieselExhP	0.00276	2.90E-06	70YrCancer	*	2.90E-06
156	472041.8	3771180	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
157	472035.6	3771172	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
158	472148	3771308	9901	DieselExhP	0.0029	3.04E-06	70YrCancer	*	3.04E-06
159	472150.2	3771315	9901	DieselExhP	0.0029	3.04E-06	70YrCancer	*	3.04E-06
160	472148.7	3771329	9901	DieselExhP	0.00307	3.22E-06	70YrCancer	*	3.22E-06
161	472145	3771336	9901	DieselExhP	0.00324	3.40E-06	70YrCancer	*	3.40E-06
162	472145.9	3771300	9901	DieselExhP	0.00287	3.01E-06	70YrCancer	*	3.01E-06
163	472139.6	3771293	9901	DieselExhP	0.00296	3.11E-06	70YrCancer	*	3.11E-06
164	472133.4	3771285	9901	DieselExhP	0.00304	3.19E-06	70YrCancer	*	3.19E-06
165	472127.1	3771277	9901	DieselExhP	0.00311	3.26E-06	70YrCancer	*	3.26E-06
166	472120.8	3771270	9901	DieselExhP	0.00316	3.32E-06	70YrCancer	*	3.32E-06
167	472114.6	3771262	9901	DieselExhP	0.00319	3.35E-06	70YrCancer	*	3.35E-06
168	472108.3	3771254	9901	DieselExhP	0.00321	3.37E-06	70YrCancer	*	3.37E-06
169	472102.1	3771246	9901	DieselExhP	0.00321	3.37E-06	70YrCancer	*	3.37E-06
170	472095.8	3771239	9901	DieselExhP	0.00319	3.35E-06	70YrCancer	*	3.35E-06
171	472089.5	3771231	9901	DieselExhP	0.00315	3.31E-06	70YrCancer	*	3.31E-06
172	472083.3	3771223	9901	DieselExhP	0.0031	3.25E-06	70YrCancer	*	3.25E-06
173	472077	3771215	9901	DieselExhP	0.00303	3.18E-06	70YrCancer	*	3.18E-06
174	472070.8	3771208	9901	DieselExhP	0.00294	3.09E-06	70YrCancer	*	3.09E-06
175	472064.5	3771200	9901	DieselExhP	0.00284	2.98E-06	70YrCancer	*	2.98E-06
176	472058.2	3771192	9901	DieselExhP	0.00273	2.87E-06	70YrCancer	*	2.87E-06
177	472052	3771185	9901	DieselExhP	0.00261	2.74E-06	70YrCancer	*	2.74E-06
178	472045.7	3771177	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
179	472039.5	3771169	9901	DieselExhP	0.00235	2.47E-06	70YrCancer	*	2.47E-06
180	472152.3	3771306	9901	DieselExhP	0.00275	2.89E-06	70YrCancer	*	2.89E-06
181	472154.8	3771314	9901	DieselExhP	0.00276	2.90E-06	70YrCancer	*	2.90E-06
182	472153.1	3771331	9901	DieselExhP	0.00294	3.09E-06	70YrCancer	*	3.09E-06
183	472148.8	3771339	9901	DieselExhP	0.00312	3.27E-06	70YrCancer	*	3.27E-06
184	472149.8	3771297	9901	DieselExhP	0.00272	2.85E-06	70YrCancer	*	2.85E-06
185	472143.5	3771290	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
186	472137.2	3771282	9901	DieselExhP	0.00286	3.00E-06	70YrCancer	*	3.00E-06
187	472131	3771274	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
188	472124.7	3771266	9901	DieselExhP	0.00296	3.11E-06	70YrCancer	*	3.11E-06
189	472118.5	3771259	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
190	472112.2	3771251	9901	DieselExhP	0.003	3.15E-06	70YrCancer	*	3.15E-06
191	472105.9	3771243	9901	DieselExhP	0.003	3.15E-06	70YrCancer	*	3.15E-06
192	472099.7	3771236	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
193	472093.4	3771228	9901	DieselExhP	0.00295	3.10E-06	70YrCancer	*	3.10E-06
194	472087.2	3771220	9901	DieselExhP	0.0029	3.04E-06	70YrCancer	*	3.04E-06
195	472080.9	3771212	9901	DieselExhP	0.00284	2.98E-06	70YrCancer	*	2.98E-06
196	472074.6	3771205	9901	DieselExhP	0.00276	2.90E-06	70YrCancer	*	2.90E-06
197	472068.4	3771197	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06

198	472062.1	3771189	9901	DieselExhP	0.00257	2.70E-06	70YrCancer	*	2.70E-06
199	472055.9	3771181	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
200	472049.6	3771174	9901	DieselExhP	0.00235	2.47E-06	70YrCancer	*	2.47E-06
201	472043.3	3771166	9901	DieselExhP	0.00224	2.35E-06	70YrCancer	*	2.35E-06
202	472155.8	3771302	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
203	472158	3771309	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
204	472160.2	3771316	9901	DieselExhP	0.00263	2.76E-06	70YrCancer	*	2.76E-06
205	472158.7	3771330	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
206	472155	3771337	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
207	472151.3	3771344	9901	DieselExhP	0.00305	3.20E-06	70YrCancer	*	3.20E-06
208	472153.6	3771294	9901	DieselExhP	0.00257	2.70E-06	70YrCancer	*	2.70E-06
209	472147.4	3771286	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
210	472141.1	3771279	9901	DieselExhP	0.0027	2.83E-06	70YrCancer	*	2.83E-06
211	472134.9	3771271	9901	DieselExhP	0.00275	2.89E-06	70YrCancer	*	2.89E-06
212	472128.6	3771263	9901	DieselExhP	0.00278	2.92E-06	70YrCancer	*	2.92E-06
213	472122.3	3771256	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
214	472116.1	3771248	9901	DieselExhP	0.00282	2.96E-06	70YrCancer	*	2.96E-06
215	472109.8	3771240	9901	DieselExhP	0.00281	2.95E-06	70YrCancer	*	2.95E-06
216	472103.6	3771232	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
217	472097.3	3771225	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
218	472091.1	3771217	9901	DieselExhP	0.00273	2.87E-06	70YrCancer	*	2.87E-06
219	472084.8	3771209	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06
220	472078.5	3771201	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
221	472072.3	3771194	9901	DieselExhP	0.00252	2.64E-06	70YrCancer	*	2.64E-06
222	472066	3771186	9901	DieselExhP	0.00243	2.55E-06	70YrCancer	*	2.55E-06
223	472059.8	3771178	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
224	472053.5	3771171	9901	DieselExhP	0.00224	2.35E-06	70YrCancer	*	2.35E-06
225	472047.2	3771163	9901	DieselExhP	0.00213	2.24E-06	70YrCancer	*	2.24E-06
226	472160	3771299	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
227	472162.4	3771308	9901	DieselExhP	0.00249	2.61E-06	70YrCancer	*	2.61E-06
228	472164.9	3771316	9901	DieselExhP	0.0025	2.62E-06	70YrCancer	*	2.62E-06
229	472163.2	3771332	9901	DieselExhP	0.00265	2.78E-06	70YrCancer	*	2.78E-06
230	472159	3771339	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
231	472154.9	3771347	9901	DieselExhP	0.00295	3.10E-06	70YrCancer	*	3.10E-06
232	472157.5	3771291	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
233	472151.3	3771283	9901	DieselExhP	0.0025	2.62E-06	70YrCancer	*	2.62E-06
234	472145	3771276	9901	DieselExhP	0.00255	2.68E-06	70YrCancer	*	2.68E-06
235	472138.8	3771268	9901	DieselExhP	0.00259	2.72E-06	70YrCancer	*	2.72E-06
236	472132.5	3771260	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
237	472126.2	3771252	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
238	472120	3771245	9901	DieselExhP	0.00265	2.78E-06	70YrCancer	*	2.78E-06
239	472113.7	3771237	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
240	472107.5	3771229	9901	DieselExhP	0.00263	2.76E-06	70YrCancer	*	2.76E-06
241	472101.2	3771221	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
242	472094.9	3771214	9901	DieselExhP	0.00257	2.70E-06	70YrCancer	*	2.70E-06
243	472088.7	3771206	9901	DieselExhP	0.00252	2.64E-06	70YrCancer	*	2.64E-06
244	472082.4	3771198	9901	DieselExhP	0.00246	2.58E-06	70YrCancer	*	2.58E-06
245	472076.2	3771191	9901	DieselExhP	0.00238	2.50E-06	70YrCancer	*	2.50E-06
246	472069.9	3771183	9901	DieselExhP	0.0023	2.41E-06	70YrCancer	*	2.41E-06
247	472063.6	3771175	9901	DieselExhP	0.00222	2.33E-06	70YrCancer	*	2.33E-06

248	472057.4	3771167	9901	DieselExhP	0.00212	2.23E-06	70YrCancer	*	2.23E-06
249	472051.1	3771160	9901	DieselExhP	0.00203	2.13E-06	70YrCancer	*	2.13E-06
250	472164.1	3771297	9901	DieselExhP	0.00235	2.47E-06	70YrCancer	*	2.47E-06
251	472166.8	3771306	9901	DieselExhP	0.00237	2.49E-06	70YrCancer	*	2.49E-06
252	472169.6	3771315	9901	DieselExhP	0.00239	2.51E-06	70YrCancer	*	2.51E-06
253	472167.7	3771333	9901	DieselExhP	0.00254	2.67E-06	70YrCancer	*	2.67E-06
254	472163.1	3771341	9901	DieselExhP	0.00269	2.82E-06	70YrCancer	*	2.82E-06
255	472158.5	3771350	9901	DieselExhP	0.00285	2.99E-06	70YrCancer	*	2.99E-06
256	472161.4	3771288	9901	DieselExhP	0.00231	2.42E-06	70YrCancer	*	2.42E-06
257	472155.2	3771280	9901	DieselExhP	0.00236	2.48E-06	70YrCancer	*	2.48E-06
258	472148.9	3771272	9901	DieselExhP	0.00241	2.53E-06	70YrCancer	*	2.53E-06
259	472142.6	3771265	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
260	472136.4	3771257	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
261	472130.1	3771249	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
262	472123.9	3771242	9901	DieselExhP	0.00249	2.61E-06	70YrCancer	*	2.61E-06
263	472117.6	3771234	9901	DieselExhP	0.00249	2.61E-06	70YrCancer	*	2.61E-06
264	472111.3	3771226	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
265	472105.1	3771218	9901	DieselExhP	0.00245	2.57E-06	70YrCancer	*	2.57E-06
266	472098.8	3771211	9901	DieselExhP	0.00242	2.54E-06	70YrCancer	*	2.54E-06
267	472092.6	3771203	9901	DieselExhP	0.00237	2.49E-06	70YrCancer	*	2.49E-06
268	472086.3	3771195	9901	DieselExhP	0.00232	2.44E-06	70YrCancer	*	2.44E-06
269	472080	3771187	9901	DieselExhP	0.00226	2.37E-06	70YrCancer	*	2.37E-06
270	472073.8	3771180	9901	DieselExhP	0.00218	2.29E-06	70YrCancer	*	2.29E-06
271	472067.5	3771172	9901	DieselExhP	0.00211	2.21E-06	70YrCancer	*	2.21E-06
272	472061.3	3771164	9901	DieselExhP	0.00202	2.12E-06	70YrCancer	*	2.12E-06
273	472055	3771157	9901	DieselExhP	0.00193	2.03E-06	70YrCancer	*	2.03E-06
274	472183.6	3771281	9901	DieselExhP	0.00184	1.93E-06	70YrCancer	*	1.93E-06
275	472186.3	3771291	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
276	472189	3771300	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
277	472191.7	3771309	9901	DieselExhP	0.00191	2.00E-06	70YrCancer	*	2.00E-06
278	472194.4	3771318	9901	DieselExhP	0.00191	2.00E-06	70YrCancer	*	2.00E-06
279	472192.5	3771336	9901	DieselExhP	0.00203	2.13E-06	70YrCancer	*	2.13E-06
280	472188	3771344	9901	DieselExhP	0.00214	2.25E-06	70YrCancer	*	2.25E-06
281	472183.4	3771353	9901	DieselExhP	0.00225	2.36E-06	70YrCancer	*	2.36E-06
282	472178.8	3771361	9901	DieselExhP	0.00236	2.48E-06	70YrCancer	*	2.48E-06
283	472174.2	3771369	9901	DieselExhP	0.00246	2.58E-06	70YrCancer	*	2.58E-06
284	472180.8	3771272	9901	DieselExhP	0.00181	1.90E-06	70YrCancer	*	1.90E-06
285	472174.6	3771264	9901	DieselExhP	0.00183	1.92E-06	70YrCancer	*	1.92E-06
286	472168.3	3771257	9901	DieselExhP	0.00186	1.95E-06	70YrCancer	*	1.95E-06
287	472162.1	3771249	9901	DieselExhP	0.00188	1.97E-06	70YrCancer	*	1.97E-06
288	472155.8	3771241	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
289	472149.5	3771234	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
290	472143.3	3771226	9901	DieselExhP	0.0019	1.99E-06	70YrCancer	*	1.99E-06
291	472137	3771218	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
292	472130.8	3771210	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
293	472124.5	3771203	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
294	472118.2	3771195	9901	DieselExhP	0.00185	1.94E-06	70YrCancer	*	1.94E-06
295	472112	3771187	9901	DieselExhP	0.00183	1.92E-06	70YrCancer	*	1.92E-06
296	472105.7	3771179	9901	DieselExhP	0.00179	1.88E-06	70YrCancer	*	1.88E-06
297	472099.5	3771172	9901	DieselExhP	0.00176	1.85E-06	70YrCancer	*	1.85E-06

298	472093.2	3771164	9901	DieselExhP	0.00171	1.79E-06	70YrCancer	*	1.79E-06
299	472086.9	3771156	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
300	472080.7	3771149	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
301	472074.4	3771141	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
302	472203	3771266	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
303	472205.7	3771275	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
304	472208.4	3771284	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
305	472211.1	3771293	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
306	472213.8	3771302	9901	DieselExhP	0.00155	1.63E-06	70YrCancer	*	1.63E-06
307	472216.6	3771312	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
308	472219.3	3771321	9901	DieselExhP	0.00157	1.65E-06	70YrCancer	*	1.65E-06
309	472217.4	3771338	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
310	472212.8	3771347	9901	DieselExhP	0.00174	1.83E-06	70YrCancer	*	1.83E-06
311	472208.2	3771355	9901	DieselExhP	0.00183	1.92E-06	70YrCancer	*	1.92E-06
312	472203.6	3771364	9901	DieselExhP	0.00191	2.00E-06	70YrCancer	*	2.00E-06
313	472199	3771372	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
314	472194.4	3771380	9901	DieselExhP	0.00206	2.16E-06	70YrCancer	*	2.16E-06
315	472189.8	3771389	9901	DieselExhP	0.00213	2.24E-06	70YrCancer	*	2.24E-06
316	472200.3	3771256	9901	DieselExhP	0.00144	1.51E-06	70YrCancer	*	1.51E-06
317	472194	3771249	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
318	472187.7	3771241	9901	DieselExhP	0.00146	1.53E-06	70YrCancer	*	1.53E-06
319	472181.5	3771233	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
320	472175.2	3771225	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
321	472169	3771218	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
322	472162.7	3771210	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
323	472156.4	3771202	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
324	472150.2	3771195	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
325	472143.9	3771187	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
326	472137.7	3771179	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
327	472131.4	3771171	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
328	472125.2	3771164	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
329	472118.9	3771156	9901	DieselExhP	0.00141	1.48E-06	70YrCancer	*	1.48E-06
330	472112.6	3771148	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
331	472106.4	3771141	9901	DieselExhP	0.00135	1.42E-06	70YrCancer	*	1.42E-06
332	472100.1	3771133	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
333	472093.9	3771125	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
334	472222.4	3771250	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
335	472225.1	3771259	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
336	472227.8	3771268	9901	DieselExhP	0.00124	1.30E-06	70YrCancer	*	1.30E-06
337	472230.6	3771277	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
338	472233.3	3771287	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
339	472236	3771296	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
340	472238.7	3771305	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
341	472241.4	3771314	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
342	472244.1	3771323	9901	DieselExhP	0.00132	1.39E-06	70YrCancer	*	1.39E-06
343	472242.3	3771341	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
344	472237.7	3771349	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
345	472233.1	3771358	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
346	472228.5	3771366	9901	DieselExhP	0.00158	1.66E-06	70YrCancer	*	1.66E-06
347	472223.9	3771375	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06

348	472219.3	3771383	9901	DieselExhP	0.00171	1.79E-06	70YrCancer	*	1.79E-06
349	472214.7	3771392	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
350	472210.1	3771400	9901	DieselExhP	0.00182	1.91E-06	70YrCancer	*	1.91E-06
351	472205.5	3771408	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
352	472219.7	3771241	9901	DieselExhP	0.00117	1.23E-06	70YrCancer	*	1.23E-06
353	472213.4	3771233	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
354	472207.2	3771225	9901	DieselExhP	0.00119	1.25E-06	70YrCancer	*	1.25E-06
355	472200.9	3771217	9901	DieselExhP	0.00119	1.25E-06	70YrCancer	*	1.25E-06
356	472194.7	3771210	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
357	472188.4	3771202	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
358	472182.1	3771194	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
359	472175.9	3771187	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
360	472169.6	3771179	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
361	472163.4	3771171	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
362	472157.1	3771163	9901	DieselExhP	0.00119	1.25E-06	70YrCancer	*	1.25E-06
363	472150.8	3771156	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
364	472144.6	3771148	9901	DieselExhP	0.00117	1.23E-06	70YrCancer	*	1.23E-06
365	472138.3	3771140	9901	DieselExhP	0.00115	1.21E-06	70YrCancer	*	1.21E-06
366	472132.1	3771132	9901	DieselExhP	0.00113	1.19E-06	70YrCancer	*	1.19E-06
367	472125.8	3771125	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
368	472119.5	3771117	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
369	472113.3	3771109	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
370	472241.8	3771234	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
371	472244.5	3771243	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
372	472247.3	3771253	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
373	472250	3771262	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
374	472252.7	3771271	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
375	472255.4	3771280	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
376	472258.1	3771289	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
377	472260.9	3771298	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
378	472263.6	3771308	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
379	472266.3	3771317	9901	DieselExhP	0.00112	1.18E-06	70YrCancer	*	1.18E-06
380	472269	3771326	9901	DieselExhP	0.00113	1.19E-06	70YrCancer	*	1.19E-06
381	472267.1	3771344	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
382	472262.5	3771352	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
383	472257.9	3771360	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
384	472253.3	3771369	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
385	472248.7	3771377	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
386	472244.1	3771386	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
387	472239.6	3771394	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
388	472235	3771403	9901	DieselExhP	0.00153	1.61E-06	70YrCancer	*	1.61E-06
389	472230.4	3771411	9901	DieselExhP	0.00157	1.65E-06	70YrCancer	*	1.65E-06
390	472225.8	3771419	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
391	472221.2	3771428	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
392	472239.1	3771225	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
393	472232.9	3771217	9901	DieselExhP	0.00098	1.03E-06	70YrCancer	*	1.03E-06
394	472226.6	3771209	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
395	472220.3	3771202	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
396	472214.1	3771194	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06
397	472207.8	3771186	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06

398	472201.6	3771179	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06
399	472195.3	3771171	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06
400	472189	3771163	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06
401	472182.8	3771155	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
402	472176.5	3771148	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
403	472170.3	3771140	9901	DieselExhP	0.00098	1.03E-06	70YrCancer	*	1.03E-06
404	472164	3771132	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
405	472157.7	3771124	9901	DieselExhP	0.00096	1.01E-06	70YrCancer	*	1.01E-06
406	472151.5	3771117	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
407	472145.2	3771109	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
408	472139	3771101	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
409	472132.7	3771094	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
410	472261.3	3771218	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
411	472264	3771228	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
412	472266.7	3771237	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
413	472269.4	3771246	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
414	472272.1	3771255	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
415	472274.8	3771264	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
416	472277.6	3771274	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
417	472280.3	3771283	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
418	472283	3771292	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
419	472285.7	3771301	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
420	472288.4	3771310	9901	DieselExhP	0.00096	1.01E-06	70YrCancer	*	1.01E-06
421	472291.1	3771320	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
422	472293.9	3771329	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
423	472292	3771346	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
424	472287.4	3771355	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
425	472282.8	3771363	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
426	472278.2	3771372	9901	DieselExhP	0.00114	1.20E-06	70YrCancer	*	1.20E-06
427	472273.6	3771380	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
428	472269	3771388	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
429	472264.4	3771397	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
430	472259.8	3771405	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
431	472255.2	3771414	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
432	472250.6	3771422	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
433	472246	3771430	9901	DieselExhP	0.00141	1.48E-06	70YrCancer	*	1.48E-06
434	472241.4	3771439	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
435	472236.8	3771447	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
436	472258.5	3771209	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
437	472252.3	3771201	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
438	472246	3771194	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
439	472239.8	3771186	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
440	472233.5	3771178	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
441	472227.2	3771171	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
442	472221	3771163	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
443	472214.7	3771155	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
444	472208.5	3771147	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
445	472202.2	3771140	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
446	472195.9	3771132	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
447	472189.7	3771124	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07

448	472183.4	3771116	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
449	472177.2	3771109	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
450	472170.9	3771101	9901	DieselExhP	0.00081	8.50E-07	70YrCancer	*	8.50E-07
451	472164.6	3771093	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
452	472158.4	3771086	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
453	472152.1	3771078	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
454	472280.7	3771203	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
455	472283.4	3771212	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
456	472286.1	3771221	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
457	472288.8	3771230	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
458	472291.5	3771239	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07
459	472294.3	3771249	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
460	472297	3771258	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
461	472299.7	3771267	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
462	472302.4	3771276	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
463	472305.1	3771285	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
464	472307.9	3771295	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
465	472310.6	3771304	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
466	472313.3	3771313	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
467	472316	3771322	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
468	472318.7	3771331	9901	DieselExhP	0.00081	8.50E-07	70YrCancer	*	8.50E-07
469	472316.8	3771349	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
470	472312.2	3771357	9901	DieselExhP	0.00087	9.13E-07	70YrCancer	*	9.13E-07
471	472307.7	3771366	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
472	472303.1	3771374	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
473	472298.5	3771383	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
474	472293.9	3771391	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
475	472289.3	3771399	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
476	472284.7	3771408	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
477	472280.1	3771416	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
478	472275.5	3771425	9901	DieselExhP	0.00115	1.21E-06	70YrCancer	*	1.21E-06
479	472270.9	3771433	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
480	472266.3	3771442	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
481	472261.7	3771450	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
482	472257.1	3771458	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
483	472252.5	3771467	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
484	472278	3771193	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
485	472271.7	3771186	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
486	472265.4	3771178	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
487	472259.2	3771170	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
488	472252.9	3771163	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
489	472246.7	3771155	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
490	472240.4	3771147	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
491	472234.1	3771139	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
492	472227.9	3771132	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
493	472221.6	3771124	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
494	472215.4	3771116	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
495	472209.1	3771108	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
496	472202.9	3771101	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07
497	472196.6	3771093	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07

498	472190.3	3771085	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
499	472184.1	3771078	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
500	472177.8	3771070	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
501	472171.6	3771062	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
502	472013	3771184	9901	DieselExhP	0.00311	3.26E-06	70YrCancer	*	3.26E-06
503	472005.8	3771190	9901	DieselExhP	0.00344	3.61E-06	70YrCancer	*	3.61E-06
504	471998.6	3771196	9901	DieselExhP	0.00382	4.01E-06	70YrCancer	*	4.01E-06
505	471991.4	3771202	9901	DieselExhP	0.00425	4.46E-06	70YrCancer	*	4.46E-06
506	471984.2	3771208	9901	DieselExhP	0.00473	4.96E-06	70YrCancer	*	4.96E-06
507	471977	3771214	9901	DieselExhP	0.00526	5.52E-06	70YrCancer	*	5.52E-06
508	471969.8	3771219	9901	DieselExhP	0.00582	6.11E-06	70YrCancer	*	6.11E-06
509	471962.6	3771225	9901	DieselExhP	0.00641	6.73E-06	70YrCancer	*	6.73E-06
510	471955.4	3771231	9901	DieselExhP	0.007	7.35E-06	70YrCancer	*	7.35E-06
511	471948.2	3771237	9901	DieselExhP	0.0076	7.98E-06	70YrCancer	*	7.98E-06
512	471941	3771243	9901	DieselExhP	0.0082	8.61E-06	70YrCancer	*	8.61E-06
513	471933.8	3771249	9901	DieselExhP	0.00874	9.17E-06	70YrCancer	*	9.17E-06
514	471926.7	3771255	9901	DieselExhP	0.00889	9.33E-06	70YrCancer	*	9.33E-06
515	471919.5	3771261	9901	DieselExhP	0.0083	8.71E-06	70YrCancer	*	8.71E-06
516	472009.8	3771180	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
517	472002.6	3771186	9901	DieselExhP	0.0033	3.46E-06	70YrCancer	*	3.46E-06
518	471995.4	3771192	9901	DieselExhP	0.00364	3.82E-06	70YrCancer	*	3.82E-06
519	471988.2	3771198	9901	DieselExhP	0.00403	4.23E-06	70YrCancer	*	4.23E-06
520	471981	3771204	9901	DieselExhP	0.00445	4.67E-06	70YrCancer	*	4.67E-06
521	471973.8	3771210	9901	DieselExhP	0.00491	5.15E-06	70YrCancer	*	5.15E-06
522	471966.7	3771216	9901	DieselExhP	0.00539	5.66E-06	70YrCancer	*	5.66E-06
523	471959.5	3771221	9901	DieselExhP	0.00589	6.18E-06	70YrCancer	*	6.18E-06
524	471952.3	3771227	9901	DieselExhP	0.00638	6.70E-06	70YrCancer	*	6.70E-06
525	471945.1	3771233	9901	DieselExhP	0.00685	7.19E-06	70YrCancer	*	7.19E-06
526	471937.9	3771239	9901	DieselExhP	0.0073	7.66E-06	70YrCancer	*	7.66E-06
527	471930.7	3771245	9901	DieselExhP	0.00766	8.04E-06	70YrCancer	*	8.04E-06
528	471923.5	3771251	9901	DieselExhP	0.00773	8.11E-06	70YrCancer	*	8.11E-06
529	471916.3	3771257	9901	DieselExhP	0.00729	7.65E-06	70YrCancer	*	7.65E-06
530	472012.2	3771175	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
531	472022.7	3771176	9901	DieselExhP	0.0027	2.83E-06	70YrCancer	*	2.83E-06
532	472006.7	3771176	9901	DieselExhP	0.00288	3.02E-06	70YrCancer	*	3.02E-06
533	471999.5	3771182	9901	DieselExhP	0.00316	3.32E-06	70YrCancer	*	3.32E-06
534	471992.3	3771188	9901	DieselExhP	0.00347	3.64E-06	70YrCancer	*	3.64E-06
535	471985.1	3771194	9901	DieselExhP	0.00381	4.00E-06	70YrCancer	*	4.00E-06
536	471977.9	3771200	9901	DieselExhP	0.00419	4.40E-06	70YrCancer	*	4.40E-06
537	471970.7	3771206	9901	DieselExhP	0.00459	4.82E-06	70YrCancer	*	4.82E-06
538	471963.5	3771212	9901	DieselExhP	0.00501	5.26E-06	70YrCancer	*	5.26E-06
539	471956.3	3771218	9901	DieselExhP	0.00542	5.69E-06	70YrCancer	*	5.69E-06
540	471949.1	3771223	9901	DieselExhP	0.00583	6.12E-06	70YrCancer	*	6.12E-06
541	471941.9	3771229	9901	DieselExhP	0.00621	6.52E-06	70YrCancer	*	6.52E-06
542	471934.7	3771235	9901	DieselExhP	0.00655	6.87E-06	70YrCancer	*	6.87E-06
543	471927.5	3771241	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06
544	471920.3	3771247	9901	DieselExhP	0.00679	7.13E-06	70YrCancer	*	7.13E-06
545	471913.1	3771253	9901	DieselExhP	0.00648	6.80E-06	70YrCancer	*	6.80E-06
546	472010.8	3771170	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
547	472024.9	3771172	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06

548	472003.5	3771173	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
549	471996.3	3771178	9901	DieselExhP	0.00302	3.17E-06	70YrCancer	*	3.17E-06
550	471989.1	3771184	9901	DieselExhP	0.00331	3.47E-06	70YrCancer	*	3.47E-06
551	471981.9	3771190	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
552	471974.7	3771196	9901	DieselExhP	0.00395	4.15E-06	70YrCancer	*	4.15E-06
553	471967.5	3771202	9901	DieselExhP	0.0043	4.51E-06	70YrCancer	*	4.51E-06
554	471960.3	3771208	9901	DieselExhP	0.00466	4.89E-06	70YrCancer	*	4.89E-06
555	471953.1	3771214	9901	DieselExhP	0.00501	5.26E-06	70YrCancer	*	5.26E-06
556	471945.9	3771220	9901	DieselExhP	0.00535	5.62E-06	70YrCancer	*	5.62E-06
557	471938.7	3771226	9901	DieselExhP	0.00566	5.94E-06	70YrCancer	*	5.94E-06
558	471931.5	3771231	9901	DieselExhP	0.00591	6.20E-06	70YrCancer	*	6.20E-06
559	471924.3	3771237	9901	DieselExhP	0.00607	6.37E-06	70YrCancer	*	6.37E-06
560	471917.2	3771243	9901	DieselExhP	0.00605	6.35E-06	70YrCancer	*	6.35E-06
561	471910	3771249	9901	DieselExhP	0.0058	6.09E-06	70YrCancer	*	6.09E-06
562	472006.5	3771167	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06
563	472012.6	3771165	9901	DieselExhP	0.00246	2.58E-06	70YrCancer	*	2.58E-06
564	472024.3	3771166	9901	DieselExhP	0.00241	2.53E-06	70YrCancer	*	2.53E-06
565	472030	3771169	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
566	472000.3	3771169	9901	DieselExhP	0.00266	2.79E-06	70YrCancer	*	2.79E-06
567	471993.1	3771175	9901	DieselExhP	0.0029	3.04E-06	70YrCancer	*	3.04E-06
568	471985.9	3771180	9901	DieselExhP	0.00315	3.31E-06	70YrCancer	*	3.31E-06
569	471978.7	3771186	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
570	471971.5	3771192	9901	DieselExhP	0.00373	3.91E-06	70YrCancer	*	3.91E-06
571	471964.4	3771198	9901	DieselExhP	0.00403	4.23E-06	70YrCancer	*	4.23E-06
572	471957.2	3771204	9901	DieselExhP	0.00434	4.56E-06	70YrCancer	*	4.56E-06
573	471950	3771210	9901	DieselExhP	0.00465	4.88E-06	70YrCancer	*	4.88E-06
574	471942.8	3771216	9901	DieselExhP	0.00493	5.17E-06	70YrCancer	*	5.17E-06
575	471935.6	3771222	9901	DieselExhP	0.00518	5.44E-06	70YrCancer	*	5.44E-06
576	471928.4	3771228	9901	DieselExhP	0.00537	5.64E-06	70YrCancer	*	5.64E-06
577	471921.2	3771233	9901	DieselExhP	0.00548	5.75E-06	70YrCancer	*	5.75E-06
578	471914	3771239	9901	DieselExhP	0.00544	5.71E-06	70YrCancer	*	5.71E-06
579	471906.8	3771245	9901	DieselExhP	0.00524	5.50E-06	70YrCancer	*	5.50E-06
580	472004.5	3771163	9901	DieselExhP	0.00245	2.57E-06	70YrCancer	*	2.57E-06
581	472011.9	3771160	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
582	472026	3771162	9901	DieselExhP	0.00228	2.39E-06	70YrCancer	*	2.39E-06
583	472032.7	3771165	9901	DieselExhP	0.00232	2.44E-06	70YrCancer	*	2.44E-06
584	471997.2	3771165	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06
585	471990	3771171	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
586	471982.8	3771177	9901	DieselExhP	0.00301	3.16E-06	70YrCancer	*	3.16E-06
587	471975.6	3771182	9901	DieselExhP	0.00326	3.42E-06	70YrCancer	*	3.42E-06
588	471968.4	3771188	9901	DieselExhP	0.00352	3.69E-06	70YrCancer	*	3.69E-06
589	471961.2	3771194	9901	DieselExhP	0.00379	3.98E-06	70YrCancer	*	3.98E-06
590	471954	3771200	9901	DieselExhP	0.00406	4.26E-06	70YrCancer	*	4.26E-06
591	471946.8	3771206	9901	DieselExhP	0.00432	4.53E-06	70YrCancer	*	4.53E-06
592	471939.6	3771212	9901	DieselExhP	0.00455	4.78E-06	70YrCancer	*	4.78E-06
593	471932.4	3771218	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
594	471925.2	3771224	9901	DieselExhP	0.00491	5.15E-06	70YrCancer	*	5.15E-06
595	471918	3771230	9901	DieselExhP	0.00498	5.23E-06	70YrCancer	*	5.23E-06
596	471910.8	3771235	9901	DieselExhP	0.00494	5.18E-06	70YrCancer	*	5.18E-06
597	471903.6	3771241	9901	DieselExhP	0.00478	5.02E-06	70YrCancer	*	5.02E-06

598	472002.6	3771158	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
599	472011.1	3771156	9901	DieselExhP	0.00223	2.34E-06	70YrCancer	*	2.34E-06
600	472027.6	3771157	9901	DieselExhP	0.00217	2.28E-06	70YrCancer	*	2.28E-06
601	472035.5	3771162	9901	DieselExhP	0.00221	2.32E-06	70YrCancer	*	2.32E-06
602	471994	3771161	9901	DieselExhP	0.00246	2.58E-06	70YrCancer	*	2.58E-06
603	471986.8	3771167	9901	DieselExhP	0.00266	2.79E-06	70YrCancer	*	2.79E-06
604	471979.6	3771173	9901	DieselExhP	0.00287	3.01E-06	70YrCancer	*	3.01E-06
605	471972.4	3771179	9901	DieselExhP	0.00309	3.24E-06	70YrCancer	*	3.24E-06
606	471965.2	3771184	9901	DieselExhP	0.00333	3.50E-06	70YrCancer	*	3.50E-06
607	471958	3771190	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
608	471950.8	3771196	9901	DieselExhP	0.0038	3.99E-06	70YrCancer	*	3.99E-06
609	471943.6	3771202	9901	DieselExhP	0.00402	4.22E-06	70YrCancer	*	4.22E-06
610	471936.4	3771208	9901	DieselExhP	0.00422	4.43E-06	70YrCancer	*	4.43E-06
611	471929.2	3771214	9901	DieselExhP	0.00439	4.61E-06	70YrCancer	*	4.61E-06
612	471922	3771220	9901	DieselExhP	0.00451	4.73E-06	70YrCancer	*	4.73E-06
613	471914.9	3771226	9901	DieselExhP	0.00456	4.79E-06	70YrCancer	*	4.79E-06
614	471907.7	3771232	9901	DieselExhP	0.00451	4.73E-06	70YrCancer	*	4.73E-06
615	471900.5	3771237	9901	DieselExhP	0.00438	4.60E-06	70YrCancer	*	4.60E-06
616	471998.2	3771155	9901	DieselExhP	0.00227	2.38E-06	70YrCancer	*	2.38E-06
617	472005.5	3771153	9901	DieselExhP	0.00218	2.29E-06	70YrCancer	*	2.29E-06
618	472012.9	3771150	9901	DieselExhP	0.0021	2.20E-06	70YrCancer	*	2.20E-06
619	472027	3771152	9901	DieselExhP	0.00205	2.15E-06	70YrCancer	*	2.15E-06
620	472033.7	3771156	9901	DieselExhP	0.00208	2.18E-06	70YrCancer	*	2.18E-06
621	472040.5	3771159	9901	DieselExhP	0.00211	2.21E-06	70YrCancer	*	2.21E-06
622	471990.8	3771157	9901	DieselExhP	0.00237	2.49E-06	70YrCancer	*	2.49E-06
623	471983.6	3771163	9901	DieselExhP	0.00255	2.68E-06	70YrCancer	*	2.68E-06
624	471976.4	3771169	9901	DieselExhP	0.00274	2.88E-06	70YrCancer	*	2.88E-06
625	471969.2	3771175	9901	DieselExhP	0.00294	3.09E-06	70YrCancer	*	3.09E-06
626	471962	3771181	9901	DieselExhP	0.00315	3.31E-06	70YrCancer	*	3.31E-06
627	471954.9	3771186	9901	DieselExhP	0.00336	3.53E-06	70YrCancer	*	3.53E-06
628	471947.7	3771192	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
629	471940.5	3771198	9901	DieselExhP	0.00376	3.95E-06	70YrCancer	*	3.95E-06
630	471933.3	3771204	9901	DieselExhP	0.00393	4.12E-06	70YrCancer	*	4.12E-06
631	471926.1	3771210	9901	DieselExhP	0.00407	4.27E-06	70YrCancer	*	4.27E-06
632	471918.9	3771216	9901	DieselExhP	0.00416	4.37E-06	70YrCancer	*	4.37E-06
633	471911.7	3771222	9901	DieselExhP	0.00419	4.40E-06	70YrCancer	*	4.40E-06
634	471904.5	3771228	9901	DieselExhP	0.00415	4.36E-06	70YrCancer	*	4.36E-06
635	471897.3	3771234	9901	DieselExhP	0.00403	4.23E-06	70YrCancer	*	4.23E-06
636	471995.9	3771151	9901	DieselExhP	0.00218	2.29E-06	70YrCancer	*	2.29E-06
637	472012.5	3771146	9901	DieselExhP	0.002	2.10E-06	70YrCancer	*	2.10E-06
638	472028.3	3771147	9901	DieselExhP	0.00195	2.05E-06	70YrCancer	*	2.05E-06
639	472035.9	3771151	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
640	472043.5	3771156	9901	DieselExhP	0.00201	2.11E-06	70YrCancer	*	2.11E-06
641	471987.7	3771153	9901	DieselExhP	0.00227	2.38E-06	70YrCancer	*	2.38E-06
642	471980.5	3771159	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
643	471973.3	3771165	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
644	471966.1	3771171	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
645	471958.9	3771177	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
646	471951.7	3771183	9901	DieselExhP	0.00317	3.33E-06	70YrCancer	*	3.33E-06
647	471944.5	3771188	9901	DieselExhP	0.00335	3.52E-06	70YrCancer	*	3.52E-06

648	471937.3	3771194	9901	DieselExhP	0.00352	3.69E-06	70YrCancer	*	3.69E-06
649	471930.1	3771200	9901	DieselExhP	0.00367	3.85E-06	70YrCancer	*	3.85E-06
650	471922.9	3771206	9901	DieselExhP	0.00378	3.97E-06	70YrCancer	*	3.97E-06
651	471915.7	3771212	9901	DieselExhP	0.00385	4.04E-06	70YrCancer	*	4.04E-06
652	471908.5	3771218	9901	DieselExhP	0.00388	4.07E-06	70YrCancer	*	4.07E-06
653	471901.3	3771224	9901	DieselExhP	0.00384	4.03E-06	70YrCancer	*	4.03E-06
654	471894.1	3771230	9901	DieselExhP	0.00373	3.91E-06	70YrCancer	*	3.91E-06
655	471991.8	3771147	9901	DieselExhP	0.00211	2.21E-06	70YrCancer	*	2.21E-06
656	471999.2	3771145	9901	DieselExhP	0.00204	2.14E-06	70YrCancer	*	2.14E-06
657	472006.5	3771143	9901	DieselExhP	0.00197	2.07E-06	70YrCancer	*	2.07E-06
658	472013.9	3771140	9901	DieselExhP	0.0019	1.99E-06	70YrCancer	*	1.99E-06
659	472028	3771142	9901	DieselExhP	0.00186	1.95E-06	70YrCancer	*	1.95E-06
660	472034.8	3771146	9901	DieselExhP	0.00188	1.97E-06	70YrCancer	*	1.97E-06
661	472041.5	3771149	9901	DieselExhP	0.0019	1.99E-06	70YrCancer	*	1.99E-06
662	472048.3	3771153	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
663	471984.5	3771149	9901	DieselExhP	0.00219	2.30E-06	70YrCancer	*	2.30E-06
664	471977.3	3771155	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
665	471970.1	3771161	9901	DieselExhP	0.0025	2.62E-06	70YrCancer	*	2.62E-06
666	471962.9	3771167	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06
667	471955.7	3771173	9901	DieselExhP	0.00284	2.98E-06	70YrCancer	*	2.98E-06
668	471948.5	3771179	9901	DieselExhP	0.003	3.15E-06	70YrCancer	*	3.15E-06
669	471941.3	3771185	9901	DieselExhP	0.00316	3.32E-06	70YrCancer	*	3.32E-06
670	471934.1	3771191	9901	DieselExhP	0.00331	3.47E-06	70YrCancer	*	3.47E-06
671	471926.9	3771196	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
672	471919.7	3771202	9901	DieselExhP	0.00353	3.70E-06	70YrCancer	*	3.70E-06
673	471912.5	3771208	9901	DieselExhP	0.00359	3.77E-06	70YrCancer	*	3.77E-06
674	471905.4	3771214	9901	DieselExhP	0.0036	3.78E-06	70YrCancer	*	3.78E-06
675	471898.2	3771220	9901	DieselExhP	0.00356	3.74E-06	70YrCancer	*	3.74E-06
676	471891	3771226	9901	DieselExhP	0.00347	3.64E-06	70YrCancer	*	3.64E-06
677	471976.5	3771128	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
678	471984.4	3771125	9901	DieselExhP	0.00171	1.79E-06	70YrCancer	*	1.79E-06
679	471992.3	3771123	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
680	472000.2	3771120	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
681	472008	3771118	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
682	472015.9	3771116	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
683	472031	3771117	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
684	472038.3	3771121	9901	DieselExhP	0.0015	1.57E-06	70YrCancer	*	1.57E-06
685	472045.5	3771125	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
686	472052.7	3771129	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
687	472060	3771133	9901	DieselExhP	0.00155	1.63E-06	70YrCancer	*	1.63E-06
688	472067.2	3771137	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
689	471968.7	3771130	9901	DieselExhP	0.00182	1.91E-06	70YrCancer	*	1.91E-06
690	471961.5	3771136	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
691	471954.3	3771142	9901	DieselExhP	0.00202	2.12E-06	70YrCancer	*	2.12E-06
692	471947.1	3771148	9901	DieselExhP	0.00212	2.23E-06	70YrCancer	*	2.23E-06
693	471939.9	3771154	9901	DieselExhP	0.00222	2.33E-06	70YrCancer	*	2.33E-06
694	471932.7	3771159	9901	DieselExhP	0.00232	2.44E-06	70YrCancer	*	2.44E-06
695	471925.5	3771165	9901	DieselExhP	0.0024	2.52E-06	70YrCancer	*	2.52E-06
696	471918.3	3771171	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
697	471911.1	3771177	9901	DieselExhP	0.00254	2.67E-06	70YrCancer	*	2.67E-06

698	471903.9	3771183	9901	DieselExhP	0.00259	2.72E-06	70YrCancer	*	2.72E-06
699	471896.7	3771189	9901	DieselExhP	0.00261	2.74E-06	70YrCancer	*	2.74E-06
700	471889.5	3771195	9901	DieselExhP	0.00261	2.74E-06	70YrCancer	*	2.74E-06
701	471882.3	3771201	9901	DieselExhP	0.00258	2.71E-06	70YrCancer	*	2.71E-06
702	471875.1	3771206	9901	DieselExhP	0.00253	2.66E-06	70YrCancer	*	2.66E-06
703	471961	3771108	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
704	471969.2	3771106	9901	DieselExhP	0.00146	1.53E-06	70YrCancer	*	1.53E-06
705	471977.3	3771103	9901	DieselExhP	0.00142	1.49E-06	70YrCancer	*	1.49E-06
706	471985.5	3771101	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
707	471993.7	3771098	9901	DieselExhP	0.00135	1.42E-06	70YrCancer	*	1.42E-06
708	472001.8	3771096	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
709	472010	3771093	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
710	472018.2	3771091	9901	DieselExhP	0.00124	1.30E-06	70YrCancer	*	1.30E-06
711	472033.8	3771093	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
712	472041.3	3771097	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
713	472048.8	3771101	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
714	472056.3	3771105	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
715	472063.9	3771109	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
716	472071.4	3771113	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
717	472078.9	3771117	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
718	472086.4	3771121	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
719	471952.8	3771111	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
720	471945.6	3771116	9901	DieselExhP	0.00159	1.67E-06	70YrCancer	*	1.67E-06
721	471938.4	3771122	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06
722	471931.2	3771128	9901	DieselExhP	0.00172	1.81E-06	70YrCancer	*	1.81E-06
723	471924.1	3771134	9901	DieselExhP	0.00178	1.87E-06	70YrCancer	*	1.87E-06
724	471916.9	3771140	9901	DieselExhP	0.00184	1.93E-06	70YrCancer	*	1.93E-06
725	471909.7	3771146	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
726	471902.5	3771152	9901	DieselExhP	0.00194	2.04E-06	70YrCancer	*	2.04E-06
727	471895.3	3771158	9901	DieselExhP	0.00197	2.07E-06	70YrCancer	*	2.07E-06
728	471888.1	3771164	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
729	471880.9	3771169	9901	DieselExhP	0.002	2.10E-06	70YrCancer	*	2.10E-06
730	471873.7	3771175	9901	DieselExhP	0.002	2.10E-06	70YrCancer	*	2.10E-06
731	471866.5	3771181	9901	DieselExhP	0.00198	2.08E-06	70YrCancer	*	2.08E-06
732	471859.3	3771187	9901	DieselExhP	0.00195	2.05E-06	70YrCancer	*	2.05E-06
733	471945.4	3771089	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
734	471953.7	3771086	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
735	471962.1	3771084	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
736	471970.4	3771081	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
737	471978.8	3771079	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
738	471987.1	3771076	9901	DieselExhP	0.00115	1.21E-06	70YrCancer	*	1.21E-06
739	471995.5	3771074	9901	DieselExhP	0.00112	1.18E-06	70YrCancer	*	1.18E-06
740	472003.8	3771071	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
741	472012.2	3771069	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
742	472020.5	3771066	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
743	472036.6	3771068	9901	DieselExhP	0.00102	1.07E-06	70YrCancer	*	1.07E-06
744	472044.2	3771072	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
745	472051.9	3771076	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
746	472059.6	3771080	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
747	472067.3	3771084	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06

748	472074.9	3771089	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
749	472082.6	3771093	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
750	472090.3	3771097	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
751	472097.9	3771101	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
752	472105.6	3771105	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
753	471937	3771091	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
754	471929.8	3771097	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
755	471922.6	3771103	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
756	471915.4	3771109	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
757	471908.2	3771115	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
758	471901	3771121	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
759	471893.8	3771127	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
760	471886.6	3771132	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
761	471879.4	3771138	9901	DieselExhP	0.00158	1.66E-06	70YrCancer	*	1.66E-06
762	471872.3	3771144	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
763	471865.1	3771150	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
764	471857.9	3771156	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
765	471850.7	3771162	9901	DieselExhP	0.00159	1.67E-06	70YrCancer	*	1.67E-06
766	471843.5	3771168	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
767	471929.7	3771069	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
768	471938.1	3771067	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
769	471946.6	3771064	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
770	471955.1	3771062	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
771	471963.6	3771059	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
772	471972.1	3771057	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
773	471980.5	3771054	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
774	471989	3771052	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
775	471997.5	3771049	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
776	472006	3771046	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
777	472014.5	3771044	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
778	472023	3771041	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
779	472039.2	3771043	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
780	472047	3771047	9901	DieselExhP	0.00087	9.13E-07	70YrCancer	*	9.13E-07
781	472054.8	3771051	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
782	472062.6	3771056	9901	DieselExhP	0.00089	9.34E-07	70YrCancer	*	9.34E-07
783	472070.4	3771060	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
784	472078.2	3771064	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
785	472086	3771068	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
786	472093.8	3771073	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
787	472101.5	3771077	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
788	472109.3	3771081	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
789	472117.1	3771085	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
790	472124.9	3771089	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
791	471921.2	3771072	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
792	471914	3771078	9901	DieselExhP	0.00114	1.20E-06	70YrCancer	*	1.20E-06
793	471906.8	3771084	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
794	471899.6	3771090	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
795	471892.4	3771095	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
796	471885.2	3771101	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
797	471878	3771107	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06

798	471870.8	3771113	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
799	471863.6	3771119	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
800	471856.4	3771125	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
801	471849.2	3771131	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
802	471842	3771137	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
803	471834.8	3771143	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
804	471827.6	3771148	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
805	471913.9	3771050	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
806	471922.5	3771047	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
807	471931.1	3771045	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
808	471939.6	3771042	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
809	471948.2	3771040	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
810	471956.8	3771037	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
811	471965.4	3771035	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
812	471974	3771032	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
813	471982.5	3771029	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
814	471991.1	3771027	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
815	471999.7	3771024	9901	DieselExhP	0.00081	8.50E-07	70YrCancer	*	8.50E-07
816	472008.3	3771022	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
817	472016.8	3771019	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
818	472025.4	3771016	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
819	472041.9	3771018	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
820	472049.7	3771022	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
821	472057.6	3771027	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
822	472065.5	3771031	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
823	472073.4	3771035	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
824	472081.2	3771039	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
825	472089.1	3771044	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
826	472097	3771048	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
827	472104.9	3771052	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
828	472112.7	3771057	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
829	472120.6	3771061	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
830	472128.5	3771065	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
831	472136.4	3771069	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
832	472144.3	3771074	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
833	471905.3	3771053	9901	DieselExhP	0.00096	1.01E-06	70YrCancer	*	1.01E-06
834	471898.1	3771058	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
835	471891	3771064	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
836	471883.8	3771070	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
837	471876.6	3771076	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
838	471869.4	3771082	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
839	471862.2	3771088	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
840	471855	3771094	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
841	471847.8	3771100	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
842	471840.6	3771106	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
843	471833.4	3771111	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
844	471826.2	3771117	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
845	471819	3771123	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
846	471811.8	3771129	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
847	471898.2	3771031	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07

848	471906.8	3771028	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
849	471915.5	3771025	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
850	471924.1	3771023	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
851	471932.8	3771020	9901	DieselExhP	0.00081	8.50E-07	70YrCancer	*	8.50E-07
852	471941.4	3771018	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
853	471950.1	3771015	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
854	471958.7	3771012	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
855	471967.3	3771010	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
856	471976	3771007	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
857	471984.6	3771005	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
858	471993.3	3771002	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
859	472001.9	3770999	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07
860	472010.6	3770997	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
861	472019.2	3770994	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
862	472027.9	3770992	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
863	472044.5	3770993	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
864	472052.4	3770998	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
865	472060.4	3771002	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
866	472068.3	3771006	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
867	472076.2	3771011	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
868	472084.2	3771015	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
869	472092.1	3771019	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
870	472100.1	3771023	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
871	472108	3771028	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
872	472116	3771032	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
873	472123.9	3771036	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
874	472131.8	3771041	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
875	472139.8	3771045	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
876	472147.7	3771049	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
877	472155.7	3771054	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
878	472163.6	3771058	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
879	471889.5	3771033	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
880	471882.3	3771039	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
881	471875.1	3771045	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
882	471867.9	3771051	9901	DieselExhP	0.00089	9.34E-07	70YrCancer	*	9.34E-07
883	471860.7	3771057	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
884	471853.5	3771063	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
885	471846.3	3771069	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
886	471839.1	3771074	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
887	471832	3771080	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
888	471824.8	3771086	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
889	471817.6	3771092	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
890	471810.4	3771098	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
891	471803.2	3771104	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
892	471796	3771110	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
893	472054.8	3770894	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
894	472062.9	3770898	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
895	472071	3770903	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
896	472079.1	3770907	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
897	472087.2	3770911	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07

898	472095.3	3770916	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
899	472103.4	3770920	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
900	472111.5	3770925	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
901	472119.6	3770929	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
902	472127.7	3770933	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
903	472135.8	3770938	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
904	472143.9	3770942	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
905	472152	3770947	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
906	472160.1	3770951	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
907	472168.2	3770955	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
908	472176.3	3770960	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
909	472184.4	3770964	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
910	472192.5	3770968	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
911	472200.6	3770973	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
912	472208.7	3770977	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
913	472216.8	3770982	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
914	471771.5	3770876	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
915	471780.2	3770873	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
916	471788.8	3770871	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
917	471797.5	3770868	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
918	471806.1	3770865	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
919	471814.8	3770863	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
920	471823.4	3770860	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
921	471832.1	3770858	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
922	472136.3	3770833	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
923	472144.3	3770837	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
924	472152.2	3770842	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
925	472160.2	3770846	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
926	472168.1	3770850	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
927	472176.1	3770855	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
928	472184	3770859	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
929	472191.9	3770863	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
930	472199.9	3770867	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
931	471762.9	3770878	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
932	471755.7	3770884	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
933	471748.5	3770890	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
934	471741.3	3770896	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
935	471734.1	3770902	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
936	471726.9	3770908	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
937	471719.7	3770914	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
938	471712.5	3770920	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
939	471705.3	3770926	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
940	471698.1	3770931	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
941	471690.9	3770937	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
942	471683.7	3770943	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
943	471676.5	3770949	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
944	471669.3	3770955	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
945	471708.3	3770798	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
946	471717.1	3770796	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
947	471725.8	3770793	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07

948	471734.6	3770791	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
949	471743.3	3770788	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
950	471752.1	3770785	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
951	471760.8	3770783	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
952	471769.6	3770780	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
953	471778.3	3770777	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
954	471787.1	3770775	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
955	471795.8	3770772	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
956	471804.6	3770769	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
957	471813.3	3770767	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
958	471822.1	3770764	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
959	471830.8	3770762	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
960	471839.6	3770759	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
961	471699.5	3770801	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
962	471692.4	3770807	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
963	471685.2	3770813	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
964	471678	3770819	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
965	471670.8	3770825	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
966	471663.6	3770830	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
967	471656.4	3770836	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
968	471649.2	3770842	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
969	471642	3770848	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
970	471634.8	3770854	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
971	471627.6	3770860	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
972	471620.4	3770866	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
973	471613.2	3770872	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
974	471606	3770878	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
975	471994.1	3771359	9901	DieselExhP	0.0177	1.86E-05	70YrCancer	*	1.86E-05
976	472000.4	3771367	9901	DieselExhP	0.01538	1.61E-05	70YrCancer	*	1.61E-05
977	472006.7	3771374	9901	DieselExhP	0.01343	1.41E-05	70YrCancer	*	1.41E-05
978	472012.9	3771382	9901	DieselExhP	0.01188	1.25E-05	70YrCancer	*	1.25E-05
979	472019.2	3771390	9901	DieselExhP	0.01053	1.11E-05	70YrCancer	*	1.11E-05
980	472025.5	3771397	9901	DieselExhP	0.00942	9.89E-06	70YrCancer	*	9.89E-06
981	471990.2	3771362	9901	DieselExhP	0.01548	1.62E-05	70YrCancer	*	1.62E-05
982	471996.5	3771370	9901	DieselExhP	0.01371	1.44E-05	70YrCancer	*	1.44E-05
983	472002.8	3771378	9901	DieselExhP	0.01216	1.28E-05	70YrCancer	*	1.28E-05
984	472009.1	3771385	9901	DieselExhP	0.01087	1.14E-05	70YrCancer	*	1.14E-05
985	472015.3	3771393	9901	DieselExhP	0.0097	1.02E-05	70YrCancer	*	1.02E-05
986	472021.6	3771400	9901	DieselExhP	0.00877	9.20E-06	70YrCancer	*	9.20E-06
987	471986.4	3771366	9901	DieselExhP	0.01352	1.42E-05	70YrCancer	*	1.42E-05
988	471992.7	3771373	9901	DieselExhP	0.01216	1.28E-05	70YrCancer	*	1.28E-05
989	471998.9	3771381	9901	DieselExhP	0.0109	1.14E-05	70YrCancer	*	1.14E-05
990	472005.2	3771388	9901	DieselExhP	0.00981	1.03E-05	70YrCancer	*	1.03E-05
991	472011.5	3771396	9901	DieselExhP	0.00883	9.27E-06	70YrCancer	*	9.27E-06
992	472017.8	3771404	9901	DieselExhP	0.00802	8.42E-06	70YrCancer	*	8.42E-06
993	471982.5	3771369	9901	DieselExhP	0.01184	1.24E-05	70YrCancer	*	1.24E-05
994	471988.8	3771376	9901	DieselExhP	0.01076	1.13E-05	70YrCancer	*	1.13E-05
995	471995.1	3771384	9901	DieselExhP	0.00973	1.02E-05	70YrCancer	*	1.02E-05
996	472001.4	3771392	9901	DieselExhP	0.00881	9.25E-06	70YrCancer	*	9.25E-06
997	472007.6	3771399	9901	DieselExhP	0.00798	8.38E-06	70YrCancer	*	8.38E-06

998	472013.9	3771407	9901	DieselExhP	0.00728	7.64E-06	70YrCancer	*	7.64E-06
999	471972.4	3771364	9901	DieselExhP	0.01122	1.18E-05	70YrCancer	*	1.18E-05
1000	471978.7	3771372	9901	DieselExhP	0.01041	1.09E-05	70YrCancer	*	1.09E-05
1001	471984.9	3771380	9901	DieselExhP	0.00954	1.00E-05	70YrCancer	*	1.00E-05
1002	471991.2	3771387	9901	DieselExhP	0.00869	9.12E-06	70YrCancer	*	9.12E-06
1003	471997.5	3771395	9901	DieselExhP	0.00791	8.30E-06	70YrCancer	*	8.30E-06
1004	472003.8	3771402	9901	DieselExhP	0.00719	7.55E-06	70YrCancer	*	7.55E-06
1005	472010	3771410	9901	DieselExhP	0.00658	6.91E-06	70YrCancer	*	6.91E-06
1006	471968.5	3771367	9901	DieselExhP	0.00984	1.03E-05	70YrCancer	*	1.03E-05
1007	471974.8	3771375	9901	DieselExhP	0.00919	9.65E-06	70YrCancer	*	9.65E-06
1008	471981.1	3771383	9901	DieselExhP	0.00848	8.90E-06	70YrCancer	*	8.90E-06
1009	471987.4	3771390	9901	DieselExhP	0.00777	8.16E-06	70YrCancer	*	8.16E-06
1010	471993.6	3771398	9901	DieselExhP	0.0071	7.45E-06	70YrCancer	*	7.45E-06
1011	471999.9	3771406	9901	DieselExhP	0.00649	6.81E-06	70YrCancer	*	6.81E-06
1012	472006.2	3771413	9901	DieselExhP	0.00594	6.23E-06	70YrCancer	*	6.23E-06
1013	471964.7	3771371	9901	DieselExhP	0.00869	9.12E-06	70YrCancer	*	9.12E-06
1014	471970.9	3771378	9901	DieselExhP	0.00814	8.54E-06	70YrCancer	*	8.54E-06
1015	471977.2	3771386	9901	DieselExhP	0.00756	7.93E-06	70YrCancer	*	7.93E-06
1016	471983.5	3771393	9901	DieselExhP	0.00697	7.32E-06	70YrCancer	*	7.32E-06
1017	471989.8	3771401	9901	DieselExhP	0.0064	6.72E-06	70YrCancer	*	6.72E-06
1018	471996.1	3771409	9901	DieselExhP	0.00587	6.16E-06	70YrCancer	*	6.16E-06
1019	472002.3	3771416	9901	DieselExhP	0.0054	5.67E-06	70YrCancer	*	5.67E-06
1020	471954.5	3771366	9901	DieselExhP	0.00807	8.47E-06	70YrCancer	*	8.47E-06
1021	471960.8	3771374	9901	DieselExhP	0.00772	8.10E-06	70YrCancer	*	8.10E-06
1022	471967.1	3771381	9901	DieselExhP	0.00726	7.62E-06	70YrCancer	*	7.62E-06
1023	471973.4	3771389	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06
1024	471979.6	3771397	9901	DieselExhP	0.00628	6.59E-06	70YrCancer	*	6.59E-06
1025	471985.9	3771404	9901	DieselExhP	0.00579	6.08E-06	70YrCancer	*	6.08E-06
1026	471992.2	3771412	9901	DieselExhP	0.00534	5.60E-06	70YrCancer	*	5.60E-06
1027	471998.5	3771420	9901	DieselExhP	0.00493	5.17E-06	70YrCancer	*	5.17E-06
1028	471950.7	3771369	9901	DieselExhP	0.00721	7.57E-06	70YrCancer	*	7.57E-06
1029	471956.9	3771377	9901	DieselExhP	0.00691	7.25E-06	70YrCancer	*	7.25E-06
1030	471963.2	3771385	9901	DieselExhP	0.00654	6.86E-06	70YrCancer	*	6.86E-06
1031	471969.5	3771392	9901	DieselExhP	0.00613	6.43E-06	70YrCancer	*	6.43E-06
1032	471975.8	3771400	9901	DieselExhP	0.00571	5.99E-06	70YrCancer	*	5.99E-06
1033	471982.1	3771407	9901	DieselExhP	0.0053	5.56E-06	70YrCancer	*	5.56E-06
1034	471988.3	3771415	9901	DieselExhP	0.0049	5.14E-06	70YrCancer	*	5.14E-06
1035	471994.6	3771423	9901	DieselExhP	0.00454	4.77E-06	70YrCancer	*	4.77E-06
1036	471940.5	3771365	9901	DieselExhP	0.00661	6.94E-06	70YrCancer	*	6.94E-06
1037	471946.8	3771373	9901	DieselExhP	0.00648	6.80E-06	70YrCancer	*	6.80E-06
1038	471953.1	3771380	9901	DieselExhP	0.00623	6.54E-06	70YrCancer	*	6.54E-06
1039	471959.4	3771388	9901	DieselExhP	0.00593	6.22E-06	70YrCancer	*	6.22E-06
1040	471965.6	3771395	9901	DieselExhP	0.00559	5.87E-06	70YrCancer	*	5.87E-06
1041	471971.9	3771403	9901	DieselExhP	0.00523	5.49E-06	70YrCancer	*	5.49E-06
1042	471978.2	3771411	9901	DieselExhP	0.00487	5.11E-06	70YrCancer	*	5.11E-06
1043	471984.5	3771418	9901	DieselExhP	0.00453	4.75E-06	70YrCancer	*	4.75E-06
1044	471990.8	3771426	9901	DieselExhP	0.0042	4.41E-06	70YrCancer	*	4.41E-06
1045	471908.7	3771366	9901	DieselExhP	0.00417	4.38E-06	70YrCancer	*	4.38E-06
1046	471915	3771373	9901	DieselExhP	0.0042	4.41E-06	70YrCancer	*	4.41E-06
1047	471921.2	3771381	9901	DieselExhP	0.00419	4.40E-06	70YrCancer	*	4.40E-06

1048	471927.5	3771388	9901	DieselExhP	0.00414	4.35E-06	70YrCancer	*	4.35E-06
1049	471933.8	3771396	9901	DieselExhP	0.00404	4.24E-06	70YrCancer	*	4.24E-06
1050	471940.1	3771404	9901	DieselExhP	0.0039	4.09E-06	70YrCancer	*	4.09E-06
1051	471946.3	3771411	9901	DieselExhP	0.00374	3.93E-06	70YrCancer	*	3.93E-06
1052	471952.6	3771419	9901	DieselExhP	0.00356	3.74E-06	70YrCancer	*	3.74E-06
1053	471958.9	3771427	9901	DieselExhP	0.00338	3.55E-06	70YrCancer	*	3.55E-06
1054	471965.2	3771434	9901	DieselExhP	0.00319	3.35E-06	70YrCancer	*	3.35E-06
1055	471971.5	3771442	9901	DieselExhP	0.00301	3.16E-06	70YrCancer	*	3.16E-06
1056	471876.8	3771366	9901	DieselExhP	0.00281	2.95E-06	70YrCancer	*	2.95E-06
1057	471883.1	3771374	9901	DieselExhP	0.00287	3.01E-06	70YrCancer	*	3.01E-06
1058	471889.4	3771381	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
1059	471895.7	3771389	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
1060	471901.9	3771397	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
1061	471908.2	3771404	9901	DieselExhP	0.00289	3.03E-06	70YrCancer	*	3.03E-06
1062	471914.5	3771412	9901	DieselExhP	0.00284	2.98E-06	70YrCancer	*	2.98E-06
1063	471920.8	3771420	9901	DieselExhP	0.00278	2.92E-06	70YrCancer	*	2.92E-06
1064	471927	3771427	9901	DieselExhP	0.0027	2.83E-06	70YrCancer	*	2.83E-06
1065	471933.3	3771435	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
1066	471939.6	3771442	9901	DieselExhP	0.0025	2.62E-06	70YrCancer	*	2.62E-06
1067	471945.9	3771450	9901	DieselExhP	0.00239	2.51E-06	70YrCancer	*	2.51E-06
1068	471952.2	3771458	9901	DieselExhP	0.00228	2.39E-06	70YrCancer	*	2.39E-06
1069	471845	3771367	9901	DieselExhP	0.00201	2.11E-06	70YrCancer	*	2.11E-06
1070	471851.2	3771374	9901	DieselExhP	0.00206	2.16E-06	70YrCancer	*	2.16E-06
1071	471857.5	3771382	9901	DieselExhP	0.0021	2.20E-06	70YrCancer	*	2.20E-06
1072	471863.8	3771390	9901	DieselExhP	0.00214	2.25E-06	70YrCancer	*	2.25E-06
1073	471870.1	3771397	9901	DieselExhP	0.00216	2.27E-06	70YrCancer	*	2.27E-06
1074	471876.4	3771405	9901	DieselExhP	0.00217	2.28E-06	70YrCancer	*	2.28E-06
1075	471882.6	3771413	9901	DieselExhP	0.00216	2.27E-06	70YrCancer	*	2.27E-06
1076	471888.9	3771420	9901	DieselExhP	0.00215	2.26E-06	70YrCancer	*	2.26E-06
1077	471895.2	3771428	9901	DieselExhP	0.00212	2.23E-06	70YrCancer	*	2.23E-06
1078	471901.5	3771435	9901	DieselExhP	0.00208	2.18E-06	70YrCancer	*	2.18E-06
1079	471907.7	3771443	9901	DieselExhP	0.00203	2.13E-06	70YrCancer	*	2.13E-06
1080	471914	3771451	9901	DieselExhP	0.00198	2.08E-06	70YrCancer	*	2.08E-06
1081	471920.3	3771458	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
1082	471926.6	3771466	9901	DieselExhP	0.00186	1.95E-06	70YrCancer	*	1.95E-06
1083	471932.9	3771474	9901	DieselExhP	0.00179	1.88E-06	70YrCancer	*	1.88E-06
1084	471813.1	3771368	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
1085	471819.4	3771375	9901	DieselExhP	0.00155	1.63E-06	70YrCancer	*	1.63E-06
1086	471825.7	3771383	9901	DieselExhP	0.00159	1.67E-06	70YrCancer	*	1.67E-06
1087	471832	3771390	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
1088	471838.2	3771398	9901	DieselExhP	0.00164	1.72E-06	70YrCancer	*	1.72E-06
1089	471844.5	3771406	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
1090	471850.8	3771413	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
1091	471857.1	3771421	9901	DieselExhP	0.00168	1.76E-06	70YrCancer	*	1.76E-06
1092	471863.3	3771428	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
1093	471869.6	3771436	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
1094	471875.9	3771444	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06
1095	471882.2	3771451	9901	DieselExhP	0.00163	1.71E-06	70YrCancer	*	1.71E-06
1096	471888.5	3771459	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
1097	471894.7	3771467	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06

1098	471901	3771474	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
1099	471907.3	3771482	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
1100	471913.6	3771489	9901	DieselExhP	0.00144	1.51E-06	70YrCancer	*	1.51E-06
1101	471787.5	3771376	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
1102	471793.8	3771383	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
1103	471800.1	3771391	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
1104	471806.4	3771399	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
1105	471812.7	3771406	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
1106	471818.9	3771414	9901	DieselExhP	0.00132	1.39E-06	70YrCancer	*	1.39E-06
1107	471825.2	3771422	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
1108	471831.5	3771429	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1109	471837.8	3771437	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1110	471844	3771444	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1111	471850.3	3771452	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
1112	471856.6	3771460	9901	DieselExhP	0.00132	1.39E-06	70YrCancer	*	1.39E-06
1113	471862.9	3771467	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
1114	471869.2	3771475	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
1115	471875.4	3771482	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
1116	471881.7	3771490	9901	DieselExhP	0.00124	1.30E-06	70YrCancer	*	1.30E-06
1117	471888	3771498	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
1118	471894.3	3771505	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
1119	471765.5	3771383	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1120	471762.7	3771373	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1121	471791.5	3771118	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
1122	471768.2	3771392	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1123	471774.5	3771399	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
1124	471780.8	3771407	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
1125	471787.1	3771415	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
1126	471793.4	3771422	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
1127	471799.6	3771430	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
1128	471805.9	3771437	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
1129	471812.2	3771445	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
1130	471818.5	3771453	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
1131	471824.7	3771460	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
1132	471831	3771468	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
1133	471837.3	3771476	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
1134	471843.6	3771483	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
1135	471849.9	3771491	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
1136	471856.1	3771498	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
1137	471862.4	3771506	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
1138	471868.7	3771514	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1139	471875	3771521	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
1140	471688.3	3771446	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1141	471685.5	3771437	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1142	471682.7	3771428	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1143	471679.9	3771419	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1144	471677.1	3771409	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1145	471674.3	3771400	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1146	471671.5	3771391	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1147	471668.7	3771382	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07

1148	471665.9	3771373	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1149	471691.1	3771455	9901	DieselExhP	0.00056	5.88E-07	70YrCancer	*	5.88E-07
1150	471697.3	3771463	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1151	471703.6	3771470	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1152	471709.9	3771478	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1153	471716.2	3771486	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1154	471722.4	3771493	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1155	471728.7	3771501	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1156	471735	3771509	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1157	471741.3	3771516	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1158	471747.6	3771524	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1159	471753.8	3771531	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1160	471760.1	3771539	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1161	471766.4	3771547	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1162	471772.7	3771554	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1163	471778.9	3771562	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1164	471785.2	3771570	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1165	471791.5	3771577	9901	DieselExhP	0.00056	5.88E-07	70YrCancer	*	5.88E-07
1166	471797.8	3771585	9901	DieselExhP	0.00055	5.77E-07	70YrCancer	*	5.77E-07
1167	471611.1	3771510	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1168	471608.3	3771500	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1169	471605.5	3771491	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1170	471602.7	3771482	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1171	471599.9	3771473	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1172	471597.1	3771464	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1173	471594.3	3771455	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1174	471591.5	3771445	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1175	471588.7	3771436	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1176	471586	3771427	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1177	471583.2	3771418	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1178	471580.4	3771409	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1179	471577.6	3771400	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1180	471574.8	3771390	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1181	471572	3771381	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1182	471535.7	3771262	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1183	471532.9	3771253	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1184	471530.1	3771244	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1185	471527.3	3771235	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1186	471529.1	3771217	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1187	471533.6	3771208	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1188	471538.1	3771200	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1189	471542.6	3771192	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1190	471547.2	3771183	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1191	471551.7	3771175	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1192	471556.2	3771166	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1193	471560.7	3771158	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1194	471565.3	3771149	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1195	471569.8	3771141	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1196	471574.3	3771132	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1197	471578.8	3771124	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07

1198	471583.4	3771116	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1199	471587.9	3771107	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1200	471592.4	3771099	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1201	471596.9	3771090	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1202	471601.5	3771082	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1203	471606	3771073	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1204	471610.5	3771065	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1205	471615	3771056	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1206	471619.6	3771048	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1207	471624.1	3771039	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1208	471628.6	3771031	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1209	471633.1	3771023	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1210	471637.7	3771014	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1211	471642.2	3771006	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1212	471646.7	3770997	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1213	471651.2	3770989	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1214	471655.8	3770980	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1215	471660.3	3770972	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1216	471664.8	3770963	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1217	471613.9	3771519	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1218	471620.1	3771526	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1219	471626.4	3771534	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1220	471632.7	3771542	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1221	471639	3771549	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1222	471645.3	3771557	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1223	471651.5	3771565	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1224	471657.8	3771572	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1225	471664.1	3771580	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1226	471670.4	3771587	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1227	471676.6	3771595	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1228	471682.9	3771603	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1229	471689.2	3771610	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1230	471695.5	3771618	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1231	471701.8	3771626	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1232	471708	3771633	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1233	471714.3	3771641	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1234	471720.6	3771648	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1235	471533.8	3771573	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
1236	471531	3771564	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07
1237	471528.1	3771554	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07
1238	471525.2	3771545	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
1239	471522.4	3771535	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
1240	471519.5	3771526	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1241	471516.6	3771517	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1242	471513.8	3771507	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1243	471510.9	3771498	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1244	471508.1	3771488	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1245	471505.2	3771479	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1246	471502.3	3771470	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1247	471499.5	3771460	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07

1248	471496.6	3771451	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
1249	471493.7	3771441	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1250	471490.9	3771432	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1251	471488	3771423	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1252	471485.1	3771413	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1253	471482.3	3771404	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1254	471479.4	3771394	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1255	471456.5	3771319	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1256	471453.7	3771310	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1257	471450.8	3771300	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1258	471447.9	3771291	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1259	471445.1	3771281	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1260	471442.2	3771272	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1261	471439.3	3771263	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1262	471436.5	3771253	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1263	471433.6	3771244	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1264	471430.8	3771234	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1265	471427.9	3771225	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
1266	471429.7	3771207	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1267	471434.3	3771198	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1268	471438.9	3771190	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1269	471443.6	3771181	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1270	471448.2	3771172	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1271	471452.9	3771164	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1272	471457.5	3771155	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1273	471462.2	3771146	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1274	471466.8	3771138	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1275	471471.4	3771129	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1276	471476.1	3771120	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1277	471480.7	3771112	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1278	471485.4	3771103	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1279	471490	3771094	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1280	471494.6	3771086	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1281	471499.3	3771077	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1282	471503.9	3771068	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1283	471508.6	3771060	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1284	471513.2	3771051	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1285	471517.8	3771042	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1286	471522.5	3771034	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1287	471527.1	3771025	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1288	471531.8	3771016	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1289	471536.4	3771008	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1290	471541	3770999	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1291	471545.7	3770990	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1292	471550.3	3770982	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1293	471555	3770973	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1294	471559.6	3770964	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1295	471564.3	3770956	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1296	471568.9	3770947	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1297	471573.5	3770938	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07

1298	471578.2	3770930	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1299	471582.8	3770921	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1300	471587.5	3770912	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1301	471592.1	3770904	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1302	471596.7	3770895	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1303	471601.4	3770886	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1304	471536.7	3771582	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1305	471543	3771590	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1306	471549.2	3771598	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1307	471555.5	3771605	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1308	471561.8	3771613	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1309	471568.1	3771621	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1310	471574.3	3771628	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1311	471580.6	3771636	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1312	471586.9	3771643	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1313	471593.2	3771651	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1314	471599.5	3771659	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1315	471605.7	3771666	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1316	471612	3771674	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1317	471618.3	3771681	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1318	471624.6	3771689	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1319	471630.8	3771697	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1320	471637.1	3771704	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1321	471643.4	3771712	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1322	472025.8	3771391	9901	DieselExhP	0.01047	1.10E-05	70YrCancer	*	1.10E-05
1323	472018.7	3771383	9901	DieselExhP	0.01178	1.24E-05	70YrCancer	*	1.24E-05
1324	472011.7	3771376	9901	DieselExhP	0.01321	1.39E-05	70YrCancer	*	1.39E-05
1325	472004.6	3771369	9901	DieselExhP	0.01489	1.56E-05	70YrCancer	*	1.56E-05
1326	471997.5	3771362	9901	DieselExhP	0.01687	1.77E-05	70YrCancer	*	1.77E-05
1327	471675.8	3771041	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1328	471605.1	3770970	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1329	472031.3	3771399	9901	DieselExhP	0.0092	9.66E-06	70YrCancer	*	9.66E-06
1330	472038.6	3771393	9901	DieselExhP	0.00948	9.95E-06	70YrCancer	*	9.95E-06
1331	472045.8	3771387	9901	DieselExhP	0.00927	9.73E-06	70YrCancer	*	9.73E-06
1332	472053.1	3771382	9901	DieselExhP	0.00896	9.40E-06	70YrCancer	*	9.40E-06
1333	472060.3	3771376	9901	DieselExhP	0.00863	9.06E-06	70YrCancer	*	9.06E-06
1334	472067.6	3771370	9901	DieselExhP	0.00825	8.66E-06	70YrCancer	*	8.66E-06
1335	472074.9	3771364	9901	DieselExhP	0.0078	8.19E-06	70YrCancer	*	8.19E-06
1336	472082.1	3771358	9901	DieselExhP	0.00726	7.62E-06	70YrCancer	*	7.62E-06
1337	472089.4	3771352	9901	DieselExhP	0.00667	7.00E-06	70YrCancer	*	7.00E-06
1338	472096.7	3771347	9901	DieselExhP	0.00607	6.37E-06	70YrCancer	*	6.37E-06
1339	472103.9	3771341	9901	DieselExhP	0.00548	5.75E-06	70YrCancer	*	5.75E-06
1340	472111.2	3771335	9901	DieselExhP	0.00493	5.17E-06	70YrCancer	*	5.17E-06
1341	472118.4	3771329	9901	DieselExhP	0.00443	4.65E-06	70YrCancer	*	4.65E-06
1342	472125.7	3771323	9901	DieselExhP	0.00397	4.17E-06	70YrCancer	*	4.17E-06
1343	472027.6	3771403	9901	DieselExhP	0.00873	9.16E-06	70YrCancer	*	9.16E-06
1344	472020.9	3771395	9901	DieselExhP	0.00961	1.01E-05	70YrCancer	*	1.01E-05
1345	472034.4	3771403	9901	DieselExhP	0.00871	9.14E-06	70YrCancer	*	9.14E-06
1346	472041.7	3771397	9901	DieselExhP	0.00888	9.32E-06	70YrCancer	*	9.32E-06
1347	472049	3771391	9901	DieselExhP	0.0086	9.03E-06	70YrCancer	*	9.03E-06

1348	472056.2	3771386	9901	DieselExhP	0.00828	8.69E-06	70YrCancer	*	8.69E-06
1349	472063.5	3771380	9901	DieselExhP	0.00797	8.37E-06	70YrCancer	*	8.37E-06
1350	472070.7	3771374	9901	DieselExhP	0.00764	8.02E-06	70YrCancer	*	8.02E-06
1351	472078	3771368	9901	DieselExhP	0.00724	7.60E-06	70YrCancer	*	7.60E-06
1352	472085.3	3771362	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06
1353	472092.5	3771356	9901	DieselExhP	0.00628	6.59E-06	70YrCancer	*	6.59E-06
1354	472099.8	3771351	9901	DieselExhP	0.00575	6.04E-06	70YrCancer	*	6.04E-06
1355	472107	3771345	9901	DieselExhP	0.00523	5.49E-06	70YrCancer	*	5.49E-06
1356	472114.3	3771339	9901	DieselExhP	0.00473	4.96E-06	70YrCancer	*	4.96E-06
1357	472121.6	3771333	9901	DieselExhP	0.00427	4.48E-06	70YrCancer	*	4.48E-06
1358	472128.8	3771327	9901	DieselExhP	0.00385	4.04E-06	70YrCancer	*	4.04E-06
1359	472030.7	3771406	9901	DieselExhP	0.00833	8.74E-06	70YrCancer	*	8.74E-06
1360	472023.9	3771406	9901	DieselExhP	0.00809	8.49E-06	70YrCancer	*	8.49E-06
1361	472017.2	3771398	9901	DieselExhP	0.00882	9.26E-06	70YrCancer	*	9.26E-06
1362	472037.6	3771407	9901	DieselExhP	0.00831	8.72E-06	70YrCancer	*	8.72E-06
1363	472044.8	3771401	9901	DieselExhP	0.00839	8.81E-06	70YrCancer	*	8.81E-06
1364	472052.1	3771395	9901	DieselExhP	0.00803	8.43E-06	70YrCancer	*	8.43E-06
1365	472059.4	3771389	9901	DieselExhP	0.0077	8.08E-06	70YrCancer	*	8.08E-06
1366	472066.6	3771384	9901	DieselExhP	0.00741	7.78E-06	70YrCancer	*	7.78E-06
1367	472073.9	3771378	9901	DieselExhP	0.0071	7.45E-06	70YrCancer	*	7.45E-06
1368	472081.1	3771372	9901	DieselExhP	0.00675	7.08E-06	70YrCancer	*	7.08E-06
1369	472088.4	3771366	9901	DieselExhP	0.00635	6.66E-06	70YrCancer	*	6.66E-06
1370	472095.7	3771360	9901	DieselExhP	0.00591	6.20E-06	70YrCancer	*	6.20E-06
1371	472102.9	3771354	9901	DieselExhP	0.00545	5.72E-06	70YrCancer	*	5.72E-06
1372	472110.2	3771349	9901	DieselExhP	0.00499	5.24E-06	70YrCancer	*	5.24E-06
1373	472117.4	3771343	9901	DieselExhP	0.00454	4.77E-06	70YrCancer	*	4.77E-06
1374	472124.7	3771337	9901	DieselExhP	0.00412	4.32E-06	70YrCancer	*	4.32E-06
1375	472132	3771331	9901	DieselExhP	0.00374	3.93E-06	70YrCancer	*	3.93E-06
1376	472040.7	3771411	9901	DieselExhP	0.00796	8.35E-06	70YrCancer	*	8.35E-06
1377	472048	3771405	9901	DieselExhP	0.00796	8.35E-06	70YrCancer	*	8.35E-06
1378	472055.2	3771399	9901	DieselExhP	0.00756	7.93E-06	70YrCancer	*	7.93E-06
1379	472062.5	3771393	9901	DieselExhP	0.00721	7.57E-06	70YrCancer	*	7.57E-06
1380	472069.7	3771387	9901	DieselExhP	0.00692	7.26E-06	70YrCancer	*	7.26E-06
1381	472077	3771382	9901	DieselExhP	0.00663	6.96E-06	70YrCancer	*	6.96E-06
1382	472084.3	3771376	9901	DieselExhP	0.00632	6.63E-06	70YrCancer	*	6.63E-06
1383	472091.5	3771370	9901	DieselExhP	0.00597	6.27E-06	70YrCancer	*	6.27E-06
1384	472098.8	3771364	9901	DieselExhP	0.00558	5.86E-06	70YrCancer	*	5.86E-06
1385	472106.1	3771358	9901	DieselExhP	0.00517	5.43E-06	70YrCancer	*	5.43E-06
1386	472113.3	3771352	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1387	472120.6	3771347	9901	DieselExhP	0.00436	4.58E-06	70YrCancer	*	4.58E-06
1388	472127.8	3771341	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
1389	472135.1	3771335	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
1390	472035.3	3771414	9901	DieselExhP	0.00762	8.00E-06	70YrCancer	*	8.00E-06
1391	472026.7	3771413	9901	DieselExhP	0.00725	7.61E-06	70YrCancer	*	7.61E-06
1392	472018.1	3771413	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06
1393	472009.8	3771403	9901	DieselExhP	0.00749	7.86E-06	70YrCancer	*	7.86E-06
1394	472043.8	3771415	9901	DieselExhP	0.00764	8.02E-06	70YrCancer	*	8.02E-06
1395	472051.1	3771409	9901	DieselExhP	0.00759	7.97E-06	70YrCancer	*	7.97E-06
1396	472058.4	3771403	9901	DieselExhP	0.00715	7.50E-06	70YrCancer	*	7.50E-06
1397	472065.6	3771397	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06

1398	472072.9	3771391	9901	DieselExhP	0.00649	6.81E-06	70YrCancer	*	6.81E-06
1399	472080.1	3771386	9901	DieselExhP	0.00622	6.53E-06	70YrCancer	*	6.53E-06
1400	472087.4	3771380	9901	DieselExhP	0.00593	6.22E-06	70YrCancer	*	6.22E-06
1401	472094.7	3771374	9901	DieselExhP	0.00562	5.90E-06	70YrCancer	*	5.90E-06
1402	472101.9	3771368	9901	DieselExhP	0.00528	5.54E-06	70YrCancer	*	5.54E-06
1403	472109.2	3771362	9901	DieselExhP	0.00492	5.16E-06	70YrCancer	*	5.16E-06
1404	472116.4	3771356	9901	DieselExhP	0.00455	4.78E-06	70YrCancer	*	4.78E-06
1405	472123.7	3771351	9901	DieselExhP	0.00418	4.39E-06	70YrCancer	*	4.39E-06
1406	472131	3771345	9901	DieselExhP	0.00384	4.03E-06	70YrCancer	*	4.03E-06
1407	472138.2	3771339	9901	DieselExhP	0.00351	3.68E-06	70YrCancer	*	3.68E-06
1408	472038.7	3771418	9901	DieselExhP	0.00735	7.71E-06	70YrCancer	*	7.71E-06
1409	472030.5	3771417	9901	DieselExhP	0.007	7.35E-06	70YrCancer	*	7.35E-06
1410	472022.3	3771417	9901	DieselExhP	0.00655	6.87E-06	70YrCancer	*	6.87E-06
1411	472014.1	3771416	9901	DieselExhP	0.0061	6.40E-06	70YrCancer	*	6.40E-06
1412	472006.1	3771407	9901	DieselExhP	0.00669	7.02E-06	70YrCancer	*	7.02E-06
1413	472047	3771419	9901	DieselExhP	0.00738	7.75E-06	70YrCancer	*	7.75E-06
1414	472054.2	3771413	9901	DieselExhP	0.00728	7.64E-06	70YrCancer	*	7.64E-06
1415	472061.5	3771407	9901	DieselExhP	0.0068	7.14E-06	70YrCancer	*	7.14E-06
1416	472068.8	3771401	9901	DieselExhP	0.00641	6.73E-06	70YrCancer	*	6.73E-06
1417	472076	3771395	9901	DieselExhP	0.00612	6.42E-06	70YrCancer	*	6.42E-06
1418	472083.3	3771389	9901	DieselExhP	0.00586	6.15E-06	70YrCancer	*	6.15E-06
1419	472090.5	3771384	9901	DieselExhP	0.00559	5.87E-06	70YrCancer	*	5.87E-06
1420	472097.8	3771378	9901	DieselExhP	0.00531	5.57E-06	70YrCancer	*	5.57E-06
1421	472105.1	3771372	9901	DieselExhP	0.005	5.25E-06	70YrCancer	*	5.25E-06
1422	472112.3	3771366	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
1423	472119.6	3771360	9901	DieselExhP	0.00435	4.57E-06	70YrCancer	*	4.57E-06
1424	472126.8	3771354	9901	DieselExhP	0.00402	4.22E-06	70YrCancer	*	4.22E-06
1425	472134.1	3771349	9901	DieselExhP	0.0037	3.88E-06	70YrCancer	*	3.88E-06
1426	472141.4	3771343	9901	DieselExhP	0.0034	3.57E-06	70YrCancer	*	3.57E-06
1427	472042.1	3771422	9901	DieselExhP	0.00711	7.46E-06	70YrCancer	*	7.46E-06
1428	472034.1	3771421	9901	DieselExhP	0.00677	7.11E-06	70YrCancer	*	7.11E-06
1429	472026.1	3771421	9901	DieselExhP	0.00634	6.65E-06	70YrCancer	*	6.65E-06
1430	472018.1	3771420	9901	DieselExhP	0.0059	6.19E-06	70YrCancer	*	6.19E-06
1431	472010.1	3771419	9901	DieselExhP	0.0055	5.77E-06	70YrCancer	*	5.77E-06
1432	472002.3	3771411	9901	DieselExhP	0.00601	6.31E-06	70YrCancer	*	6.31E-06
1433	472050.1	3771423	9901	DieselExhP	0.00712	7.47E-06	70YrCancer	*	7.47E-06
1434	472057.4	3771417	9901	DieselExhP	0.00699	7.34E-06	70YrCancer	*	7.34E-06
1435	472064.6	3771411	9901	DieselExhP	0.0065	6.82E-06	70YrCancer	*	6.82E-06
1436	472071.9	3771405	9901	DieselExhP	0.00609	6.39E-06	70YrCancer	*	6.39E-06
1437	472079.1	3771399	9901	DieselExhP	0.00579	6.08E-06	70YrCancer	*	6.08E-06
1438	472086.4	3771393	9901	DieselExhP	0.00553	5.80E-06	70YrCancer	*	5.80E-06
1439	472093.7	3771388	9901	DieselExhP	0.00528	5.54E-06	70YrCancer	*	5.54E-06
1440	472100.9	3771382	9901	DieselExhP	0.00502	5.27E-06	70YrCancer	*	5.27E-06
1441	472108.2	3771376	9901	DieselExhP	0.00475	4.99E-06	70YrCancer	*	4.99E-06
1442	472115.5	3771370	9901	DieselExhP	0.00446	4.68E-06	70YrCancer	*	4.68E-06
1443	472122.7	3771364	9901	DieselExhP	0.00416	4.37E-06	70YrCancer	*	4.37E-06
1444	472130	3771358	9901	DieselExhP	0.00386	4.05E-06	70YrCancer	*	4.05E-06
1445	472137.2	3771352	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
1446	472144.5	3771347	9901	DieselExhP	0.00329	3.45E-06	70YrCancer	*	3.45E-06
1447	472053.2	3771426	9901	DieselExhP	0.00692	7.26E-06	70YrCancer	*	7.26E-06

1448	472060.5	3771421	9901	DieselExhP	0.00675	7.08E-06	70YrCancer	*	7.08E-06
1449	472067.8	3771415	9901	DieselExhP	0.00623	6.54E-06	70YrCancer	*	6.54E-06
1450	472075	3771409	9901	DieselExhP	0.00581	6.10E-06	70YrCancer	*	6.10E-06
1451	472082.3	3771403	9901	DieselExhP	0.0055	5.77E-06	70YrCancer	*	5.77E-06
1452	472089.5	3771397	9901	DieselExhP	0.00525	5.51E-06	70YrCancer	*	5.51E-06
1453	472096.8	3771391	9901	DieselExhP	0.00501	5.26E-06	70YrCancer	*	5.26E-06
1454	472104.1	3771386	9901	DieselExhP	0.00477	5.01E-06	70YrCancer	*	5.01E-06
1455	472111.3	3771380	9901	DieselExhP	0.00452	4.74E-06	70YrCancer	*	4.74E-06
1456	472118.6	3771374	9901	DieselExhP	0.00425	4.46E-06	70YrCancer	*	4.46E-06
1457	472125.9	3771368	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
1458	472133.1	3771362	9901	DieselExhP	0.00371	3.89E-06	70YrCancer	*	3.89E-06
1459	472140.4	3771356	9901	DieselExhP	0.00344	3.61E-06	70YrCancer	*	3.61E-06
1460	472147.6	3771351	9901	DieselExhP	0.00319	3.35E-06	70YrCancer	*	3.35E-06
1461	472047.6	3771430	9901	DieselExhP	0.00665	6.98E-06	70YrCancer	*	6.98E-06
1462	472038.7	3771429	9901	DieselExhP	0.00626	6.57E-06	70YrCancer	*	6.57E-06
1463	472029.9	3771428	9901	DieselExhP	0.00576	6.05E-06	70YrCancer	*	6.05E-06
1464	472021.1	3771427	9901	DieselExhP	0.00529	5.55E-06	70YrCancer	*	5.55E-06
1465	472012.3	3771427	9901	DieselExhP	0.0049	5.14E-06	70YrCancer	*	5.14E-06
1466	472003.5	3771426	9901	DieselExhP	0.0046	4.83E-06	70YrCancer	*	4.83E-06
1467	471994.9	3771416	9901	DieselExhP	0.00505	5.30E-06	70YrCancer	*	5.30E-06
1468	471995.6	3771390	9901	DieselExhP	0.00858	9.01E-06	70YrCancer	*	9.01E-06
1469	472056.4	3771430	9901	DieselExhP	0.00674	7.07E-06	70YrCancer	*	7.07E-06
1470	472063.6	3771424	9901	DieselExhP	0.00655	6.87E-06	70YrCancer	*	6.87E-06
1471	472070.9	3771419	9901	DieselExhP	0.006	6.30E-06	70YrCancer	*	6.30E-06
1472	472078.2	3771413	9901	DieselExhP	0.00556	5.84E-06	70YrCancer	*	5.84E-06
1473	472085.4	3771407	9901	DieselExhP	0.00524	5.50E-06	70YrCancer	*	5.50E-06
1474	472092.7	3771401	9901	DieselExhP	0.00499	5.24E-06	70YrCancer	*	5.24E-06
1475	472099.9	3771395	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1476	472107.2	3771389	9901	DieselExhP	0.00453	4.75E-06	70YrCancer	*	4.75E-06
1477	472114.5	3771384	9901	DieselExhP	0.0043	4.51E-06	70YrCancer	*	4.51E-06
1478	472121.7	3771378	9901	DieselExhP	0.00406	4.26E-06	70YrCancer	*	4.26E-06
1479	472129	3771372	9901	DieselExhP	0.00381	4.00E-06	70YrCancer	*	4.00E-06
1480	472136.2	3771366	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
1481	472143.5	3771360	9901	DieselExhP	0.00332	3.48E-06	70YrCancer	*	3.48E-06
1482	472150.8	3771354	9901	DieselExhP	0.00308	3.23E-06	70YrCancer	*	3.23E-06
1483	472050.9	3771434	9901	DieselExhP	0.00647	6.79E-06	70YrCancer	*	6.79E-06
1484	472042.4	3771433	9901	DieselExhP	0.0061	6.40E-06	70YrCancer	*	6.40E-06
1485	472033.8	3771432	9901	DieselExhP	0.00562	5.90E-06	70YrCancer	*	5.90E-06
1486	472025.2	3771431	9901	DieselExhP	0.00515	5.41E-06	70YrCancer	*	5.41E-06
1487	472016.7	3771431	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1488	472008.1	3771430	9901	DieselExhP	0.00446	4.68E-06	70YrCancer	*	4.68E-06
1489	471999.5	3771429	9901	DieselExhP	0.00423	4.44E-06	70YrCancer	*	4.44E-06
1490	472059.5	3771434	9901	DieselExhP	0.00657	6.90E-06	70YrCancer	*	6.90E-06
1491	472066.8	3771428	9901	DieselExhP	0.00635	6.66E-06	70YrCancer	*	6.66E-06
1492	472074	3771423	9901	DieselExhP	0.00578	6.07E-06	70YrCancer	*	6.07E-06
1493	472081.3	3771417	9901	DieselExhP	0.00533	5.59E-06	70YrCancer	*	5.59E-06
1494	472088.5	3771411	9901	DieselExhP	0.00501	5.26E-06	70YrCancer	*	5.26E-06
1495	472095.8	3771405	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1496	472103.1	3771399	9901	DieselExhP	0.00454	4.77E-06	70YrCancer	*	4.77E-06
1497	472110.3	3771393	9901	DieselExhP	0.00432	4.53E-06	70YrCancer	*	4.53E-06

1498	472117.6	3771388	9901	DieselExhP	0.00411	4.31E-06	70YrCancer	*	4.31E-06
1499	472124.9	3771382	9901	DieselExhP	0.00389	4.08E-06	70YrCancer	*	4.08E-06
1500	472132.1	3771376	9901	DieselExhP	0.00366	3.84E-06	70YrCancer	*	3.84E-06
1501	472139.4	3771370	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
1502	472146.6	3771364	9901	DieselExhP	0.0032	3.36E-06	70YrCancer	*	3.36E-06
1503	472153.9	3771358	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
1504	472066.6	3771453	9901	DieselExhP	0.00579	6.08E-06	70YrCancer	*	6.08E-06
1505	472058	3771452	9901	DieselExhP	0.00535	5.62E-06	70YrCancer	*	5.62E-06
1506	472049.5	3771452	9901	DieselExhP	0.00487	5.11E-06	70YrCancer	*	5.11E-06
1507	472040.9	3771451	9901	DieselExhP	0.0044	4.62E-06	70YrCancer	*	4.62E-06
1508	472032.3	3771450	9901	DieselExhP	0.00401	4.21E-06	70YrCancer	*	4.21E-06
1509	472023.8	3771450	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
1510	472015.2	3771449	9901	DieselExhP	0.00351	3.68E-06	70YrCancer	*	3.68E-06
1511	472006.6	3771448	9901	DieselExhP	0.00335	3.52E-06	70YrCancer	*	3.52E-06
1512	471998.1	3771447	9901	DieselExhP	0.00322	3.38E-06	70YrCancer	*	3.38E-06
1513	471989.5	3771447	9901	DieselExhP	0.00311	3.26E-06	70YrCancer	*	3.26E-06
1514	471980.9	3771446	9901	DieselExhP	0.003	3.15E-06	70YrCancer	*	3.15E-06
1515	471972.6	3771437	9901	DieselExhP	0.00322	3.38E-06	70YrCancer	*	3.38E-06
1516	471972.8	3771428	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
1517	471973	3771420	9901	DieselExhP	0.00409	4.29E-06	70YrCancer	*	4.29E-06
1518	471973.3	3771411	9901	DieselExhP	0.00466	4.89E-06	70YrCancer	*	4.89E-06
1519	472075.2	3771454	9901	DieselExhP	0.00585	6.14E-06	70YrCancer	*	6.14E-06
1520	472082.4	3771448	9901	DieselExhP	0.0056	5.88E-06	70YrCancer	*	5.88E-06
1521	472089.7	3771442	9901	DieselExhP	0.00499	5.24E-06	70YrCancer	*	5.24E-06
1522	472097	3771436	9901	DieselExhP	0.00449	4.71E-06	70YrCancer	*	4.71E-06
1523	472104.2	3771430	9901	DieselExhP	0.00415	4.36E-06	70YrCancer	*	4.36E-06
1524	472111.5	3771425	9901	DieselExhP	0.00389	4.08E-06	70YrCancer	*	4.08E-06
1525	472118.7	3771419	9901	DieselExhP	0.00368	3.86E-06	70YrCancer	*	3.86E-06
1526	472126	3771413	9901	DieselExhP	0.0035	3.67E-06	70YrCancer	*	3.67E-06
1527	472133.3	3771407	9901	DieselExhP	0.00334	3.51E-06	70YrCancer	*	3.51E-06
1528	472140.5	3771401	9901	DieselExhP	0.00318	3.34E-06	70YrCancer	*	3.34E-06
1529	472147.8	3771395	9901	DieselExhP	0.00302	3.17E-06	70YrCancer	*	3.17E-06
1530	472155	3771389	9901	DieselExhP	0.00286	3.00E-06	70YrCancer	*	3.00E-06
1531	472162.3	3771384	9901	DieselExhP	0.0027	2.83E-06	70YrCancer	*	2.83E-06
1532	472169.6	3771378	9901	DieselExhP	0.00255	2.68E-06	70YrCancer	*	2.68E-06
1533	472081.7	3771472	9901	DieselExhP	0.00519	5.45E-06	70YrCancer	*	5.45E-06
1534	472072.6	3771472	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1535	472063.4	3771471	9901	DieselExhP	0.00426	4.47E-06	70YrCancer	*	4.47E-06
1536	472054.3	3771470	9901	DieselExhP	0.00376	3.95E-06	70YrCancer	*	3.95E-06
1537	472045.1	3771469	9901	DieselExhP	0.00337	3.54E-06	70YrCancer	*	3.54E-06
1538	472036	3771469	9901	DieselExhP	0.0031	3.25E-06	70YrCancer	*	3.25E-06
1539	472026.9	3771468	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
1540	472017.7	3771467	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
1541	472008.6	3771467	9901	DieselExhP	0.00266	2.79E-06	70YrCancer	*	2.79E-06
1542	471999.4	3771466	9901	DieselExhP	0.00257	2.70E-06	70YrCancer	*	2.70E-06
1543	471990.3	3771465	9901	DieselExhP	0.00249	2.61E-06	70YrCancer	*	2.61E-06
1544	471981.2	3771464	9901	DieselExhP	0.00242	2.54E-06	70YrCancer	*	2.54E-06
1545	471972	3771464	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
1546	471962.9	3771463	9901	DieselExhP	0.00227	2.38E-06	70YrCancer	*	2.38E-06
1547	471954	3771453	9901	DieselExhP	0.00242	2.54E-06	70YrCancer	*	2.54E-06

1548	471954.2	3771444	9901	DieselExhP	0.00268	2.81E-06	70YrCancer	*	2.81E-06
1549	471954.5	3771435	9901	DieselExhP	0.00298	3.13E-06	70YrCancer	*	3.13E-06
1550	471955.2	3771407	9901	DieselExhP	0.00425	4.46E-06	70YrCancer	*	4.46E-06
1551	471955.5	3771398	9901	DieselExhP	0.00487	5.11E-06	70YrCancer	*	5.11E-06
1552	471956.2	3771370	9901	DieselExhP	0.00769	8.07E-06	70YrCancer	*	8.07E-06
1553	472090.8	3771473	9901	DieselExhP	0.00534	5.60E-06	70YrCancer	*	5.60E-06
1554	472098.1	3771467	9901	DieselExhP	0.0051	5.35E-06	70YrCancer	*	5.35E-06
1555	472105.4	3771462	9901	DieselExhP	0.00449	4.71E-06	70YrCancer	*	4.71E-06
1556	472112.6	3771456	9901	DieselExhP	0.00397	4.17E-06	70YrCancer	*	4.17E-06
1557	472119.9	3771450	9901	DieselExhP	0.0036	3.78E-06	70YrCancer	*	3.78E-06
1558	472127.1	3771444	9901	DieselExhP	0.00333	3.50E-06	70YrCancer	*	3.50E-06
1559	472134.4	3771438	9901	DieselExhP	0.00312	3.27E-06	70YrCancer	*	3.27E-06
1560	472141.7	3771432	9901	DieselExhP	0.00295	3.10E-06	70YrCancer	*	3.10E-06
1561	472148.9	3771426	9901	DieselExhP	0.00281	2.95E-06	70YrCancer	*	2.95E-06
1562	472156.2	3771421	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06
1563	472163.5	3771415	9901	DieselExhP	0.00255	2.68E-06	70YrCancer	*	2.68E-06
1564	472170.7	3771409	9901	DieselExhP	0.00243	2.55E-06	70YrCancer	*	2.55E-06
1565	472178	3771403	9901	DieselExhP	0.00231	2.42E-06	70YrCancer	*	2.42E-06
1566	472185.2	3771397	9901	DieselExhP	0.0022	2.31E-06	70YrCancer	*	2.31E-06
1567	472097.5	3771492	9901	DieselExhP	0.00477	5.01E-06	70YrCancer	*	5.01E-06
1568	472088.5	3771491	9901	DieselExhP	0.00434	4.56E-06	70YrCancer	*	4.56E-06
1569	472079.5	3771490	9901	DieselExhP	0.00388	4.07E-06	70YrCancer	*	4.07E-06
1570	472070.4	3771490	9901	DieselExhP	0.0034	3.57E-06	70YrCancer	*	3.57E-06
1571	472061.4	3771489	9901	DieselExhP	0.00301	3.16E-06	70YrCancer	*	3.16E-06
1572	472052.4	3771488	9901	DieselExhP	0.00273	2.87E-06	70YrCancer	*	2.87E-06
1573	472043.4	3771488	9901	DieselExhP	0.00254	2.67E-06	70YrCancer	*	2.67E-06
1574	472034.4	3771487	9901	DieselExhP	0.0024	2.52E-06	70YrCancer	*	2.52E-06
1575	472025.3	3771486	9901	DieselExhP	0.0023	2.41E-06	70YrCancer	*	2.41E-06
1576	472016.3	3771485	9901	DieselExhP	0.00222	2.33E-06	70YrCancer	*	2.33E-06
1577	472007.3	3771485	9901	DieselExhP	0.00215	2.26E-06	70YrCancer	*	2.26E-06
1578	471998.3	3771484	9901	DieselExhP	0.00209	2.19E-06	70YrCancer	*	2.19E-06
1579	471989.3	3771483	9901	DieselExhP	0.00204	2.14E-06	70YrCancer	*	2.14E-06
1580	471980.2	3771482	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
1581	471971.2	3771482	9901	DieselExhP	0.00194	2.04E-06	70YrCancer	*	2.04E-06
1582	471962.2	3771481	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
1583	471953.2	3771480	9901	DieselExhP	0.00183	1.92E-06	70YrCancer	*	1.92E-06
1584	471944.2	3771479	9901	DieselExhP	0.00178	1.87E-06	70YrCancer	*	1.87E-06
1585	471935.4	3771470	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
1586	471935.6	3771461	9901	DieselExhP	0.00204	2.14E-06	70YrCancer	*	2.14E-06
1587	471935.9	3771452	9901	DieselExhP	0.00223	2.34E-06	70YrCancer	*	2.34E-06
1588	471936.6	3771424	9901	DieselExhP	0.00297	3.12E-06	70YrCancer	*	3.12E-06
1589	471936.8	3771415	9901	DieselExhP	0.0033	3.46E-06	70YrCancer	*	3.46E-06
1590	471937.6	3771388	9901	DieselExhP	0.00463	4.86E-06	70YrCancer	*	4.86E-06
1591	471937.8	3771379	9901	DieselExhP	0.00522	5.48E-06	70YrCancer	*	5.48E-06
1592	471938.1	3771370	9901	DieselExhP	0.00593	6.22E-06	70YrCancer	*	6.22E-06
1593	472106.5	3771493	9901	DieselExhP	0.00492	5.16E-06	70YrCancer	*	5.16E-06
1594	472113.8	3771487	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
1595	472121	3771481	9901	DieselExhP	0.00407	4.27E-06	70YrCancer	*	4.27E-06
1596	472128.3	3771475	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
1597	472135.6	3771469	9901	DieselExhP	0.0032	3.36E-06	70YrCancer	*	3.36E-06

1598	472142.8	3771463	9901	DieselExhP	0.00293	3.08E-06	70YrCancer	*	3.08E-06
1599	472150.1	3771458	9901	DieselExhP	0.00272	2.85E-06	70YrCancer	*	2.85E-06
1600	472157.3	3771452	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06
1601	472164.6	3771446	9901	DieselExhP	0.00243	2.55E-06	70YrCancer	*	2.55E-06
1602	472171.9	3771440	9901	DieselExhP	0.00231	2.42E-06	70YrCancer	*	2.42E-06
1603	472179.1	3771434	9901	DieselExhP	0.0022	2.31E-06	70YrCancer	*	2.31E-06
1604	472186.4	3771428	9901	DieselExhP	0.0021	2.20E-06	70YrCancer	*	2.20E-06
1605	472193.6	3771423	9901	DieselExhP	0.00201	2.11E-06	70YrCancer	*	2.11E-06
1606	472200.9	3771417	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
1607	472113.2	3771511	9901	DieselExhP	0.00441	4.63E-06	70YrCancer	*	4.63E-06
1608	472104.3	3771511	9901	DieselExhP	0.004	4.20E-06	70YrCancer	*	4.20E-06
1609	472095.4	3771510	9901	DieselExhP	0.00355	3.73E-06	70YrCancer	*	3.73E-06
1610	472086.4	3771509	9901	DieselExhP	0.00306	3.21E-06	70YrCancer	*	3.21E-06
1611	472077.5	3771509	9901	DieselExhP	0.00268	2.81E-06	70YrCancer	*	2.81E-06
1612	472068.5	3771508	9901	DieselExhP	0.00243	2.55E-06	70YrCancer	*	2.55E-06
1613	472059.6	3771507	9901	DieselExhP	0.00225	2.36E-06	70YrCancer	*	2.36E-06
1614	472050.6	3771506	9901	DieselExhP	0.00211	2.21E-06	70YrCancer	*	2.21E-06
1615	472041.7	3771506	9901	DieselExhP	0.00201	2.11E-06	70YrCancer	*	2.11E-06
1616	472032.8	3771505	9901	DieselExhP	0.00193	2.03E-06	70YrCancer	*	2.03E-06
1617	472023.8	3771504	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
1618	472014.9	3771503	9901	DieselExhP	0.00182	1.91E-06	70YrCancer	*	1.91E-06
1619	472005.9	3771503	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
1620	471997	3771502	9901	DieselExhP	0.00173	1.82E-06	70YrCancer	*	1.82E-06
1621	471988.1	3771501	9901	DieselExhP	0.0017	1.78E-06	70YrCancer	*	1.78E-06
1622	471979.1	3771501	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
1623	471970.2	3771500	9901	DieselExhP	0.00163	1.71E-06	70YrCancer	*	1.71E-06
1624	471961.2	3771499	9901	DieselExhP	0.00159	1.67E-06	70YrCancer	*	1.67E-06
1625	471952.3	3771498	9901	DieselExhP	0.00155	1.63E-06	70YrCancer	*	1.63E-06
1626	471943.4	3771498	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
1627	471934.4	3771497	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
1628	471925.5	3771496	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
1629	471917	3771478	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
1630	471917.3	3771469	9901	DieselExhP	0.00173	1.82E-06	70YrCancer	*	1.82E-06
1631	471918	3771442	9901	DieselExhP	0.0022	2.31E-06	70YrCancer	*	2.31E-06
1632	471918.2	3771433	9901	DieselExhP	0.0024	2.52E-06	70YrCancer	*	2.52E-06
1633	471918.5	3771424	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
1634	471918.7	3771415	9901	DieselExhP	0.00287	3.01E-06	70YrCancer	*	3.01E-06
1635	471919	3771406	9901	DieselExhP	0.00314	3.30E-06	70YrCancer	*	3.30E-06
1636	471919.2	3771397	9901	DieselExhP	0.00346	3.63E-06	70YrCancer	*	3.63E-06
1637	471919.4	3771388	9901	DieselExhP	0.00381	4.00E-06	70YrCancer	*	4.00E-06
1638	471919.9	3771370	9901	DieselExhP	0.00464	4.87E-06	70YrCancer	*	4.87E-06
1639	472122.2	3771512	9901	DieselExhP	0.00459	4.82E-06	70YrCancer	*	4.82E-06
1640	472129.4	3771506	9901	DieselExhP	0.00438	4.60E-06	70YrCancer	*	4.60E-06
1641	472136.7	3771500	9901	DieselExhP	0.0038	3.99E-06	70YrCancer	*	3.99E-06
1642	472144	3771495	9901	DieselExhP	0.00328	3.44E-06	70YrCancer	*	3.44E-06
1643	472151.2	3771489	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
1644	472158.5	3771483	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
1645	472165.7	3771477	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
1646	472173	3771471	9901	DieselExhP	0.00228	2.39E-06	70YrCancer	*	2.39E-06
1647	472180.3	3771465	9901	DieselExhP	0.00214	2.25E-06	70YrCancer	*	2.25E-06

1648	472187.5	3771460	9901	DieselExhP	0.00203	2.13E-06	70YrCancer	*	2.13E-06
1649	472194.8	3771454	9901	DieselExhP	0.00194	2.04E-06	70YrCancer	*	2.04E-06
1650	472202.1	3771448	9901	DieselExhP	0.00185	1.94E-06	70YrCancer	*	1.94E-06
1651	472209.3	3771442	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
1652	472216.6	3771436	9901	DieselExhP	0.0017	1.78E-06	70YrCancer	*	1.78E-06
1653	472128.6	3771531	9901	DieselExhP	0.0041	4.30E-06	70YrCancer	*	4.30E-06
1654	472119.4	3771530	9901	DieselExhP	0.00364	3.82E-06	70YrCancer	*	3.82E-06
1655	472110.2	3771529	9901	DieselExhP	0.00318	3.34E-06	70YrCancer	*	3.34E-06
1656	472100.9	3771529	9901	DieselExhP	0.00273	2.87E-06	70YrCancer	*	2.87E-06
1657	472091.7	3771528	9901	DieselExhP	0.00238	2.50E-06	70YrCancer	*	2.50E-06
1658	472082.5	3771527	9901	DieselExhP	0.00214	2.25E-06	70YrCancer	*	2.25E-06
1659	472073.3	3771526	9901	DieselExhP	0.00197	2.07E-06	70YrCancer	*	2.07E-06
1660	472064	3771526	9901	DieselExhP	0.00184	1.93E-06	70YrCancer	*	1.93E-06
1661	472054.8	3771525	9901	DieselExhP	0.00175	1.84E-06	70YrCancer	*	1.84E-06
1662	472045.6	3771524	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
1663	472036.3	3771523	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
1664	472027.1	3771523	9901	DieselExhP	0.00157	1.65E-06	70YrCancer	*	1.65E-06
1665	472017.9	3771522	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
1666	472008.7	3771521	9901	DieselExhP	0.0015	1.57E-06	70YrCancer	*	1.57E-06
1667	471999.4	3771520	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
1668	471990.2	3771520	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
1669	471981	3771519	9901	DieselExhP	0.00142	1.49E-06	70YrCancer	*	1.49E-06
1670	471971.7	3771518	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
1671	471962.5	3771517	9901	DieselExhP	0.00137	1.44E-06	70YrCancer	*	1.44E-06
1672	471953.3	3771517	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1673	471944.1	3771516	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
1674	471934.8	3771515	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
1675	471925.6	3771514	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
1676	471916.4	3771514	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
1677	471907.1	3771513	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
1678	471898.2	3771503	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
1679	471898.4	3771494	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
1680	471898.7	3771484	9901	DieselExhP	0.0014	1.47E-06	70YrCancer	*	1.47E-06
1681	471899.4	3771457	9901	DieselExhP	0.00173	1.82E-06	70YrCancer	*	1.82E-06
1682	471899.7	3771447	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
1683	471900.2	3771429	9901	DieselExhP	0.00218	2.29E-06	70YrCancer	*	2.29E-06
1684	471900.4	3771420	9901	DieselExhP	0.00236	2.48E-06	70YrCancer	*	2.48E-06
1685	471900.7	3771410	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06
1686	471901.2	3771392	9901	DieselExhP	0.00302	3.17E-06	70YrCancer	*	3.17E-06
1687	471901.4	3771383	9901	DieselExhP	0.00328	3.44E-06	70YrCancer	*	3.44E-06
1688	471901.7	3771373	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
1689	472137.8	3771532	9901	DieselExhP	0.00434	4.56E-06	70YrCancer	*	4.56E-06
1690	472145.1	3771526	9901	DieselExhP	0.00414	4.35E-06	70YrCancer	*	4.35E-06
1691	472152.4	3771520	9901	DieselExhP	0.00356	3.74E-06	70YrCancer	*	3.74E-06
1692	472159.6	3771514	9901	DieselExhP	0.00305	3.20E-06	70YrCancer	*	3.20E-06
1693	472166.9	3771508	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06
1694	472174.2	3771502	9901	DieselExhP	0.00239	2.51E-06	70YrCancer	*	2.51E-06
1695	472181.4	3771497	9901	DieselExhP	0.00219	2.30E-06	70YrCancer	*	2.30E-06
1696	472188.7	3771491	9901	DieselExhP	0.00204	2.14E-06	70YrCancer	*	2.14E-06
1697	472195.9	3771485	9901	DieselExhP	0.00191	2.00E-06	70YrCancer	*	2.00E-06

1698	472203.2	3771479	9901	DieselExhP	0.00181	1.90E-06	70YrCancer	*	1.90E-06
1699	472210.5	3771473	9901	DieselExhP	0.00172	1.81E-06	70YrCancer	*	1.81E-06
1700	472217.7	3771467	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06
1701	472225	3771462	9901	DieselExhP	0.00158	1.66E-06	70YrCancer	*	1.66E-06
1702	472232.2	3771456	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
1703	472144.4	3771550	9901	DieselExhP	0.00384	4.03E-06	70YrCancer	*	4.03E-06
1704	472135.2	3771550	9901	DieselExhP	0.00337	3.54E-06	70YrCancer	*	3.54E-06
1705	472126.1	3771549	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
1706	472117	3771548	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
1707	472107.8	3771547	9901	DieselExhP	0.00217	2.28E-06	70YrCancer	*	2.28E-06
1708	472098.7	3771547	9901	DieselExhP	0.00194	2.04E-06	70YrCancer	*	2.04E-06
1709	472089.5	3771546	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
1710	472080.4	3771545	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06
1711	472071.3	3771544	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
1712	472062.1	3771544	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
1713	472053	3771543	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
1714	472043.8	3771542	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
1715	472034.7	3771541	9901	DieselExhP	0.00135	1.42E-06	70YrCancer	*	1.42E-06
1716	472025.6	3771541	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
1717	472016.4	3771540	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
1718	472007.3	3771539	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
1719	471998.1	3771539	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
1720	471989	3771538	9901	DieselExhP	0.00124	1.30E-06	70YrCancer	*	1.30E-06
1721	471979.9	3771537	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
1722	471970.7	3771536	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
1723	471961.6	3771536	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
1724	471952.4	3771535	9901	DieselExhP	0.00116	1.22E-06	70YrCancer	*	1.22E-06
1725	471943.3	3771534	9901	DieselExhP	0.00114	1.20E-06	70YrCancer	*	1.20E-06
1726	471934.2	3771533	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
1727	471925	3771533	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
1728	471915.9	3771532	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
1729	471906.7	3771531	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
1730	471897.6	3771530	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1731	471888.5	3771530	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
1732	471879.6	3771520	9901	DieselExhP	0.00102	1.07E-06	70YrCancer	*	1.07E-06
1733	471879.8	3771511	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
1734	471880.1	3771501	9901	DieselExhP	0.00114	1.20E-06	70YrCancer	*	1.20E-06
1735	471880.6	3771483	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
1736	471880.8	3771474	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
1737	471881	3771465	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
1738	471881.5	3771446	9901	DieselExhP	0.00168	1.76E-06	70YrCancer	*	1.76E-06
1739	471881.8	3771437	9901	DieselExhP	0.0018	1.89E-06	70YrCancer	*	1.89E-06
1740	471882	3771428	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
1741	471882.3	3771419	9901	DieselExhP	0.00206	2.16E-06	70YrCancer	*	2.16E-06
1742	471882.8	3771401	9901	DieselExhP	0.00236	2.48E-06	70YrCancer	*	2.48E-06
1743	471883	3771391	9901	DieselExhP	0.00253	2.66E-06	70YrCancer	*	2.66E-06
1744	471883.3	3771382	9901	DieselExhP	0.00271	2.84E-06	70YrCancer	*	2.84E-06
1745	472153.5	3771551	9901	DieselExhP	0.00412	4.32E-06	70YrCancer	*	4.32E-06
1746	472160.8	3771545	9901	DieselExhP	0.00397	4.17E-06	70YrCancer	*	4.17E-06
1747	472168	3771539	9901	DieselExhP	0.00338	3.55E-06	70YrCancer	*	3.55E-06

1748	472175.3	3771534	9901	DieselExhP	0.00285	2.99E-06	70YrCancer	*	2.99E-06
1749	472182.6	3771528	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
1750	472189.8	3771522	9901	DieselExhP	0.00219	2.30E-06	70YrCancer	*	2.30E-06
1751	472197.1	3771516	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
1752	472204.3	3771510	9901	DieselExhP	0.00184	1.93E-06	70YrCancer	*	1.93E-06
1753	472211.6	3771504	9901	DieselExhP	0.00172	1.81E-06	70YrCancer	*	1.81E-06
1754	472218.9	3771499	9901	DieselExhP	0.00163	1.71E-06	70YrCancer	*	1.71E-06
1755	472226.1	3771493	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
1756	472233.4	3771487	9901	DieselExhP	0.00146	1.53E-06	70YrCancer	*	1.53E-06
1757	472240.7	3771481	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
1758	472247.9	3771475	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
1759	472060.8	3771616	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
1760	472051.7	3771616	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
1761	472042.5	3771615	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
1762	472033.4	3771614	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
1763	472024.3	3771613	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
1764	472015.1	3771613	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
1765	472006	3771612	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
1766	471996.8	3771611	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
1767	471987.7	3771610	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
1768	471978.6	3771610	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
1769	471969.4	3771609	9901	DieselExhP	0.00073	7.66E-07	70YrCancer	*	7.66E-07
1770	471960.3	3771608	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
1771	471951.1	3771608	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
1772	471942	3771607	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07
1773	471932.9	3771606	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
1774	471923.7	3771605	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
1775	471914.6	3771605	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
1776	471905.4	3771604	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
1777	471896.3	3771603	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
1778	471887.2	3771602	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
1779	471878	3771602	9901	DieselExhP	0.00064	6.72E-07	70YrCancer	*	6.72E-07
1780	471868.9	3771601	9901	DieselExhP	0.00063	6.61E-07	70YrCancer	*	6.61E-07
1781	471859.7	3771600	9901	DieselExhP	0.00062	6.51E-07	70YrCancer	*	6.51E-07
1782	471850.6	3771599	9901	DieselExhP	0.0006	6.30E-07	70YrCancer	*	6.30E-07
1783	471841.5	3771599	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1784	471832.3	3771598	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1785	471823.2	3771597	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1786	471814	3771596	9901	DieselExhP	0.00055	5.77E-07	70YrCancer	*	5.77E-07
1787	471805.1	3771586	9901	DieselExhP	0.00056	5.88E-07	70YrCancer	*	5.88E-07
1788	471805.4	3771577	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1789	471805.6	3771568	9901	DieselExhP	0.00061	6.40E-07	70YrCancer	*	6.40E-07
1790	471805.9	3771559	9901	DieselExhP	0.00063	6.61E-07	70YrCancer	*	6.61E-07
1791	471806.1	3771550	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
1792	471806.4	3771541	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
1793	471806.6	3771531	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
1794	471806.9	3771522	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
1795	471807.1	3771513	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
1796	471807.4	3771504	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
1797	471807.6	3771495	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07

1798	471807.9	3771486	9901	DieselExhP	0.00089	9.34E-07	70YrCancer	*	9.34E-07
1799	471808.1	3771476	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
1800	471808.4	3771467	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
1801	471808.6	3771458	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1802	471808.9	3771449	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
1803	471809.3	3771431	9901	DieselExhP	0.00115	1.21E-06	70YrCancer	*	1.21E-06
1804	471809.6	3771421	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
1805	471809.8	3771412	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
1806	471810.3	3771394	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1807	471810.6	3771385	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
1808	471810.8	3771376	9901	DieselExhP	0.00144	1.51E-06	70YrCancer	*	1.51E-06
1809	472050.4	3771688	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1810	472041.2	3771688	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1811	472032.1	3771687	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1812	472022.9	3771686	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1813	472013.8	3771685	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1814	472004.7	3771685	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1815	471995.5	3771684	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1816	471986.4	3771683	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1817	471977.2	3771682	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1818	471968.1	3771682	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1819	471959	3771681	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1820	471949.8	3771680	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1821	471940.7	3771680	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1822	471931.5	3771679	9901	DieselExhP	0.00048	5.04E-07	70YrCancer	*	5.04E-07
1823	471922.4	3771678	9901	DieselExhP	0.00048	5.04E-07	70YrCancer	*	5.04E-07
1824	471913.3	3771677	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1825	471904.1	3771677	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1826	471895	3771676	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1827	471885.8	3771675	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1828	471876.7	3771674	9901	DieselExhP	0.00045	4.72E-07	70YrCancer	*	4.72E-07
1829	471867.6	3771674	9901	DieselExhP	0.00045	4.72E-07	70YrCancer	*	4.72E-07
1830	471858.4	3771673	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
1831	471849.3	3771672	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
1832	471840.1	3771671	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1833	471831	3771671	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1834	471821.9	3771670	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1835	471812.7	3771669	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1836	471803.6	3771668	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1837	471794.4	3771668	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
1838	471785.3	3771667	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1839	471776.2	3771666	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1840	471767	3771665	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1841	471757.9	3771665	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1842	471748.7	3771664	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1843	471739.6	3771663	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1844	471730.7	3771653	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1845	471731	3771644	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1846	471731.2	3771635	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1847	471731.5	3771626	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07

1848	471731.7	3771617	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1849	471732	3771607	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1850	471732.2	3771598	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1851	471732.4	3771589	9901	DieselExhP	0.00045	4.72E-07	70YrCancer	*	4.72E-07
1852	471732.7	3771580	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1853	471732.9	3771571	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1854	471733.2	3771562	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1855	471733.4	3771552	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1856	471733.7	3771543	9901	DieselExhP	0.00052	5.46E-07	70YrCancer	*	5.46E-07
1857	471733.9	3771534	9901	DieselExhP	0.00054	5.67E-07	70YrCancer	*	5.67E-07
1858	471734.2	3771525	9901	DieselExhP	0.00055	5.77E-07	70YrCancer	*	5.77E-07
1859	471734.4	3771516	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1860	471734.9	3771497	9901	DieselExhP	0.00061	6.40E-07	70YrCancer	*	6.40E-07
1861	471735.2	3771488	9901	DieselExhP	0.00063	6.61E-07	70YrCancer	*	6.61E-07
1862	471735.4	3771479	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
1863	471735.7	3771470	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
1864	471735.9	3771461	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
1865	471736.2	3771452	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
1866	471736.4	3771442	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
1867	471736.7	3771433	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
1868	471736.9	3771424	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
1869	471737.2	3771415	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
1870	471737.4	3771406	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
1871	471737.6	3771397	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
1872	471737.9	3771387	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
1873	471738.1	3771378	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
1874	472045.1	3771761	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1875	472035.8	3771760	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1876	472026.6	3771759	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1877	472017.3	3771759	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1878	472008.1	3771758	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1879	471998.8	3771757	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1880	471989.5	3771756	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1881	471980.3	3771756	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1882	471971	3771755	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1883	471961.7	3771754	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1884	471952.5	3771753	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1885	471943.2	3771753	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1886	471933.9	3771752	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1887	471924.7	3771751	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1888	471915.4	3771750	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1889	471906.2	3771750	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1890	471896.9	3771749	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1891	471887.6	3771748	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1892	471878.4	3771747	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1893	471869.1	3771747	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1894	471859.8	3771746	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1895	471850.6	3771745	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1896	471841.3	3771744	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1897	471832	3771744	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07

1898	471822.8	3771743	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1899	471813.5	3771742	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1900	471804.3	3771741	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1901	471795	3771741	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1902	471785.7	3771740	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1903	471776.5	3771739	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1904	471767.2	3771738	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1905	471757.9	3771738	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1906	471748.7	3771737	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1907	471739.4	3771736	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1908	471730.2	3771735	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1909	471720.9	3771734	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1910	471711.6	3771734	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1911	471702.4	3771733	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1912	471693.1	3771732	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1913	471683.8	3771731	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1914	471674.6	3771731	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1915	471665.3	3771730	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1916	471656.3	3771720	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1917	471656.5	3771711	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1918	471656.8	3771701	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1919	471657	3771692	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1920	471657.3	3771683	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1921	471657.5	3771673	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1922	471657.8	3771664	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1923	471658	3771655	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1924	471658.3	3771646	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1925	471658.6	3771636	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1926	471658.8	3771627	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1927	471659.1	3771618	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1928	471659.3	3771608	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1929	471659.6	3771599	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1930	471659.8	3771590	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1931	471660.6	3771562	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1932	471660.8	3771553	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1933	471661.1	3771543	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
1934	471661.3	3771534	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1935	471661.6	3771525	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1936	471661.8	3771516	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1937	471662.1	3771506	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
1938	471662.3	3771497	9901	DieselExhP	0.00045	4.72E-07	70YrCancer	*	4.72E-07
1939	471662.6	3771488	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1940	471662.8	3771478	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1941	471663.1	3771469	9901	DieselExhP	0.00048	5.04E-07	70YrCancer	*	5.04E-07
1942	471663.3	3771460	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1943	471663.6	3771451	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1944	471663.8	3771441	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1945	471664.1	3771432	9901	DieselExhP	0.00052	5.46E-07	70YrCancer	*	5.46E-07
1946	471664.3	3771423	9901	DieselExhP	0.00053	5.56E-07	70YrCancer	*	5.56E-07
1947	471664.6	3771413	9901	DieselExhP	0.00054	5.67E-07	70YrCancer	*	5.67E-07

1948	471664.8	3771404	9901	DieselExhP	0.00055	5.77E-07	70YrCancer	*	5.77E-07
1949	471665.1	3771395	9901	DieselExhP	0.00056	5.88E-07	70YrCancer	*	5.88E-07
1950	471665.3	3771385	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1951	471672.9	3771107	9901	DieselExhP	0.00052	5.46E-07	70YrCancer	*	5.46E-07
1952	471673.1	3771097	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1953	471673.4	3771088	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1954	471673.6	3771079	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1955	471673.9	3771070	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1956	471674.1	3771060	9901	DieselExhP	0.00048	5.04E-07	70YrCancer	*	5.04E-07
1957	471674.4	3771051	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1958	471583.9	3771713	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
1959	471584.1	3771703	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
1960	471584.4	3771694	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
1961	471584.6	3771685	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
1962	471584.9	3771676	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
1963	471585.1	3771666	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1964	471585.4	3771657	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1965	471585.6	3771648	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1966	471585.9	3771638	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1967	471586.1	3771629	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1968	471586.4	3771620	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1969	471586.6	3771611	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1970	471586.9	3771601	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1971	471587.1	3771592	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1972	471587.4	3771583	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1973	471587.6	3771574	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1974	471587.9	3771564	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1975	471588.1	3771555	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1976	471588.4	3771546	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1977	471588.6	3771536	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1978	471588.9	3771527	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1979	471589.1	3771518	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1980	471589.4	3771509	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1981	471589.6	3771499	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1982	471589.9	3771490	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1983	471590.1	3771481	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1984	471590.4	3771472	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1985	471590.6	3771462	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1986	471591.6	3771425	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1987	471591.9	3771416	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1988	471592.1	3771407	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1989	471592.4	3771397	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1990	471592.6	3771388	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1991	471592.9	3771379	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1992	471597.6	3771203	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1993	471597.9	3771193	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1994	471598.1	3771184	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1995	471598.4	3771175	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1996	471598.6	3771166	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1997	471598.9	3771156	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07

1998	471599.1	3771147	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1999	471599.4	3771138	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
2000	471599.6	3771129	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
2001	471599.9	3771119	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
2002	471600.1	3771110	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
2003	471600.4	3771101	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
2004	471601.1	3771073	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
2005	471601.4	3771064	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
2006	471601.6	3771054	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
2007	471601.9	3771045	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
2008	471602.1	3771036	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
2009	471602.4	3771027	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
2010	471602.6	3771017	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
2011	471602.9	3771008	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
2012	471603.1	3770999	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
2013	471603.4	3770990	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
2014	471603.7	3770980	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
2015	471513.2	3771641	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
2016	471513.4	3771631	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
2017	471513.7	3771622	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
2018	471513.9	3771613	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
2019	471514.2	3771604	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
2020	471514.4	3771594	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2021	471514.7	3771585	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2022	471514.9	3771576	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2023	471515.2	3771567	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2024	471515.4	3771557	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2025	471515.7	3771548	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2026	471515.9	3771539	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
2027	471516.2	3771530	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
2028	471516.7	3771511	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
2029	471516.9	3771502	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
2030	471517.2	3771493	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2031	471517.4	3771483	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2032	471517.7	3771474	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07
2033	471517.9	3771465	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07
2034	471518.2	3771456	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
2035	471518.4	3771446	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
2036	471518.7	3771437	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
2037	471518.9	3771428	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
2038	471519.2	3771419	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
2039	471519.4	3771409	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
2040	471519.7	3771400	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
2041	471519.9	3771391	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
2042	471520.2	3771382	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
2043	471522.9	3771280	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2044	471523.2	3771270	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2045	471523.4	3771261	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2046	471523.7	3771252	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2047	471523.9	3771243	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07

2048	471524.4	3771224	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2049	471524.7	3771215	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2050	471524.9	3771206	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2051	471525.2	3771196	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2052	471525.4	3771187	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2053	471525.7	3771178	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2054	471525.9	3771169	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2055	471526.2	3771159	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
2056	471526.4	3771150	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
2057	471526.7	3771141	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
2058	471526.9	3771132	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
2059	471527.2	3771122	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
2060	471527.4	3771113	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
2061	471527.7	3771104	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
2062	471527.9	3771095	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
2063	471528.2	3771085	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
2064	471528.4	3771076	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
2065	471528.7	3771067	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
2066	471528.9	3771058	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
2067	471529.2	3771048	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
2068	471529.4	3771039	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
2069	471529.7	3771030	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
2070	471529.9	3771021	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
2071	471530.2	3771011	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
2072	471530.4	3771002	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
2073	471530.7	3770993	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
2074	471530.9	3770984	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
2075	471531.2	3770974	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
2076	471531.4	3770965	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
2077	471531.7	3770956	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
2078	471531.9	3770947	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
2079	471532.2	3770937	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
2080	471532.4	3770928	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
2081	472029.3	3771394	9901	DieselExhP	0.00988	1.04E-05	70YrCancer	*	1.04E-05
2082	471922.6	3771265	9901	DieselExhP	0.00942	9.89E-06	70YrCancer	*	9.89E-06
2083	472016.2	3771188	9901	DieselExhP	0.00323	3.39E-06	70YrCancer	*	3.39E-06
2084	472122.6	3771319	9901	DieselExhP	0.00408	4.28E-06	70YrCancer	*	4.28E-06
2085	472028.2	3771395	9901	DieselExhP	0.00973	1.02E-05	70YrCancer	*	1.02E-05
2086	472023.1	3771386	9901	DieselExhP	0.01121	1.18E-05	70YrCancer	*	1.18E-05
2087	472016.8	3771379	9901	DieselExhP	0.01281	1.34E-05	70YrCancer	*	1.34E-05
2088	472010.5	3771371	9901	DieselExhP	0.01468	1.54E-05	70YrCancer	*	1.54E-05
2089	472004.2	3771364	9901	DieselExhP	0.01714	1.80E-05	70YrCancer	*	1.80E-05
2090	471998	3771356	9901	DieselExhP	0.02023	2.12E-05	70YrCancer	*	2.12E-05
2091	471991.7	3771348	9901	DieselExhP	0.02346	2.46E-05	70YrCancer	*	2.46E-05
2092	471985.4	3771341	9901	DieselExhP	0.02593	2.72E-05	70YrCancer	*	2.72E-05
2093	471979.1	3771333	9901	DieselExhP	0.02738	2.87E-05	70YrCancer	*	2.87E-05
2094	471972.8	3771325	9901	DieselExhP	0.02784	2.92E-05	70YrCancer	*	2.92E-05
2095	471966.6	3771318	9901	DieselExhP	0.02731	2.87E-05	70YrCancer	*	2.87E-05
2096	471960.3	3771310	9901	DieselExhP	0.02559	2.69E-05	70YrCancer	*	2.69E-05
2097	471954	3771303	9901	DieselExhP	0.02275	2.39E-05	70YrCancer	*	2.39E-05

2098	471947.7	3771295	9901	DieselExhP	0.01965	2.06E-05	70YrCancer	*	2.06E-05
2099	471941.5	3771287	9901	DieselExhP	0.01677	1.76E-05	70YrCancer	*	1.76E-05
2100	471935.2	3771280	9901	DieselExhP	0.0142	1.49E-05	70YrCancer	*	1.49E-05
2101	471928.9	3771272	9901	DieselExhP	0.01168	1.23E-05	70YrCancer	*	1.23E-05
2102	471929.8	3771259	9901	DieselExhP	0.01027	1.08E-05	70YrCancer	*	1.08E-05
2103	471937	3771253	9901	DieselExhP	0.01006	1.06E-05	70YrCancer	*	1.06E-05
2104	471944.2	3771247	9901	DieselExhP	0.00926	9.72E-06	70YrCancer	*	9.72E-06
2105	471951.4	3771241	9901	DieselExhP	0.00846	8.88E-06	70YrCancer	*	8.88E-06
2106	471958.6	3771235	9901	DieselExhP	0.00772	8.10E-06	70YrCancer	*	8.10E-06
2107	471965.8	3771229	9901	DieselExhP	0.007	7.35E-06	70YrCancer	*	7.35E-06
2108	471973	3771223	9901	DieselExhP	0.0063	6.61E-06	70YrCancer	*	6.61E-06
2109	471980.2	3771217	9901	DieselExhP	0.00564	5.92E-06	70YrCancer	*	5.92E-06
2110	471987.4	3771212	9901	DieselExhP	0.00503	5.28E-06	70YrCancer	*	5.28E-06
2111	471994.6	3771206	9901	DieselExhP	0.00449	4.71E-06	70YrCancer	*	4.71E-06
2112	472001.8	3771200	9901	DieselExhP	0.00401	4.21E-06	70YrCancer	*	4.21E-06
2113	472009	3771194	9901	DieselExhP	0.00359	3.77E-06	70YrCancer	*	3.77E-06
2114	472022.4	3771196	9901	DieselExhP	0.00347	3.64E-06	70YrCancer	*	3.64E-06
2115	472028.7	3771203	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
2116	472034.9	3771211	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
2117	472041.2	3771219	9901	DieselExhP	0.00424	4.45E-06	70YrCancer	*	4.45E-06
2118	472047.5	3771227	9901	DieselExhP	0.00447	4.69E-06	70YrCancer	*	4.69E-06
2119	472053.7	3771234	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
2120	472060	3771242	9901	DieselExhP	0.00485	5.09E-06	70YrCancer	*	5.09E-06
2121	472066.2	3771250	9901	DieselExhP	0.00498	5.23E-06	70YrCancer	*	5.23E-06
2122	472072.5	3771258	9901	DieselExhP	0.00507	5.32E-06	70YrCancer	*	5.32E-06
2123	472078.7	3771265	9901	DieselExhP	0.0051	5.35E-06	70YrCancer	*	5.35E-06
2124	472085	3771273	9901	DieselExhP	0.00507	5.32E-06	70YrCancer	*	5.32E-06
2125	472091.3	3771281	9901	DieselExhP	0.005	5.25E-06	70YrCancer	*	5.25E-06
2126	472097.5	3771288	9901	DieselExhP	0.00488	5.12E-06	70YrCancer	*	5.12E-06
2127	472103.8	3771296	9901	DieselExhP	0.00472	4.95E-06	70YrCancer	*	4.95E-06
2128	472110	3771304	9901	DieselExhP	0.00453	4.75E-06	70YrCancer	*	4.75E-06
2129	472116.3	3771312	9901	DieselExhP	0.00431	4.52E-06	70YrCancer	*	4.52E-06
2130	472115.3	3771325	9901	DieselExhP	0.00458	4.81E-06	70YrCancer	*	4.81E-06
2131	472108	3771331	9901	DieselExhP	0.00513	5.38E-06	70YrCancer	*	5.38E-06
2132	472100.8	3771337	9901	DieselExhP	0.00575	6.04E-06	70YrCancer	*	6.04E-06
2133	472093.5	3771343	9901	DieselExhP	0.00642	6.74E-06	70YrCancer	*	6.74E-06
2134	472086.3	3771349	9901	DieselExhP	0.00711	7.46E-06	70YrCancer	*	7.46E-06
2135	472079	3771354	9901	DieselExhP	0.0078	8.19E-06	70YrCancer	*	8.19E-06
2136	472071.7	3771360	9901	DieselExhP	0.00844	8.86E-06	70YrCancer	*	8.86E-06
2137	472064.5	3771366	9901	DieselExhP	0.00897	9.41E-06	70YrCancer	*	9.41E-06
2138	472057.2	3771372	9901	DieselExhP	0.0094	9.87E-06	70YrCancer	*	9.87E-06
2139	472049.9	3771378	9901	DieselExhP	0.00975	1.02E-05	70YrCancer	*	1.02E-05
2140	472042.7	3771384	9901	DieselExhP	0.01006	1.06E-05	70YrCancer	*	1.06E-05
2141	472035.4	3771389	9901	DieselExhP	0.01019	1.07E-05	70YrCancer	*	1.07E-05
								Avg.	2.86E-06

Population	Community Risk
1039	0.002970671

HARP2 - HRACalc (dated 16057) 11/26/2018 2:25:57 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Population
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 70

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 0
16 to 70 Years Bin: 54

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home

```
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

**********
TIER 2 SETTINGS
Tier2 not used.

**********

Calculating cancer risk
Cancer risk saved to:
C:\Users\cdugan\Desktop\ICD_RAST\CommunityBurdernCancerRisk.csv
HRA ran successfully
```

Inland Center Drive Warehouse Project

AERMOD SOURCE INPUT SUMMARY

On-Site Idling	Release Height (m)	Emission Rate (g/s)	Length of Side (m)	σY	σZ
B01 (V12)	4.12	2.814E-05	28.00	6.51	5.25
B02 (V13)	4.12	2.814E-05	28.00	6.51	5.25

On-Site Truck Travel	Release Height (m)	Emission Rate (g/s)	Length of Side(m)	σY	σZ
So. Dr (V01)	4.12	1.098E-06	11.50	2.67	0.96
So. Dr (V02-V06)	4.12	1.098E-06	64.79	15.07	0.96
No Dr (V07-V10)	4.12	3.659E-07	19.82	4.61	0.96
No Dr (V11)	4.12	3.659E-07	64.79	15.07	0.96

Off-Site Truck Travel	Release Height (m)	Area (m^2)	Emission Rate ($g/s\text{-}m^2$)
ICD (A01)	4.12	4261.6	1.76E-09
ICD (A02)	4.12	951.1	1.76E-09
ICD (A03)	4.12	2743.5	1.32E-09

Inland Center Drive Warehouse Project

AERMOD SOURCE ANNUAL EMISSIONS ESTIMATES

On-Site Idling	Annual Trucks Idling	Total Idle-Hours	PM (Annual Grams)	PM (Avg Grams/Hr)	PM (Avg Grams/Sec)
B01 (V12)	9,916	2479	8.9E+02	1.013E-01	2.814E-05
B01 (V13)	9,916	2479	8.9E+02	1.013E-01	2.814E-05

On-Site Truck Travel	Annual Trips	On-Site VMT / Trip	Total On-Site VMT	PM (Annual Grams)	PM (Avg Grams/Hr)	PM (Avg Grams/Sec)
So. Dr (V01)	29,747	0.011	318	3.462E+01	3.952E-03	1.098E-06
So. Dr (V02-V06)	29,747	0.011	318	3.462E+01	3.952E-03	1.098E-06
No. Dr (V07-V10)	9,916	0.011	106	1.154E+01	1.317E-03	3.659E-07
No. Dr (V11)	9,916	0.011	106	1.154E+01	1.317E-03	3.659E-07

Off-Site Truck Travel	Annual Trips	Off-Site VMT/Trip	Total Off-Site VMT	PM (Annual Grams)	PM (Avg Grams/Hr)	PM (Avg Grams/Sec)
ICD (A01)	39,663	0.14	5,741	2.359E+02	2.693E-02	7.481E-06
ICD (A02)	39,663	0.03	1,281	5.265E+01	6.010E-03	1.670E-06
ICD (A03)	29,747	0.09	2,772	1.139E+02	1.300E-02	3.612E-06

Inland Center Drive Warehouse Project

Truck Trip / Idle Distribution for AERMOD Source Input Data

Land Use	ITE Code	Unit	Qty	Rate	Total Trips	Truck Trips
Gen Light Industrial	110	KSF	102.38	4.96	508	109

Source: RK Engineering, Inc. 2018 (Traffic Impact Analysis)

Vehicle Class	%	ADT	AHT	IN	OUT
LHDT1	4.0%	20.31	0.85	**0.42**	**0.42**
LHDT2	4.0%	20.31	0.85	**0.42**	**0.42**
MHDT	3.9%	19.80	0.83	**0.41**	**0.41**
HHDT	9.5%	48.24	2.01	**1.00**	**1.00**
Total	**0.21**	**109**	**4.53**	**2.26**	**2.26**

Source: RK Engineering, Inc. 2018 (Traffic Impact Analysis)

Truck Distribution	%	Inbound Trips/HR	%	Outbound Trips/HR	Total Trips/HR
Inland Ctr Dr, South of I-215	100.0%	**2.26**	100.0%	**2.26**	**4.53**
Inland Ctr Dr, South of I St	100.0%	**2.26**	100.0%	**2.26**	**4.53**
Inland Ctr Dr, South of North Access	100.0%	**2.26**	50.0%	**1.13**	**3.40**
Building 01 (South Access)	100.0%	**2.26**	50.0%	**1.13**	**3.40**
Building 01 (North Access)	0.0%	**0.00**	50.0%	**1.13**	**1.13**
Building Idle1	50.0%	**1.13**	50.0%	**1.13**	**2.26**
Building Idle2	50.0%	**1.13**	50.0%	**1.13**	**2.26**

Source: RK Engineering, Inc. 2018 (Traffic Impact Analysis)

Inland Center Drive Warehouse Project

EMFAC-Derived Composite Truck Trip / Idle Emission Factors

Land Use	ITE Code	Unit	Qty	Rate	Daily Trips	Truck Trips
Gen Light Industrial	110	KSF	102.375	4.96	508	109

Source: RK Engineering, Inc. 2018 (*Traffic Impact Analysis)*

Vehicle Category	% Fleet	ADT	AHT	IN	OUT
LDV	78.6%	399.12	-	-	-
LHDT1	4.0%	20.31	0.85	0.42	0.42
LHDT2	4.0%	20.31	0.85	0.42	0.42
MHDT	3.9%	19.80	0.83	0.41	0.41
HHDT	9.5%	48.24	2.01	1.00	1.00
TOTAL	100.0%	507.78	4.53	2.26	2.26

Source: RK Engineering, Inc., 2018 (*Traffic Impact Analysis)*

COMPOSITE PM10 EMISSION FACTORS				
Truck Category	% Fleet	IDLE EX (g/hr)	RUN EX (10 MPH) (g/mile)	RUN EX (30 MPH) (g/mile)
LHDT1	4.0%	0.793125	0.060404211	0.019780212
LHDT2	4.0%	0.8014	0.055081669	0.018665627
MHDT	3.9%	0.256611	0.19604667	0.069383574
HHDT	9.5%	0.029628	0.116210027	0.047898917
COMPOSITE EMFAC	21.4%	0.35796	0.108902841	0.041094346

Source: EMFAC2017 and RK Engineering, Inc. 2018 (*Traffic Impact Analysis)*

Inland Center Drive Warehouse Project

EMFAC2017 Output - Filtered and Sorted for LHDT1/2 Type Diesel Trucks

calendar_y	season_mo	sub_area	vehicle_cla	fuel	temperatu	relative_hu	process	speed_time	pollutant	emission_rate
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	HC	0.433635
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	CO	2.210413
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	NOx	2.135983
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	SOx	0.009932
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	PM	0.060769
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	TOG	0.625171
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	ROG	0.54915
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	CO2	1040.695
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	CH4	0.025507
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	PM10	0.060404
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	PM2_5	0.057791
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	HC	0.067678
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	CO	0.454927
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	NOx	2.539614
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	SOx	0.004331
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	PM	0.0199
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	TOG	0.097571
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	ROG	0.085707
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	CO2	453.8049
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	CH4	0.003981
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	PM10	0.01978
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	PM2_5	0.018925
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	HC	0.431932
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	CO	2.225212
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	NOx	1.824161
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	SOx	0.01108
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	PM	0.055414
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	TOG	0.622716
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	ROG	0.546994
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	CO2	1160.973
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	CH4	0.025407
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	PM10	0.055082
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	PM2_5	0.052699
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	HC	0.059349
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	CO	0.394002
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	NOx	2.076685
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	SOx	0.004871
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	PM	0.018778
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	TOG	0.085563
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	ROG	0.075159
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	CO2	510.4075
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	CH4	0.003491
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	PM10	0.018666
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	PM2_5	0.017858
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		HC	2.5056
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		CO	26.3
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		NOx	68.55694
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		SOx	0.037805
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		PM	0.797912
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		TOG	3.612324
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		ROG	3.173065
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		CO2	3961.177
2020	Annual	San Bernar	LHDT1	Dsl			IDLEX		CH4	0.147383

2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	PM10	0.793125
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	PM2_5	0.758815
2020	Annual	San Bernar	LHDT1	Dsl	PMTW	PM	0.012
2020	Annual	San Bernar	LHDT1	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernar	LHDT1	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernar	LHDT1	Dsl	PMBW	PM	0.078
2020	Annual	San Bernar	LHDT1	Dsl	PMBW	PM10	0.07644
2020	Annual	San Bernar	LHDT1	Dsl	PMBW	PM2_5	0.03276
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	HC	2.5056
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	CO	26.3
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	NOx	68.43382
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	SOx	0.060617
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	PM	0.806238
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	TOG	3.612324
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	ROG	3.173065
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	CO2	6351.406
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	CH4	0.147383
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	PM10	0.8014
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	PM2_5	0.766732
2020	Annual	San Bernar	LHDT2	Dsl	PMTW	PM	0.012
2020	Annual	San Bernar	LHDT2	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernar	LHDT2	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernar	LHDT2	Dsl	PMBW	PM	0.091
2020	Annual	San Bernar	LHDT2	Dsl	PMBW	PM10	0.08918
2020	Annual	San Bernar	LHDT2	Dsl	PMBW	PM2_5	0.03822

Inland Center Drive Warehouse Project

EMFAC2017 Output - Filtered and Sorted for MHDT Type Diesel Trucks

calendar_y	season_mo	sub_area	vehicle_cla	fuel	temperatu	relative_hu	process	speed_time	pollutant	emission_rate
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	HC	0.920042
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	CO	2.036017
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	NOx	7.478721
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	SOx	0.01933
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	PM	0.19723
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	TOG	1.326425
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	ROG	1.165142
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	CO2	2026.128
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	CH4	0.054118
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	PM10	0.196047
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	PM2_5	0.187566
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	HC	0.097263
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	CO	0.458814
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	NOx	2.57655
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	SOx	0.008686
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	PM	0.069802
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	TOG	0.140225
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	ROG	0.123174
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	CO2	910.4133
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	CH4	0.005721
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	PM10	0.069384
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	PM2_5	0.066382
2020	Annual	San Bernar	MHDT	Dsl			STREX	5	NOx	0.23249
2020	Annual	San Bernar	MHDT	Dsl			STREX	10	NOx	0.319537
2020	Annual	San Bernar	MHDT	Dsl			STREX	20	NOx	0.491751
2020	Annual	San Bernar	MHDT	Dsl			STREX	30	NOx	0.661456
2020	Annual	San Bernar	MHDT	Dsl			STREX	40	NOx	0.828652
2020	Annual	San Bernar	MHDT	Dsl			STREX	50	NOx	0.99334
2020	Annual	San Bernar	MHDT	Dsl			STREX	60	NOx	1.155519
2020	Annual	San Bernar	MHDT	Dsl			STREX	120	NOx	2.075915
2020	Annual	San Bernar	MHDT	Dsl			STREX	180	NOx	2.906002
2020	Annual	San Bernar	MHDT	Dsl			STREX	240	NOx	3.645782
2020	Annual	San Bernar	MHDT	Dsl			STREX	300	NOx	4.295253
2020	Annual	San Bernar	MHDT	Dsl			STREX	360	NOx	4.854416
2020	Annual	San Bernar	MHDT	Dsl			STREX	420	NOx	5.323271
2020	Annual	San Bernar	MHDT	Dsl			STREX	480	NOx	5.701818
2020	Annual	San Bernar	MHDT	Dsl			STREX	540	NOx	5.990056
2020	Annual	San Bernar	MHDT	Dsl			STREX	600	NOx	6.187986
2020	Annual	San Bernar	MHDT	Dsl			STREX	660	NOx	6.295608
2020	Annual	San Bernar	MHDT	Dsl			STREX	720	NOx	6.312922
2020	Annual	San Bernar	MHDT	Dsl			STREX	9999	NOx	6.312922
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		HC	0.816464
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		CO	19.25376
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		NOx	68.86374
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		SOx	0.064373
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		PM	0.25816
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		TOG	1.177097
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		ROG	1.033971
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		CO2	6747.354
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		CH4	0.048025
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		PM10	0.256611
2020	Annual	San Bernar	MHDT	Dsl			IDLEX		PM2_5	0.24551
2020	Annual	San Bernar	MHDT	Dsl			PMTW		PM	0.012

2020	Annual	San Bernar	MHDT	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernar	MHDT	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernar	MHDT	Dsl	PMBW	PM	0.133
2020	Annual	San Bernar	MHDT	Dsl	PMBW	PM10	0.13034
2020	Annual	San Bernar	MHDT	Dsl	PMBW	PM2_5	0.05586

Inland Center Drive Warehouse Project

EMFAC2017 Output - Filtered and Sorted for HHDT Type Diesel Trucks

calendar_y	season_mo	sub_area	vehicle_cla	fuel	temperatu	relative_hu	process	speed_time	pollutant	emission_rate
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	HC	0.774114
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	CO	2.693227
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	NOx	11.72892
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	SOx	0.029103
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	PM	0.116911
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	TOG	1.11604
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	ROG	0.980338
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	CO2	3050.506
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	CH4	0.045534
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	PM10	0.11621
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	PM2_5	0.111183
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	HC	0.091231
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	CO	0.476115
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	NOx	3.64361
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	SOx	0.013054
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	PM	0.048188
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	TOG	0.131527
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	ROG	0.115535
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	CO2	1368.308
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	CH4	0.005366
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	PM10	0.047899
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	PM2_5	0.045827
2020	Annual	San Bernar	HHDT	Dsl			STREX	5	NOx	0.46301
2020	Annual	San Bernar	HHDT	Dsl			STREX	10	NOx	0.636367
2020	Annual	San Bernar	HHDT	Dsl			STREX	20	NOx	0.979336
2020	Annual	San Bernar	HHDT	Dsl			STREX	30	NOx	1.317308
2020	Annual	San Bernar	HHDT	Dsl			STREX	40	NOx	1.650285
2020	Annual	San Bernar	HHDT	Dsl			STREX	50	NOx	1.978265
2020	Annual	San Bernar	HHDT	Dsl			STREX	60	NOx	2.30125
2020	Annual	San Bernar	HHDT	Dsl			STREX	120	NOx	4.134245
2020	Annual	San Bernar	HHDT	Dsl			STREX	180	NOx	5.787389
2020	Annual	San Bernar	HHDT	Dsl			STREX	240	NOx	7.260681
2020	Annual	San Bernar	HHDT	Dsl			STREX	300	NOx	8.554122
2020	Annual	San Bernar	HHDT	Dsl			STREX	360	NOx	9.667711
2020	Annual	San Bernar	HHDT	Dsl			STREX	420	NOx	10.60145
2020	Annual	San Bernar	HHDT	Dsl			STREX	480	NOx	11.35534
2020	Annual	San Bernar	HHDT	Dsl			STREX	540	NOx	11.92937
2020	Annual	San Bernar	HHDT	Dsl			STREX	600	NOx	12.32355
2020	Annual	San Bernar	HHDT	Dsl			STREX	660	NOx	12.53789
2020	Annual	San Bernar	HHDT	Dsl			STREX	720	NOx	12.57237
2020	Annual	San Bernar	HHDT	Dsl			STREX	9999	NOx	12.57237
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		HC	1.904426
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		CO	31.06246
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		NOx	35.29859
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		SOx	0.05893
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		PM	0.029806
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		TOG	2.745611
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		ROG	2.411765
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		CO2	6176.801
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		CH4	0.11202
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		PM10	0.029628
2020	Annual	San Bernar	HHDT	Dsl			IDLEX		PM2_5	0.028346
2020	Annual	San Bernar	HHDT	Dsl			PMTW		PM	0.036

2020	Annual	San Bernar	HHDT	Dsl	PMTW	PM10	0.036
2020	Annual	San Bernar	HHDT	Dsl	PMTW	PM2_5	0.009
2020	Annual	San Bernar	HHDT	Dsl	PMBW	PM	0.063
2020	Annual	San Bernar	HHDT	Dsl	PMBW	PM10	0.06174
2020	Annual	San Bernar	HHDT	Dsl	PMBW	PM2_5	0.02646

Inland Center Drive Warehouse Project

EMFAC2017 Raw Output

calendar_y	season_mo	sub_area	vehicle_cla	fuel	temperatu	relative_hu	process	speed_time	pollutant	emission_rate
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	HC	0.774114
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	CO	2.693227
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	NOx	11.72892
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	SOx	0.029103
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	PM	0.116911
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	TOG	1.11604
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	ROG	0.980338
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	CO2	3050.506
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	CH4	0.045534
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	PM10	0.11621
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	10	PM2_5	0.111183
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	HC	0.091231
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	CO	0.476115
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	NOx	3.64361
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	SOx	0.013054
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	PM	0.048188
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	TOG	0.131527
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	ROG	0.115535
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	CO2	1368.308
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	CH4	0.005366
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	PM10	0.047899
2020	Annual	San Bernar	HHDT	Dsl	78	50	RUNEX	40	PM2_5	0.045827
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	HC	5.488454
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	CO	90.16557
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	NOx	7.989129
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	SOx	0.041393
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	PM	0.009392
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	TOG	5.942476
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	ROG	4.072427
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	CO2	3988.957
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	CH4	0.60484
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	PM10	0.008396
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	10	PM2_5	0.00772
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	HC	1.233941
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	CO	44.7833
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	NOx	6.134699
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	SOx	0.019157
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	PM	0.002147
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	TOG	1.336016
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	ROG	0.915583
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	CO2	1845.41
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	CH4	0.163676
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	PM10	0.001919
2020	Annual	San Bernar	HHDT	Gas	78	50	RUNEX	40	PM2_5	0.001765
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	HC	14.85205
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	CO	32.26382
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	NOx	6.420134
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	PM	0.011776
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	TOG	15.49116
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	ROG	1.203488
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	CO2	4835.523
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	CH4	14.05956
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	PM10	0.011706

2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	10	PM2_5	0.011199
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	HC	2.066273
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	CO	4.838478
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	NOx	2.865275
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	PM	0.005074
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	TOG	2.146932
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	ROG	0.155138
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	CO2	2803.79
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	CH4	1.961746
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	PM10	0.005043
2020	Annual	San Bernar	HHDT	NG	78	50	RUNEX	40	PM2_5	0.004825
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	HC	0.433635
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	CO	2.210413
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	NOx	2.135983
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	SOx	0.009932
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	PM	0.060769
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	TOG	0.625171
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	ROG	0.54915
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	CO2	1040.695
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	CH4	0.025507
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	PM10	0.060404
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	10	PM2_5	0.057791
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	HC	0.067678
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	CO	0.454927
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	NOx	2.539614
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	SOx	0.004331
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	PM	0.0199
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	TOG	0.097571
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	ROG	0.085707
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	CO2	453.8049
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	CH4	0.003981
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	PM10	0.01978
2020	Annual	San Bernar	LHDT1	Dsl	78	50	RUNEX	40	PM2_5	0.018925
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	HC	0.221374
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	CO	2.262383
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	NOx	0.331897
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	SOx	0.015553
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	PM	0.006058
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	TOG	0.239638
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	ROG	0.165354
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	CO2	1554.339
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	CH4	0.032278
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	PM10	0.00542
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	10	PM2_5	0.004985
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	HC	0.053475
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	CO	1.056017
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	NOx	0.22922
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	SOx	0.007194
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	PM	0.001227
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	TOG	0.057885
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	ROG	0.040002
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	CO2	719.0832
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	CH4	0.009069
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	PM10	0.001098
2020	Annual	San Bernar	LHDT1	Gas	78	50	RUNEX	40	PM2_5	0.00101
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	HC	0.431932
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	CO	2.225212

2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	NOx	1.824161
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	SOx	0.01108
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	PM	0.055414
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	TOG	0.622716
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	ROG	0.546994
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	CO2	1160.973
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	CH4	0.025407
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	PM10	0.055082
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	10	PM2_5	0.052699
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	HC	0.059349
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	CO	0.394002
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	NOx	2.076685
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	SOx	0.004871
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	PM	0.018778
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	TOG	0.085563
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	ROG	0.075159
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	CO2	510.4075
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	CH4	0.003491
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	PM10	0.018666
2020	Annual	San Bernar	LHDT2	Dsl	78	50	RUNEX	40	PM2_5	0.017858
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	HC	0.144934
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	CO	1.350769
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	NOx	0.309089
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	SOx	0.017862
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	PM	0.005043
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	TOG	0.156923
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	ROG	0.107541
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	CO2	1787.403
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	CH4	0.023387
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	PM10	0.004508
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	10	PM2_5	0.004145
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	HC	0.031681
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	CO	0.694777
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	NOx	0.198495
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	SOx	0.008264
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	PM	0.000991
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	TOG	0.034302
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	ROG	0.023507
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	CO2	826.9055
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	CH4	0.006084
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	PM10	0.000886
2020	Annual	San Bernar	LHDT2	Gas	78	50	RUNEX	40	PM2_5	0.000814
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	HC	0.920042
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	CO	2.036017
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	NOx	7.478721
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	SOx	0.01933
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	PM	0.19723
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	TOG	1.326425
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	ROG	1.165142
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	CO2	2026.128
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	CH4	0.054118
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	PM10	0.196047
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	10	PM2_5	0.187566
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	HC	0.097263
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	CO	0.458814
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	NOx	2.57655
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	SOx	0.008686

2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	PM	0.069802
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	TOG	0.140225
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	ROG	0.123174
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	CO2	910.4133
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	CH4	0.005721
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	PM10	0.069384
2020	Annual	San Bernar	MHDT	Dsl	78	50	RUNEX	40	PM2_5	0.066382
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	HC	0.494956
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	CO	4.253251
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	NOx	0.796892
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	SOx	0.03241
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	PM	0.005182
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	TOG	0.535901
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	ROG	0.367257
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	CO2	3239.616
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	CH4	0.067246
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	PM10	0.004633
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	10	PM2_5	0.00426
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	HC	0.101287
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	CO	2.381867
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	NOx	0.49793
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	SOx	0.014996
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	PM	0.001017
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	TOG	0.109666
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	ROG	0.075155
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	CO2	1498.742
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	CH4	0.016849
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	PM10	0.000909
2020	Annual	San Bernar	MHDT	Gas	78	50	RUNEX	40	PM2_5	0.000836
2020	Annual	San Bernar	HHDT	Dsl			STREX	5	NOx	0.46301
2020	Annual	San Bernar	HHDT	Dsl			STREX	10	NOx	0.636367
2020	Annual	San Bernar	HHDT	Dsl			STREX	20	NOx	0.979336
2020	Annual	San Bernar	HHDT	Dsl			STREX	30	NOx	1.317308
2020	Annual	San Bernar	HHDT	Dsl			STREX	40	NOx	1.650285
2020	Annual	San Bernar	HHDT	Dsl			STREX	50	NOx	1.978265
2020	Annual	San Bernar	HHDT	Dsl			STREX	60	NOx	2.30125
2020	Annual	San Bernar	HHDT	Dsl			STREX	120	NOx	4.134245
2020	Annual	San Bernar	HHDT	Dsl			STREX	180	NOx	5.787389
2020	Annual	San Bernar	HHDT	Dsl			STREX	240	NOx	7.260681
2020	Annual	San Bernar	HHDT	Dsl			STREX	300	NOx	8.554122
2020	Annual	San Bernar	HHDT	Dsl			STREX	360	NOx	9.667711
2020	Annual	San Bernar	HHDT	Dsl			STREX	420	NOx	10.60145
2020	Annual	San Bernar	HHDT	Dsl			STREX	480	NOx	11.35534
2020	Annual	San Bernar	HHDT	Dsl			STREX	540	NOx	11.92937
2020	Annual	San Bernar	HHDT	Dsl			STREX	600	NOx	12.32355
2020	Annual	San Bernar	HHDT	Dsl			STREX	660	NOx	12.53789
2020	Annual	San Bernar	HHDT	Dsl			STREX	720	NOx	12.57237
2020	Annual	San Bernar	HHDT	Dsl			STREX	9999	NOx	12.57237
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	HC	0.000328
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	CO	1.334148
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	NOx	0.410347
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	SOx	9.09E-05
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	PM	0.000457
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	TOG	0.000342
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	ROG	0.000313
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	CO2	7.009241
2020	Annual	San Bernar	HHDT	Gas	78		STREX	5	CH4	9.00E-05

2020	Annual	San Bernar	HHDT	Gas	78	STREX	5	PM10	0.000409
2020	Annual	San Bernar	HHDT	Gas	78	STREX	5	PM2_5	0.000376
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	HC	0.000639
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	CO	2.614088
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	NOx	0.618286
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	SOx	0.000181
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	PM	0.000895
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	TOG	0.000667
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	ROG	0.00061
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	CO2	13.97969
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	CH4	0.00016
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	PM10	0.000801
2020	Annual	San Bernar	HHDT	Gas	78	STREX	10	PM2_5	0.000736
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	HC	0.001212
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	CO	5.011341
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	NOx	0.983457
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	SOx	0.000356
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	PM	0.001717
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	TOG	0.001265
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	ROG	0.001156
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	CO2	27.80424
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	CH4	0.000278
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	PM10	0.001535
2020	Annual	San Bernar	HHDT	Gas	78	STREX	20	PM2_5	0.001411
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	HC	0.001718
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	CO	7.191761
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	NOx	1.281016
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	SOx	0.000527
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	PM	0.002464
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	TOG	0.001794
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	ROG	0.001638
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	CO2	41.47364
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	CH4	0.000376
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	PM10	0.002202
2020	Annual	San Bernar	HHDT	Gas	78	STREX	30	PM2_5	0.002025
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	HC	0.002158
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	CO	9.155347
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	NOx	1.510966
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	SOx	0.000692
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	PM	0.003136
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	TOG	0.002252
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	ROG	0.002057
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	CO2	54.98789
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	CH4	0.000458
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	PM10	0.002804
2020	Annual	San Bernar	HHDT	Gas	78	STREX	40	PM2_5	0.002578
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	HC	0.002531
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	CO	10.9021
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	NOx	1.673304
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	SOx	0.000853
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	PM	0.003734
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	TOG	0.002642
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	ROG	0.002413
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	CO2	68.34698
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	CH4	0.000526
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	PM10	0.003339
2020	Annual	San Bernar	HHDT	Gas	78	STREX	50	PM2_5	0.00307

2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	HC	0.002837
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	CO	12.43202
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	NOx	1.768032
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	SOx	0.001009
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	PM	0.004259
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	TOG	0.002961
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	ROG	0.002705
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	CO2	81.55094
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	CH4	0.000581
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	PM10	0.003807
2020	Annual	San Bernar	HHDT	Gas	78	STREX	60	PM2_5	0.003501
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	HC	0.003473
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	CO	17.08645
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	NOx	1.773572
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	SOx	0.001652
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	PM	0.005838
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	TOG	0.003625
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	ROG	0.003311
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	CO2	138.7041
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	CH4	0.000692
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	PM10	0.00522
2020	Annual	San Bernar	HHDT	Gas	78	STREX	120	PM2_5	0.004799
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	HC	0.003685
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	CO	17.58593
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	NOx	1.767057
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	SOx	0.001911
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	PM	0.006009
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	TOG	0.003847
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	ROG	0.003513
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	CO2	163.8685
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	CH4	0.000728
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	PM10	0.005372
2020	Annual	San Bernar	HHDT	Gas	78	STREX	180	PM2_5	0.004939
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	HC	0.003891
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	CO	18.10188
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	NOx	1.757102
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	SOx	0.002156
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	PM	0.006185
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	TOG	0.004061
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	ROG	0.003709
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	CO2	187.5476
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	CH4	0.000763
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	PM10	0.00553
2020	Annual	San Bernar	HHDT	Gas	78	STREX	240	PM2_5	0.005084
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	HC	0.004089
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	CO	18.63429
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	NOx	1.743705
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	SOx	0.002385
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	PM	0.006367
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	TOG	0.004268
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	ROG	0.003898
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	CO2	209.7415
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	CH4	0.000797
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	PM10	0.005692
2020	Annual	San Bernar	HHDT	Gas	78	STREX	300	PM2_5	0.005234
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	HC	0.004281
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	CO	19.18317

2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	NOx	1.726867
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	SOx	0.002601
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	PM	0.006555
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	TOG	0.004469
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	ROG	0.004081
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	CO2	230.4501
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	CH4	0.000829
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	PM10	0.00586
2020	Annual	San Bernar	HHDT	Gas	78	STREX	360	PM2_5	0.005388
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	HC	0.004467
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	CO	19.7485
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	NOx	1.706587
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	SOx	0.002801
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	PM	0.006748
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	TOG	0.004662
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	ROG	0.004258
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	CO2	249.6734
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	CH4	0.00086
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	PM10	0.006033
2020	Annual	San Bernar	HHDT	Gas	78	STREX	420	PM2_5	0.005547
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	HC	0.004645
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	CO	20.33031
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	NOx	1.682867
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	SOx	0.002987
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	PM	0.006947
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	TOG	0.004848
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	ROG	0.004428
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	CO2	267.4115
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	CH4	0.000889
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	PM10	0.00621
2020	Annual	San Bernar	HHDT	Gas	78	STREX	480	PM2_5	0.00571
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	HC	0.004817
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	CO	20.92857
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	NOx	1.655706
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	SOx	0.003159
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	PM	0.007151
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	TOG	0.005027
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	ROG	0.004592
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	CO2	283.6643
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	CH4	0.000918
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	PM10	0.006393
2020	Annual	San Bernar	HHDT	Gas	78	STREX	540	PM2_5	0.005878
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	HC	0.004982
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	CO	21.5433
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	NOx	1.625103
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	SOx	0.003316
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	PM	0.007361
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	TOG	0.005199
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	ROG	0.004749
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	CO2	298.4319
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	CH4	0.000945
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	PM10	0.006581
2020	Annual	San Bernar	HHDT	Gas	78	STREX	600	PM2_5	0.006051
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	HC	0.00514
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	CO	22.17449
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	NOx	1.591059
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	SOx	0.003458

2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	PM	0.007577
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	TOG	0.005365
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	ROG	0.0049
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	CO2	311.7142
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	CH4	0.000971
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	PM10	0.006774
2020	Annual	San Bernar	HHDT	Gas	78	STREX	660	PM2_5	0.006228
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	HC	0.005302
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	CO	22.84344
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	NOx	1.57216
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	SOx	0.003593
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	PM	0.007806
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	TOG	0.005534
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	ROG	0.005054
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	CO2	324.1449
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	CH4	0.000997
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	PM10	0.006978
2020	Annual	San Bernar	HHDT	Gas	78	STREX	720	PM2_5	0.006416
2020	Annual	San Bernar	HHDT	Gas	78	HOTSOAK		HC	0.180986
2020	Annual	San Bernar	HHDT	Gas	78	HOTSOAK		TOG	0.193498
2020	Annual	San Bernar	HHDT	Gas	78	HOTSOAK		ROG	0.193498
2020	Annual	San Bernar	HHDT	Gas	78	HOTSOAK		CH4	0.033222
2020	Annual	San Bernar	HHDT	Gas	78	RUNLOSS		HC	10.14651
2020	Annual	San Bernar	HHDT	Gas	78	RUNLOSS		TOG	10.84793
2020	Annual	San Bernar	HHDT	Gas	78	RUNLOSS		ROG	10.84793
2020	Annual	San Bernar	HHDT	Gas	78	RUNLOSS		CH4	1.434054
2020	Annual	San Bernar	HHDT	Gas	78	PRESTLOSS		HC	0.012314
2020	Annual	San Bernar	HHDT	Gas	78	PRESTLOSS		TOG	0.013375
2020	Annual	San Bernar	HHDT	Gas	78	PRESTLOSS		ROG	0.013375
2020	Annual	San Bernar	HHDT	Gas	78	PRESTLOSS		CH4	0.003234
2020	Annual	San Bernar	HHDT	Gas	78	MDRESTLOSS		HC	0.001606
2020	Annual	San Bernar	HHDT	Gas	78	MDRESTLOSS		TOG	0.001744
2020	Annual	San Bernar	HHDT	Gas	78	MDRESTLOSS		ROG	0.001744
2020	Annual	San Bernar	HHDT	Gas	78	MDRESTLOSS		CH4	0.000556
2020	Annual	San Bernar	HHDT	Gas	78	PDIURN		HC	0.018448
2020	Annual	San Bernar	HHDT	Gas	78	PDIURN		TOG	0.020038
2020	Annual	San Bernar	HHDT	Gas	78	PDIURN		ROG	0.020038
2020	Annual	San Bernar	HHDT	Gas	78	PDIURN		CH4	0.004585
2020	Annual	San Bernar	HHDT	Gas	78	MDDIURN		HC	0.002419
2020	Annual	San Bernar	HHDT	Gas	78	MDDIURN		TOG	0.002628
2020	Annual	San Bernar	HHDT	Gas	78	MDDIURN		ROG	0.002628
2020	Annual	San Bernar	HHDT	Gas	78	MDDIURN		CH4	0.000792
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	HC	0.041979
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	CO	0.437327
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	NOx	0.437637
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	SOx	6.16E-05
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	PM	0.000161
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	TOG	0.043826
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	ROG	0.040048
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	CO2	5.353514
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	CH4	0.009194
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	PM10	0.000145
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	5	PM2_5	0.000134
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	HC	0.080275
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	CO	0.860372
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	NOx	0.496627
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	SOx	8.51E-05

2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	PM	0.000295
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	TOG	0.083797
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	ROG	0.076555
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	CO2	6.922548
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	CH4	0.016227
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	PM10	0.000265
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	10	PM2_5	0.000244
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	HC	0.152039
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	CO	1.664008
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	NOx	0.601303
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	SOx	0.000133
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	PM	0.000547
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	TOG	0.158699
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	ROG	0.144966
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	CO2	10.21686
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	CH4	0.028308
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	PM10	0.00049
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	20	PM2_5	0.000451
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	HC	0.217366
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	CO	2.41104
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	NOx	0.688242
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	SOx	0.000182
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	PM	0.000779
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	TOG	0.226882
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	ROG	0.207242
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	CO2	13.7195
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	CH4	0.038646
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	PM10	0.000697
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	30	PM2_5	0.000641
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	HC	0.276255
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	CO	3.101467
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	NOx	0.757442
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	SOx	0.000231
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	PM	0.000991
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	TOG	0.288347
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	ROG	0.263382
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	CO2	17.43046
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	CH4	0.047636
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	PM10	0.000886
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	40	PM2_5	0.000815
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	HC	0.328707
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	CO	3.735289
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	NOx	0.808904
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	SOx	0.000282
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	PM	0.001182
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	TOG	0.343093
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	ROG	0.313387
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	CO2	21.34975
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	CH4	0.055462
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	PM10	0.001057
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	50	PM2_5	0.000972
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	HC	0.374512
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	CO	4.312507
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	NOx	0.842628
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	SOx	0.000334
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	PM	0.001353
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	TOG	0.390901

2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	ROG	0.357054
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	CO2	25.47737
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	CH4	0.062203
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	PM10	0.00121
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	60	PM2_5	0.001112
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	HC	0.526678
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	CO	6.437728
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	NOx	0.887681
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	SOx	0.000632
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	PM	0.001929
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	TOG	0.549721
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	ROG	0.502114
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	CO2	51.58144
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	CH4	0.084493
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	PM10	0.001726
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	120	PM2_5	0.001587
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	HC	0.561287
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	CO	6.908605
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	NOx	0.884631
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	SOx	0.00072
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	PM	0.002029
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	TOG	0.585845
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	ROG	0.535109
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	CO2	59.4922
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	CH4	0.089292
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	PM10	0.001815
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	180	PM2_5	0.00167
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	HC	0.594728
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	CO	7.334814
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	NOx	0.878519
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	SOx	0.000804
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	PM	0.002124
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	TOG	0.62075
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	ROG	0.566992
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	CO2	67.17405
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	CH4	0.09389
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	PM10	0.001901
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	240	PM2_5	0.001748
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	HC	0.627547
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	CO	7.723731
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	NOx	0.869083
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	SOx	0.000886
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	PM	0.002214
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	TOG	0.655005
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	ROG	0.598281
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	CO2	74.62698
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	CH4	0.098372
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	PM10	0.001982
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	300	PM2_5	0.001823
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	HC	0.659744
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	CO	8.075355
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	NOx	0.856324
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	SOx	0.000964
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	PM	0.0023
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	TOG	0.688611
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	ROG	0.628978
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	CO2	81.851

2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	CH4	0.102742
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	PM10	0.002059
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	360	PM2_5	0.001894
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	HC	0.691319
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	CO	8.389686
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	NOx	0.84024
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	SOx	0.00104
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	PM	0.002381
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	TOG	0.721568
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	ROG	0.659081
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	CO2	88.84611
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	CH4	0.107002
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	PM10	0.002131
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	420	PM2_5	0.001961
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	HC	0.722271
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	CO	8.666725
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	NOx	0.820832
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	SOx	0.001113
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	PM	0.002457
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	TOG	0.753875
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	ROG	0.688591
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	CO2	95.6123
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	CH4	0.111157
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	PM10	0.0022
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	480	PM2_5	0.002024
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	HC	0.752601
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	CO	8.90647
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	NOx	0.798101
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	SOx	0.001183
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	PM	0.002529
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	TOG	0.785533
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	ROG	0.717508
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	CO2	102.1496
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	CH4	0.115207
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	PM10	0.002264
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	540	PM2_5	0.002083
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	HC	0.782309
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	CO	9.108923
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	NOx	0.772045
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	SOx	0.00125
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	PM	0.002596
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	TOG	0.816541
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	ROG	0.745832
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	CO2	108.4579
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	CH4	0.119157
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	PM10	0.002324
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	600	PM2_5	0.002138
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	HC	0.811395
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	CO	9.274083
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	NOx	0.742666
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	SOx	0.001314
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	PM	0.002658
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	TOG	0.8469
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	ROG	0.773562
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	CO2	114.5374
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	CH4	0.123007
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	PM10	0.00238

2020	Annual	San Bernar	LHDT1	Gas	78	STREX	660	PM2_5	0.00219
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	HC	0.840813
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	CO	9.406252
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	NOx	0.714735
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	SOx	0.001376
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	PM	0.002717
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	TOG	0.877605
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	ROG	0.801609
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	CO2	120.4856
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	CH4	0.12688
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	PM10	0.002433
2020	Annual	San Bernar	LHDT1	Gas	78	STREX	720	PM2_5	0.002239
2020	Annual	San Bernar	LHDT1	Gas	78	HOTSOAK		HC	0.122174
2020	Annual	San Bernar	LHDT1	Gas	78	HOTSOAK		TOG	0.130619
2020	Annual	San Bernar	LHDT1	Gas	78	HOTSOAK		ROG	0.130619
2020	Annual	San Bernar	LHDT1	Gas	78	HOTSOAK		CH4	0.022256
2020	Annual	San Bernar	LHDT1	Gas	78	RUNLOSS		HC	8.205047
2020	Annual	San Bernar	LHDT1	Gas	78	RUNLOSS		TOG	8.772255
2020	Annual	San Bernar	LHDT1	Gas	78	RUNLOSS		ROG	8.772255
2020	Annual	San Bernar	LHDT1	Gas	78	RUNLOSS		CH4	1.064872
2020	Annual	San Bernar	LHDT1	Gas	78	PRESTLOSS		HC	0.004472
2020	Annual	San Bernar	LHDT1	Gas	78	PRESTLOSS		TOG	0.004857
2020	Annual	San Bernar	LHDT1	Gas	78	PRESTLOSS		ROG	0.004857
2020	Annual	San Bernar	LHDT1	Gas	78	PRESTLOSS		CH4	0.001299
2020	Annual	San Bernar	LHDT1	Gas	78	MDRESTLOSS		HC	0.000648
2020	Annual	San Bernar	LHDT1	Gas	78	MDRESTLOSS		TOG	0.000704
2020	Annual	San Bernar	LHDT1	Gas	78	MDRESTLOSS		ROG	0.000704
2020	Annual	San Bernar	LHDT1	Gas	78	MDRESTLOSS		CH4	0.000242
2020	Annual	San Bernar	LHDT1	Gas	78	PDIURN		HC	0.008739
2020	Annual	San Bernar	LHDT1	Gas	78	PDIURN		TOG	0.009492
2020	Annual	San Bernar	LHDT1	Gas	78	PDIURN		ROG	0.009492
2020	Annual	San Bernar	LHDT1	Gas	78	PDIURN		CH4	0.002244
2020	Annual	San Bernar	LHDT1	Gas	78	MDDIURN		HC	0.001318
2020	Annual	San Bernar	LHDT1	Gas	78	MDDIURN		TOG	0.001432
2020	Annual	San Bernar	LHDT1	Gas	78	MDDIURN		ROG	0.001432
2020	Annual	San Bernar	LHDT1	Gas	78	MDDIURN		CH4	0.000432
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	HC	0.036337
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	CO	0.407574
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	NOx	0.451261
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	SOx	7.35E-05
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	PM	0.000108
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	TOG	0.037926
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	ROG	0.034639
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	CO2	6.612048
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	CH4	0.008202
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	PM10	9.68E-05
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	5	PM2_5	8.90E-05
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	HC	0.071271
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	CO	0.802654
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	NOx	0.502698
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	SOx	9.74E-05
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	PM	0.000213
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	TOG	0.074387
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	ROG	0.067942
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	CO2	8.272522
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	CH4	0.014696
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	PM10	0.00019

2020	Annual	San Bernar	LHDT2	Gas	78	STREX	10	PM2_5	0.000175
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	HC	0.136933
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	CO	1.555331
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	NOx	0.594204
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	SOx	0.000147
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	PM	0.000409
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	TOG	0.14292
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	ROG	0.130536
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	CO2	11.80822
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	CH4	0.025887
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	PM10	0.000366
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	20	PM2_5	0.000337
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	HC	0.196986
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	CO	2.258031
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	NOx	0.670554
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	SOx	0.000198
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	PM	0.000591
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	TOG	0.205599
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	ROG	0.187783
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	CO2	15.63025
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	CH4	0.035512
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	PM10	0.000528
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	30	PM2_5	0.000485
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	HC	0.25143
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	CO	2.910755
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	NOx	0.731749
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	SOx	0.000251
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	PM	0.000756
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	TOG	0.262422
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	ROG	0.239683
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	CO2	19.7386
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	CH4	0.043934
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	PM10	0.000676
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	40	PM2_5	0.000622
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	HC	0.300264
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	CO	3.513503
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	NOx	0.777788
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	SOx	0.000305
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	PM	0.000906
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	TOG	0.313392
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	ROG	0.286235
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	CO2	24.13329
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	CH4	0.051321
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	PM10	0.00081
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	50	PM2_5	0.000745
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	HC	0.343489
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	CO	4.066274
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	NOx	0.808671
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	SOx	0.000362
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	PM	0.00104
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	TOG	0.358506
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	ROG	0.327441
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	CO2	28.81431
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	CH4	0.057768
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	PM10	0.00093
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	60	PM2_5	0.000855
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	HC	0.496286

2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	CO	6.163688
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	NOx	0.857472
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	SOx	0.000711
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	PM	0.001494
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	TOG	0.517984
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	ROG	0.473099
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	CO2	60.00785
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	CH4	0.080407
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	PM10	0.001336
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	120	PM2_5	0.001228
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	HC	0.529209
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	CO	6.662026
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	NOx	0.854568
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	SOx	0.00081
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	PM	0.001574
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	TOG	0.552347
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	ROG	0.504484
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	CO2	69.00787
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	CH4	0.08502
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	PM10	0.001407
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	180	PM2_5	0.001294
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	HC	0.561003
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	CO	7.109048
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	NOx	0.848544
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	SOx	0.000906
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	PM	0.00165
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	TOG	0.58553
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	ROG	0.534792
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	CO2	77.79262
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	CH4	0.089438
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	PM10	0.001475
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	240	PM2_5	0.001356
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	HC	0.592269
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	CO	7.513052
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	NOx	0.839116
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	SOx	0.000998
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	PM	0.001721
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	TOG	0.618163
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	ROG	0.564597
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	CO2	86.36211
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	CH4	0.093753
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	PM10	0.001539
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	300	PM2_5	0.001415
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	HC	0.623007
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	CO	7.874039
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	NOx	0.826282
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	SOx	0.001088
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	PM	0.001788
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	TOG	0.650245
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	ROG	0.5939
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	CO2	94.71634
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	CH4	0.097969
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	PM10	0.001599
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	360	PM2_5	0.00147
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	HC	0.653218
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	CO	8.19201
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	NOx	0.810044

2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	SOx	0.001176
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	PM	0.001851
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	TOG	0.681777
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	ROG	0.622699
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	CO2	102.8553
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	CH4	0.102089
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	PM10	0.001655
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	420	PM2_5	0.001522
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	HC	0.682902
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	CO	8.466964
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	NOx	0.7904
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	SOx	0.00126
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	PM	0.00191
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	TOG	0.712758
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	ROG	0.650996
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	CO2	110.779
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	CH4	0.106115
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	PM10	0.001707
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	480	PM2_5	0.00157
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	HC	0.712057
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	CO	8.698901
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	NOx	0.767352
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	SOx	0.001341
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	PM	0.001964
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	TOG	0.743189
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	ROG	0.678789
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	CO2	118.4874
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	CH4	0.11005
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	PM10	0.001756
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	540	PM2_5	0.001614
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	HC	0.740686
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	CO	8.887821
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	NOx	0.740898
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	SOx	0.00142
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	PM	0.002014
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	TOG	0.773069
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	ROG	0.70608
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	CO2	125.9806
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	CH4	0.113896
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	PM10	0.0018
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	600	PM2_5	0.001655
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	HC	0.768787
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	CO	9.033724
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	NOx	0.71104
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	SOx	0.001496
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	PM	0.002059
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	TOG	0.802399
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	ROG	0.732868
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	CO2	133.2585
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	CH4	0.117656
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	PM10	0.001841
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	660	PM2_5	0.001693
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	HC	0.797168
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	CO	9.140104
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	NOx	0.681833
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	SOx	0.00157
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	PM	0.002102

2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	TOG	0.832021
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	ROG	0.759923
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	CO2	140.413
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	CH4	0.121431
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	PM10	0.001879
2020	Annual	San Bernar	LHDT2	Gas	78	STREX	720	PM2_5	0.001728
2020	Annual	San Bernar	LHDT2	Gas	78	HOTSOAK		HC	0.103396
2020	Annual	San Bernar	LHDT2	Gas	78	HOTSOAK		TOG	0.110544
2020	Annual	San Bernar	LHDT2	Gas	78	HOTSOAK		ROG	0.110544
2020	Annual	San Bernar	LHDT2	Gas	78	HOTSOAK		CH4	0.019224
2020	Annual	San Bernar	LHDT2	Gas	78	RUNLOSS		HC	6.877983
2020	Annual	San Bernar	LHDT2	Gas	78	RUNLOSS		TOG	7.353453
2020	Annual	San Bernar	LHDT2	Gas	78	RUNLOSS		ROG	7.353453
2020	Annual	San Bernar	LHDT2	Gas	78	RUNLOSS		CH4	0.913352
2020	Annual	San Bernar	LHDT2	Gas	78	PRESTLOSS		HC	0.003624
2020	Annual	San Bernar	LHDT2	Gas	78	PRESTLOSS		TOG	0.003936
2020	Annual	San Bernar	LHDT2	Gas	78	PRESTLOSS		ROG	0.003936
2020	Annual	San Bernar	LHDT2	Gas	78	PRESTLOSS		CH4	0.001096
2020	Annual	San Bernar	LHDT2	Gas	78	MDRESTLOSS		HC	0.00054
2020	Annual	San Bernar	LHDT2	Gas	78	MDRESTLOSS		TOG	0.000587
2020	Annual	San Bernar	LHDT2	Gas	78	MDRESTLOSS		ROG	0.000587
2020	Annual	San Bernar	LHDT2	Gas	78	MDRESTLOSS		CH4	0.000208
2020	Annual	San Bernar	LHDT2	Gas	78	PDIURN		HC	0.006914
2020	Annual	San Bernar	LHDT2	Gas	78	PDIURN		TOG	0.007509
2020	Annual	San Bernar	LHDT2	Gas	78	PDIURN		ROG	0.007509
2020	Annual	San Bernar	LHDT2	Gas	78	PDIURN		CH4	0.001852
2020	Annual	San Bernar	LHDT2	Gas	78	MDDIURN		HC	0.001085
2020	Annual	San Bernar	LHDT2	Gas	78	MDDIURN		TOG	0.001179
2020	Annual	San Bernar	LHDT2	Gas	78	MDDIURN		ROG	0.001179
2020	Annual	San Bernar	LHDT2	Gas	78	MDDIURN		CH4	0.000366
2020	Annual	San Bernar	MHDT	Dsl		STREX	5	NOx	0.23249
2020	Annual	San Bernar	MHDT	Dsl		STREX	10	NOx	0.319537
2020	Annual	San Bernar	MHDT	Dsl		STREX	20	NOx	0.491751
2020	Annual	San Bernar	MHDT	Dsl		STREX	30	NOx	0.661456
2020	Annual	San Bernar	MHDT	Dsl		STREX	40	NOx	0.828652
2020	Annual	San Bernar	MHDT	Dsl		STREX	50	NOx	0.99334
2020	Annual	San Bernar	MHDT	Dsl		STREX	60	NOx	1.155519
2020	Annual	San Bernar	MHDT	Dsl		STREX	120	NOx	2.075915
2020	Annual	San Bernar	MHDT	Dsl		STREX	180	NOx	2.906002
2020	Annual	San Bernar	MHDT	Dsl		STREX	240	NOx	3.645782
2020	Annual	San Bernar	MHDT	Dsl		STREX	300	NOx	4.295253
2020	Annual	San Bernar	MHDT	Dsl		STREX	360	NOx	4.854416
2020	Annual	San Bernar	MHDT	Dsl		STREX	420	NOx	5.323271
2020	Annual	San Bernar	MHDT	Dsl		STREX	480	NOx	5.701818
2020	Annual	San Bernar	MHDT	Dsl		STREX	540	NOx	5.990056
2020	Annual	San Bernar	MHDT	Dsl		STREX	600	NOx	6.187986
2020	Annual	San Bernar	MHDT	Dsl		STREX	660	NOx	6.295608
2020	Annual	San Bernar	MHDT	Dsl		STREX	720	NOx	6.312922
2020	Annual	San Bernar	MHDT	Dsl		STREX	9999	NOx	6.312922
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	HC	0.067839
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	CO	1.304921
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	NOx	0.194256
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	SOx	7.70E-05
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	PM	0.000158
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	TOG	0.070805
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	ROG	0.06467
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	CO2	5.448056

2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	CH4	0.014354
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	PM10	0.000141
2020	Annual	San Bernar	MHDT	Gas	78	STREX	5	PM2_5	0.00013
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	HC	0.132234
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	CO	2.55682
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	NOx	0.292693
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	SOx	0.000153
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	PM	0.000309
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	TOG	0.138016
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	ROG	0.126056
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	CO2	10.86596
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	CH4	0.025559
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	PM10	0.000277
2020	Annual	San Bernar	MHDT	Gas	78	STREX	10	PM2_5	0.000254
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	HC	0.250692
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	CO	4.901557
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	NOx	0.465563
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	SOx	0.0003
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	PM	0.000593
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	TOG	0.261653
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	ROG	0.23898
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	CO2	21.61134
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	CH4	0.044429
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	PM10	0.00053
2020	Annual	San Bernar	MHDT	Gas	78	STREX	20	PM2_5	0.000488
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	HC	0.355373
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	CO	7.03421
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	NOx	0.606426
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	SOx	0.000443
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	PM	0.000851
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	TOG	0.37091
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	ROG	0.33877
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	CO2	32.23612
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	CH4	0.060071
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	PM10	0.000761
2020	Annual	San Bernar	MHDT	Gas	78	STREX	30	PM2_5	0.0007
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	HC	0.446278
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	CO	8.954779
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	NOx	0.715283
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	SOx	0.000581
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	PM	0.001084
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	TOG	0.46579
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	ROG	0.425427
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	CO2	42.7403
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	CH4	0.073143
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	PM10	0.000969
2020	Annual	San Bernar	MHDT	Gas	78	STREX	40	PM2_5	0.000891
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	HC	0.523406
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	CO	10.66326
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	NOx	0.792133
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	SOx	0.000714
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	PM	0.001291
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	TOG	0.54629
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	ROG	0.498952
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	CO2	53.1239
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	CH4	0.083949
2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	PM10	0.001154

2020	Annual	San Bernar	MHDT	Gas	78	STREX	50	PM2_5	0.001061
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	HC	0.586758
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	CO	12.15967
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	NOx	0.836977
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	SOx	0.000842
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	PM	0.001472
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	TOG	0.612411
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	ROG	0.559344
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	CO2	63.3869
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	CH4	0.092664
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	PM10	0.001316
2020	Annual	San Bernar	MHDT	Gas	78	STREX	60	PM2_5	0.00121
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	HC	0.718283
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	CO	16.71164
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	NOx	0.839332
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	SOx	0.001361
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	PM	0.002018
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	TOG	0.749686
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	ROG	0.684724
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	CO2	107.8102
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	CH4	0.110366
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	PM10	0.001804
2020	Annual	San Bernar	MHDT	Gas	78	STREX	120	PM2_5	0.001659
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	HC	0.762145
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	CO	17.20017
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	NOx	0.836249
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	SOx	0.001565
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	PM	0.002077
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	TOG	0.795467
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	ROG	0.726537
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	CO2	127.3697
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	CH4	0.116168
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	PM10	0.001857
2020	Annual	San Bernar	MHDT	Gas	78	STREX	180	PM2_5	0.001707
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	HC	0.804616
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	CO	17.7048
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	NOx	0.831537
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	SOx	0.001758
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	PM	0.002138
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	TOG	0.839794
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	ROG	0.767024
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	CO2	145.7747
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	CH4	0.121743
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	PM10	0.001911
2020	Annual	San Bernar	MHDT	Gas	78	STREX	240	PM2_5	0.001757
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	HC	0.845695
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	CO	18.22553
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	NOx	0.825197
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	SOx	0.001939
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	PM	0.002201
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	TOG	0.882669
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	ROG	0.806183
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	CO2	163.0253
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	CH4	0.127097
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	PM10	0.001967
2020	Annual	San Bernar	MHDT	Gas	78	STREX	300	PM2_5	0.001809
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	HC	0.885382

2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	CO	18.76236
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	NOx	0.817229
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	SOx	0.00211
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	PM	0.002266
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	TOG	0.924092
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	ROG	0.844016
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	CO2	179.1214
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	CH4	0.132237
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	PM10	0.002025
2020	Annual	San Bernar	MHDT	Gas	78	STREX	360	PM2_5	0.001862
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	HC	0.923678
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	CO	19.3153
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	NOx	0.807632
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	SOx	0.002269
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	PM	0.002332
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	TOG	0.964062
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	ROG	0.880523
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	CO2	194.0631
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	CH4	0.137167
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	PM10	0.002085
2020	Annual	San Bernar	MHDT	Gas	78	STREX	420	PM2_5	0.001917
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	HC	0.960582
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	CO	19.88434
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	NOx	0.796406
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	SOx	0.002416
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	PM	0.002401
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	TOG	1.002579
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	ROG	0.915702
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	CO2	207.8503
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	CH4	0.141891
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	PM10	0.002146
2020	Annual	San Bernar	MHDT	Gas	78	STREX	480	PM2_5	0.001974
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	HC	0.996094
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	CO	20.46948
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	NOx	0.783552
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	SOx	0.002553
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	PM	0.002472
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	TOG	1.039644
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	ROG	0.949555
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	CO2	220.4831
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	CH4	0.146414
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	PM10	0.00221
2020	Annual	San Bernar	MHDT	Gas	78	STREX	540	PM2_5	0.002032
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	HC	1.030214
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	CO	21.07073
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	NOx	0.76907
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	SOx	0.002678
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	PM	0.002544
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	TOG	1.075256
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	ROG	0.982082
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	CO2	231.9614
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	CH4	0.15074
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	PM10	0.002275
2020	Annual	San Bernar	MHDT	Gas	78	STREX	600	PM2_5	0.002091
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	HC	1.062943
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	CO	21.68808
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	NOx	0.752959

2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	SOx	0.002791
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	PM	0.002619
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	TOG	1.109415
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	ROG	1.013281
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	CO2	242.2854
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	CH4	0.15487
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	PM10	0.002341
2020	Annual	San Bernar	MHDT	Gas	78	STREX	660	PM2_5	0.002153
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	HC	1.096411
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	CO	22.34235
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	NOx	0.744015
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	SOx	0.002899
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	PM	0.002698
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	TOG	1.144347
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	ROG	1.045186
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	CO2	251.9473
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	CH4	0.159077
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	PM10	0.002412
2020	Annual	San Bernar	MHDT	Gas	78	STREX	720	PM2_5	0.002218
2020	Annual	San Bernar	MHDT	Gas	78	HOTSOAK		HC	0.075554
2020	Annual	San Bernar	MHDT	Gas	78	HOTSOAK		TOG	0.080777
2020	Annual	San Bernar	MHDT	Gas	78	HOTSOAK		ROG	0.080777
2020	Annual	San Bernar	MHDT	Gas	78	HOTSOAK		CH4	0.014861
2020	Annual	San Bernar	MHDT	Gas	78	RUNLOSS		HC	4.666092
2020	Annual	San Bernar	MHDT	Gas	78	RUNLOSS		TOG	4.988655
2020	Annual	San Bernar	MHDT	Gas	78	RUNLOSS		ROG	4.988655
2020	Annual	San Bernar	MHDT	Gas	78	RUNLOSS		CH4	0.677789
2020	Annual	San Bernar	MHDT	Gas	78	PRESTLOSS		HC	0.003856
2020	Annual	San Bernar	MHDT	Gas	78	PRESTLOSS		TOG	0.004188
2020	Annual	San Bernar	MHDT	Gas	78	PRESTLOSS		ROG	0.004188
2020	Annual	San Bernar	MHDT	Gas	78	PRESTLOSS		CH4	0.001131
2020	Annual	San Bernar	MHDT	Gas	78	MDRESTLOSS		HC	0.000569
2020	Annual	San Bernar	MHDT	Gas	78	MDRESTLOSS		TOG	0.000618
2020	Annual	San Bernar	MHDT	Gas	78	MDRESTLOSS		ROG	0.000618
2020	Annual	San Bernar	MHDT	Gas	78	MDRESTLOSS		CH4	0.000214
2020	Annual	San Bernar	MHDT	Gas	78	PDIURN		HC	0.007259
2020	Annual	San Bernar	MHDT	Gas	78	PDIURN		TOG	0.007884
2020	Annual	San Bernar	MHDT	Gas	78	PDIURN		ROG	0.007884
2020	Annual	San Bernar	MHDT	Gas	78	PDIURN		CH4	0.001914
2020	Annual	San Bernar	MHDT	Gas	78	MDDIURN		HC	0.001118
2020	Annual	San Bernar	MHDT	Gas	78	MDDIURN		TOG	0.001214
2020	Annual	San Bernar	MHDT	Gas	78	MDDIURN		ROG	0.001214
2020	Annual	San Bernar	MHDT	Gas	78	MDDIURN		CH4	0.000375
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		HC	1.904426
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		CO	31.06246
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		NOx	35.29859
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		SOx	0.05893
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		PM	0.029806
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		TOG	2.745611
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		ROG	2.411765
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		CO2	6176.801
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		CH4	0.11202
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		PM10	0.029628
2020	Annual	San Bernar	HHDT	Dsl		IDLEX		PM2_5	0.028346
2020	Annual	San Bernar	HHDT	Dsl		PMTW		PM	0.036
2020	Annual	San Bernar	HHDT	Dsl		PMTW		PM10	0.036
2020	Annual	San Bernar	HHDT	Dsl		PMTW		PM2_5	0.009

2020	Annual	San Bernar	HHDT	Dsl	PMBW	PM	0.063
2020	Annual	San Bernar	HHDT	Dsl	PMBW	PM10	0.06174
2020	Annual	San Bernar	HHDT	Dsl	PMBW	PM2_5	0.02646
2020	Annual	San Bernar	HHDT	Gas	PMTW	PM	0.02
2020	Annual	San Bernar	HHDT	Gas	PMTW	PM10	0.02
2020	Annual	San Bernar	HHDT	Gas	PMTW	PM2_5	0.005
2020	Annual	San Bernar	HHDT	Gas	PMBW	PM	0.063
2020	Annual	San Bernar	HHDT	Gas	PMBW	PM10	0.06174
2020	Annual	San Bernar	HHDT	Gas	PMBW	PM2_5	0.02646
2020	Annual	San Bernar	HHDT	NG	IDLEX	HC	2.161993
2020	Annual	San Bernar	HHDT	NG	IDLEX	CO	30.14233
2020	Annual	San Bernar	HHDT	NG	IDLEX	NOx	40.7456
2020	Annual	San Bernar	HHDT	NG	IDLEX	PM	0.084058
2020	Annual	San Bernar	HHDT	NG	IDLEX	TOG	2.224592
2020	Annual	San Bernar	HHDT	NG	IDLEX	ROG	0.129866
2020	Annual	San Bernar	HHDT	NG	IDLEX	CO2	6431.675
2020	Annual	San Bernar	HHDT	NG	IDLEX	CH4	2.067746
2020	Annual	San Bernar	HHDT	NG	IDLEX	PM10	0.083553
2020	Annual	San Bernar	HHDT	NG	IDLEX	PM2_5	0.079939
2020	Annual	San Bernar	HHDT	NG	PMTW	PM	0.036
2020	Annual	San Bernar	HHDT	NG	PMTW	PM10	0.036
2020	Annual	San Bernar	HHDT	NG	PMTW	PM2_5	0.009
2020	Annual	San Bernar	HHDT	NG	PMBW	PM	0.063
2020	Annual	San Bernar	HHDT	NG	PMBW	PM10	0.06174
2020	Annual	San Bernar	HHDT	NG	PMBW	PM2_5	0.02646
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	HC	2.5056
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	CO	26.3
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	NOx	68.55694
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	SOx	0.037805
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	PM	0.797912
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	TOG	3.612324
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	ROG	3.173065
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	CO2	3961.177
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	CH4	0.147383
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	PM10	0.793125
2020	Annual	San Bernar	LHDT1	Dsl	IDLEX	PM2_5	0.758815
2020	Annual	San Bernar	LHDT1	Dsl	PMTW	PM	0.012
2020	Annual	San Bernar	LHDT1	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernar	LHDT1	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernar	LHDT1	Dsl	PMBW	PM	0.078
2020	Annual	San Bernar	LHDT1	Dsl	PMBW	PM10	0.07644
2020	Annual	San Bernar	LHDT1	Dsl	PMBW	PM2_5	0.03276
2020	Annual	San Bernar	LHDT1	Gas	IDLEX	HC	25.72396
2020	Annual	San Bernar	LHDT1	Gas	IDLEX	CO	153.5592
2020	Annual	San Bernar	LHDT1	Gas	IDLEX	NOx	1.667572
2020	Annual	San Bernar	LHDT1	Gas	IDLEX	SOx	0.050061
2020	Annual	San Bernar	LHDT1	Gas	IDLEX	TOG	27.85163
2020	Annual	San Bernar	LHDT1	Gas	IDLEX	ROG	19.09399
2020	Annual	San Bernar	LHDT1	Gas	IDLEX	CO2	4693.735
2020	Annual	San Bernar	LHDT1	Gas	IDLEX	CH4	2.482909
2020	Annual	San Bernar	LHDT1	Gas	PMTW	PM	0.008
2020	Annual	San Bernar	LHDT1	Gas	PMTW	PM10	0.008
2020	Annual	San Bernar	LHDT1	Gas	PMTW	PM2_5	0.002
2020	Annual	San Bernar	LHDT1	Gas	PMBW	PM	0.078
2020	Annual	San Bernar	LHDT1	Gas	PMBW	PM10	0.07644
2020	Annual	San Bernar	LHDT1	Gas	PMBW	PM2_5	0.03276
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	HC	2.5056

2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	CO	26.3
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	NOx	68.43382
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	SOx	0.060617
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	PM	0.806238
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	TOG	3.612324
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	ROG	3.173065
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	CO2	6351.406
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	CH4	0.147383
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	PM10	0.8014
2020	Annual	San Bernar	LHDT2	Dsl	IDLEX	PM2_5	0.766732
2020	Annual	San Bernar	LHDT2	Dsl	PMTW	PM	0.012
2020	Annual	San Bernar	LHDT2	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernar	LHDT2	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernar	LHDT2	Dsl	PMBW	PM	0.091
2020	Annual	San Bernar	LHDT2	Dsl	PMBW	PM10	0.08918
2020	Annual	San Bernar	LHDT2	Dsl	PMBW	PM2_5	0.03822
2020	Annual	San Bernar	LHDT2	Gas	IDLEX	HC	25.95394
2020	Annual	San Bernar	LHDT2	Gas	IDLEX	CO	154.0871
2020	Annual	San Bernar	LHDT2	Gas	IDLEX	NOx	1.680533
2020	Annual	San Bernar	LHDT2	Gas	IDLEX	SOx	0.057821
2020	Annual	San Bernar	LHDT2	Gas	IDLEX	TOG	28.10093
2020	Annual	San Bernar	LHDT2	Gas	IDLEX	ROG	19.2578
2020	Annual	San Bernar	LHDT2	Gas	IDLEX	CO2	5469.877
2020	Annual	San Bernar	LHDT2	Gas	IDLEX	CH4	2.502175
2020	Annual	San Bernar	LHDT2	Gas	PMTW	PM	0.008
2020	Annual	San Bernar	LHDT2	Gas	PMTW	PM10	0.008
2020	Annual	San Bernar	LHDT2	Gas	PMTW	PM2_5	0.002
2020	Annual	San Bernar	LHDT2	Gas	PMBW	PM	0.091
2020	Annual	San Bernar	LHDT2	Gas	PMBW	PM10	0.08918
2020	Annual	San Bernar	LHDT2	Gas	PMBW	PM2_5	0.03822
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	HC	0.816464
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	CO	19.25376
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	NOx	68.86374
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	SOx	0.064373
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	PM	0.25816
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	TOG	1.177097
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	ROG	1.033971
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	CO2	6747.354
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	CH4	0.048025
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	PM10	0.256611
2020	Annual	San Bernar	MHDT	Dsl	IDLEX	PM2_5	0.24551
2020	Annual	San Bernar	MHDT	Dsl	PMTW	PM	0.012
2020	Annual	San Bernar	MHDT	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernar	MHDT	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernar	MHDT	Dsl	PMBW	PM	0.133
2020	Annual	San Bernar	MHDT	Dsl	PMBW	PM10	0.13034
2020	Annual	San Bernar	MHDT	Dsl	PMBW	PM2_5	0.05586
2020	Annual	San Bernar	MHDT	Gas	IDLEX	HC	35.85849
2020	Annual	San Bernar	MHDT	Gas	IDLEX	CO	381.6839
2020	Annual	San Bernar	MHDT	Gas	IDLEX	NOx	2.373114
2020	Annual	San Bernar	MHDT	Gas	IDLEX	SOx	0.146759
2020	Annual	San Bernar	MHDT	Gas	IDLEX	TOG	38.82482
2020	Annual	San Bernar	MHDT	Gas	IDLEX	ROG	26.60696
2020	Annual	San Bernar	MHDT	Gas	IDLEX	CO2	13993.32
2020	Annual	San Bernar	MHDT	Gas	IDLEX	CH4	3.309837
2020	Annual	San Bernar	MHDT	Gas	PMTW	PM	0.012
2020	Annual	San Bernar	MHDT	Gas	PMTW	PM10	0.012

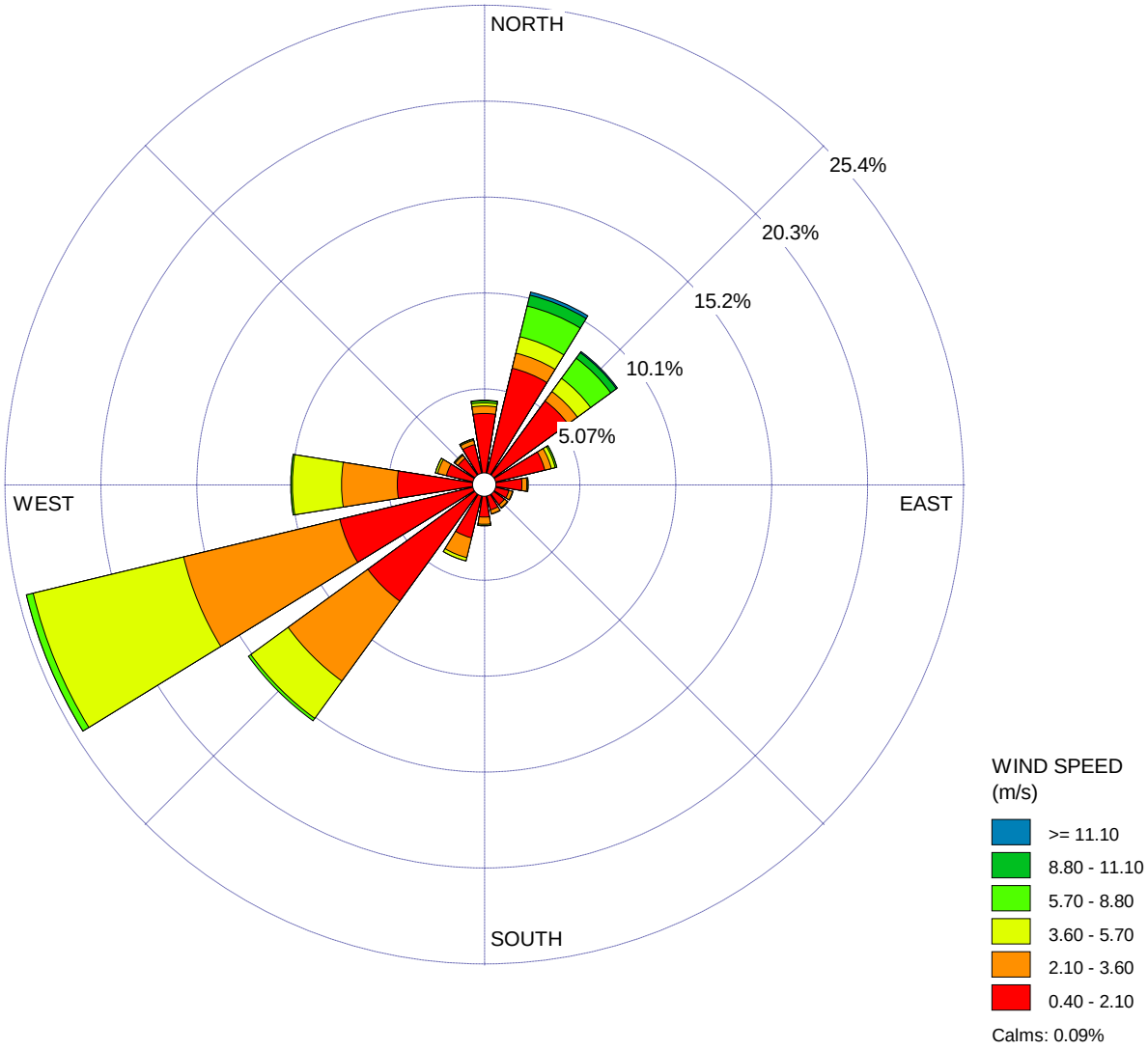
2020	Annual	San Bernar	MHDT	Gas	PMTW	PM2_5	0.003
2020	Annual	San Bernar	MHDT	Gas	PMBW	PM	0.133
2020	Annual	San Bernar	MHDT	Gas	PMBW	PM10	0.13034
2020	Annual	San Bernar	MHDT	Gas	PMBW	PM2_5	0.05586

WIND ROSE PLOT:

Station #3102

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 1/1/2011 - 00:00** **End Date: 12/31/2016 - 23:59**	COMPANY NAME: **South Coast Air Quality Management District**	
		MODELER: **Melissa Sheffer**	
	CALM WINDS: **0.09%**	TOTAL COUNT: **43273 hrs.**	
	AVG. WIND SPEED: **2.34 m/s**	DATE: **5/25/2017**	PROJECT NO.:

Inland Center Drive Warehouse Project

Cover / Summary Information Tab

This file was prepared by Chris Dugan of MIG, Inc.

This file contains the following tabs

Tab	Description of Inforamtion
"PL_SanBernardinoSC_2020_Annual"	EMFAC2014 output file - source of PM10 emission factors used in HRA.
"HHDT Filter"	EMFAC2014 output file, filtered for HHDT trucks - source of HHDT PM10 idle, 10 mph running, 40 mph running emission factors used in HRA.
"MHDT Filter"	EMFAC2014 output file, filtered for MHDT trucks - source of MHDT PM10 idle, 10 mph running, 40 mph running emission factors used in HRA.
"LHDT Filter"	EMFAC2014 output file, filtered for LHDT trucks - source ofLHDT PM10 idle, 10 mph running, 40 mph running emission factors used in HRA.
"CompEFs"	Composite truck emission factor used in HRA, based on project traffic report LHDT, MHDT, HHDT truck percentages and EMFAC2014 idle, 10 mph, 40 mph emission factors.
"TruckDistrib"	Derivation of average hourly truck trips per hour based on project traffic report truck trip distribution percentages.
"EmisEstm"	Estimate of total annual truck idle-hours and VMT, total annual PM10 emissions, and PM10 emissions rates.
"MOD_SOURCE"	Aermod source input summary

Inland Center Drive Warehouse Project

AERMOD SOURCE INPUT SUMMARY

On-Site Idling	Release Height (m)	Emission Rate (g/s)	Length of Side (m)	σY	σZ
B01 (V12)	4.12	2.814E-05	28.00	6.51	5.25
B02 (V13)	4.12	2.814E-05	28.00	6.51	5.25

On-Site Truck Travel	Release Height (m)	Emission Rate (g/s)	Length of Side(m)	σY	σZ
So. Dr (V01)	4.12	1.098E-06	11.50	2.67	0.96
So. Dr (V02-V06)	4.12	1.098E-06	64.79	15.07	0.96
No Dr (V07-V10)	4.12	3.659E-07	19.82	4.61	0.96
No Dr (V11)	4.12	3.659E-07	64.79	15.07	0.96

Off-Site Truck Travel	Release Height (m)	Area (m^2)	Emission Rate ($g/s\text{-}m^2$)
ICD (A01)	4.12	4261.6	1.76E-09
ICD (A02)	4.12	951.1	1.76E-09
ICD (A03)	4.12	2743.5	1.32E-09

Inland Center Drive Warehouse Project

AERMOD SOURCE ANNUAL EMISSIONS ESTIMATES

On-Site Idling	Annual Trucks Idling	Total Idle-Hours	PM (Annual Grams)	PM (Avg Grams/Hr)	PM (Avg Grams/Sec)
B01 (V12)	9,916	2479	8.9E+02	1.013E-01	2.814E-05
B01 (V13)	9,916	2479	8.9E+02	1.013E-01	2.814E-05

On-Site Truck Travel	Annual Trips	On-Site VMT / Trip	Total On-Site VMT	PM (Annual Grams)	PM (Avg Grams/Hr)	PM (Avg Grams/Sec)
So. Dr (V01)	29,747	0.011	318	3.462E+01	3.952E-03	1.098E-06
So. Dr (V02-V06)	29,747	0.011	318	3.462E+01	3.952E-03	1.098E-06
No. Dr (V07-V10)	9,916	0.011	106	1.154E+01	1.317E-03	3.659E-07
No. Dr (V11)	9,916	0.011	106	1.154E+01	1.317E-03	3.659E-07

Off-Site Truck Travel	Annual Trips	Off-Site VMT/Trip	Total Off-Site VMT	PM (Annual Grams)	PM (Avg Grams/Hr)	PM (Avg Grams/Sec)
ICD (A01)	39,663	0.14	5,741	2.359E+02	2.693E-02	7.481E-06
ICD (A02)	39,663	0.03	1,281	5.265E+01	6.010E-03	1.670E-06
ICD (A03)	29,747	0.09	2,772	1.139E+02	1.300E-02	3.612E-06

Inland Center Drive Warehouse Project

Truck Trip / Idle Distribution for AERMOD Source Input Data

Land Use	ITE Code	Unit	Qty	Rate	Total Trips	Truck Trips
Gen Light Industrial	110	KSF	102.38	4.96	508	109

Source: RK Engineering, Inc. 2018 (Traffic Impact Analysis)

Vehicle Class	%	ADT	AHT	IN	OUT
LHDT1	4.0%	20.31	0.85	**0.42**	**0.42**
LHDT2	4.0%	20.31	0.85	**0.42**	**0.42**
MHDT	3.9%	19.80	0.83	**0.41**	**0.41**
HHDT	9.5%	48.24	2.01	**1.00**	**1.00**
Total	**0.21**	**109**	**4.53**	**2.26**	**2.26**

Source: RK Engineering, Inc. 2018 (Traffic Impact Analysis)

Truck Distribution	%	Inbound Trips/HR	%	Outbound Trips/HR	Total Trips/HR
Inland Ctr Dr, South of I-215	100.0%	**2.26**	100.0%	**2.26**	**4.53**
Inland Ctr Dr, South of I St	100.0%	**2.26**	100.0%	**2.26**	**4.53**
Inland Ctr Dr, South of North Access	100.0%	**2.26**	50.0%	**1.13**	**3.40**
Building 01 (South Access)	100.0%	**2.26**	50.0%	**1.13**	**3.40**
Building 01 (North Access)	0.0%	**0.00**	50.0%	**1.13**	**1.13**
Building Idle1	50.0%	**1.13**	50.0%	**1.13**	**2.26**
Building Idle2	50.0%	**1.13**	50.0%	**1.13**	**2.26**

Source: RK Engineering, Inc. 2018 (Traffic Impact Analysis)

Inland Center Drive Warehouse Project

EMFAC-Derived Composite Truck Trip / Idle Emission Factors

Land Use	ITE Code	Unit	Qty	Rate	Daily Trips	Truck Trips
Gen Light Industrial	110	KSF	102.375	4.96	508	109

Source: RK Engineering, Inc. 2018 (*Traffic Impact Analysis)*

Vehicle Category	% Fleet	ADT	AHT	IN	OUT
LDV	78.6%	399.12	-	-	-
LHDT1	4.0%	20.31	0.85	0.42	0.42
LHDT2	4.0%	20.31	0.85	0.42	0.42
MHDT	3.9%	19.80	0.83	0.41	0.41
HHDT	9.5%	48.24	2.01	1.00	1.00
TOTAL	100.0%	507.78	4.53	2.26	2.26

Source: RK Engineering, Inc., 2018 (*Traffic Impact Analysis)*

COMPOSITE PM10 EMISSION FACTORS				
Truck Category	% Fleet	IDLE EX (g/hr)	RUN EX (10 MPH) (g/mile)	RUN EX (30 MPH) (g/mile)
LHDT1	4.0%	0.793125	0.060404211	0.019780212
LHDT2	4.0%	0.8014	0.055081669	0.018665627
MHDT	3.9%	0.256611	0.19604667	0.069383574
HHDT	9.5%	0.029628	0.116210027	0.047898917
COMPOSITE EMFAC	21.4%	0.35796	0.108902841	0.041094346

Source: EMFAC2017 and RK Engineering, Inc. 2018 (*Traffic Impact Analysis)*

Inland Center Drive Warehouse Project

EMFAC2017 Output - Filtered and Sorted for LHDT1/2 Type Diesel Trucks

year	season	sub_area	vehicle_class	fuel	temp	relative_humidity	process	speed_time	pollutant	emission_rate
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	HC	0.433634699
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	CO	2.210413437
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	NOx	2.13598318
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	SOx	0.009932314
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	PM	0.060768824
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	TOG	0.625171146
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	ROG	0.549150334
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	CO2	1040.695099
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	CH4	0.025506983
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	PM10	0.060404211
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	PM2_5	0.057791152
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	HC	0.067677861
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	CO	0.454927418
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	NOx	2.539614482
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	SOx	0.004331079
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	PM	0.01989961
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	TOG	0.097571172
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	ROG	0.085706517
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	CO2	453.8049304
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	CH4	0.003980904
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	PM10	0.019780212
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	PM2_5	0.018924529
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	HC	0.431931598
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	CO	2.225211925
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	NOx	1.824160597
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	SOx	0.011080241
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	PM	0.055414154
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	TOG	0.622715785
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	ROG	0.546993546
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	CO2	1160.97337

2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	CH4	0.025406805
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	PM10	0.055081669
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	PM2_5	0.05269886
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	HC	0.059348794
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	CO	0.394001804
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	NOx	2.076685014
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	SOx	0.00487129
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	PM	0.018778297
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	TOG	0.085563157
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	ROG	0.075158677
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	CO2	510.4074723
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	CH4	0.003490977
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	PM10	0.018665627
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	PM2_5	0.01785816
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		HC	2.5056
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		CO	26.3
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		NOx	68.55693835
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		SOx	0.037805167
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		PM	0.797912488
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		TOG	3.61232352
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		ROG	3.17306498
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		CO2	3961.17674
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		CH4	0.147382803
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		PM10	0.793125013
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		PM2_5	0.758814776
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			PMTW		PM	0.012
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			PMTW		PM10	0.012
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			PMTW		PM2_5	0.003
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			PMBW		PM	0.078
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			PMBW		PM10	0.07644
2020	Annual	San Bernardino (SC)	LHDT1	Dsl			PMBW		PM2_5	0.03276
2020	Annual	San Bernardino (SC)	LHDT2	Dsl			IDLEX		HC	2.5056
2020	Annual	San Bernardino (SC)	LHDT2	Dsl			IDLEX		CO	26.3
2020	Annual	San Bernardino (SC)	LHDT2	Dsl			IDLEX		NOx	68.433816
2020	Annual	San Bernardino (SC)	LHDT2	Dsl			IDLEX		SOx	0.060617329

2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	PM	0.806237789
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	TOG	3.61232352
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	ROG	3.17306498
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	CO2	6351.405641
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	CH4	0.147382803
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	PM10	0.801400362
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	PM2_5	0.766732137
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMTW	PM	0.012
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMBW	PM	0.091
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMBW	PM10	0.08918
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMBW	PM2_5	0.03822

Inland Center Drive Warehouse Project

EMFAC2017 Output - Filtered and Sorted for MHDT Type Diesel Trucks

year	season	sub_area	vehicle_class	fuel	temp	humidity	process	speed_time	pollutant	emission_rate
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	HC	0.920042385
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	CO	2.036016687
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	NOx	7.478720859
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	SOx	0.019330206
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	PM	0.197230051
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	TOG	1.326425107
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	ROG	1.165141676
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	CO2	2026.127725
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	CH4	0.054117813
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	PM10	0.19604667
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	PM2_5	0.187565778
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	HC	0.097263331
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	CO	0.458814368
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	NOx	2.576550134
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	SOx	0.008685768
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	PM	0.069802389
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	TOG	0.140224544
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	ROG	0.123174282
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	CO2	910.4132537
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	CH4	0.005721126
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	PM10	0.069383574
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	PM2_5	0.066382072
2020	Annual	San Bernardino (SC)	MHDT	Dsl			STREX	5	NOx	0.232489598
2020	Annual	San Bernardino (SC)	MHDT	Dsl			STREX	10	NOx	0.319537067
2020	Annual	San Bernardino (SC)	MHDT	Dsl			STREX	20	NOx	0.491750582
2020	Annual	San Bernardino (SC)	MHDT	Dsl			STREX	30	NOx	0.661455537
2020	Annual	San Bernardino (SC)	MHDT	Dsl			STREX	40	NOx	0.82865193
2020	Annual	San Bernardino (SC)	MHDT	Dsl			STREX	50	NOx	0.993339762
2020	Annual	San Bernardino (SC)	MHDT	Dsl			STREX	60	NOx	1.155519033
2020	Annual	San Bernardino (SC)	MHDT	Dsl			STREX	120	NOx	2.07591487

2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	180	NOx	2.906002499
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	240	NOx	3.645781922
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	300	NOx	4.295253139
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	360	NOx	4.854416148
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	420	NOx	5.323270951
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	480	NOx	5.701817546
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	540	NOx	5.990055935
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	600	NOx	6.187986118
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	660	NOx	6.295608093
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	720	NOx	6.312921861
2020	Annual	San Bernardino (SC)	MHDT	Dsl	STREX	9999	NOx	6.312921861
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		HC	0.816464392
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		CO	19.25375964
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		NOx	68.86373851
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		SOx	0.064372915
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		PM	0.258160083
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		TOG	1.177096714
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		ROG	1.033970506
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		CO2	6747.35436
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		CH4	0.048025252
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		PM10	0.256611123
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX		PM2_5	0.245510239
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMTW		PM	0.012
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMTW		PM10	0.012
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMTW		PM2_5	0.003
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMBW		PM	0.133
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMBW		PM10	0.13034
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMBW		PM2_5	0.05586

Inland Center Drive Warehouse Project

EMFAC2017 Output - Filtered and Sorted for HHDT Type Diesel Trucks

year	season	sub_area	vehicle_class	fuel	temp	humidity	process	speed_time	pollutant	emission_rate
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	HC	0.774114145
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	CO	2.693226946
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	NOx	11.72892418
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	SOx	0.029103251
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	PM	0.116911496
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	TOG	1.116040363
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	ROG	0.980338154
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	CO2	3050.505796
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	CH4	0.045534168
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	PM10	0.116210027
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	PM2_5	0.111182832
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	HC	0.091230673
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	CO	0.476115462
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	NOx	3.643609631
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	SOx	0.013054299
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	PM	0.048188045
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	TOG	0.131527261
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	ROG	0.115534524
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	CO2	1368.308082
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	CH4	0.005366279
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	PM10	0.047898917
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	PM2_5	0.045826831
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	5	NOx	0.463009822
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	10	NOx	0.636367396
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	20	NOx	0.97933564
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	30	NOx	1.317308011
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	40	NOx	1.650284509
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	50	NOx	1.978265134
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	60	NOx	2.301249886
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	120	NOx	4.134245063

2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	180	NOx	5.78738881
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	240	NOx	7.260681127
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	300	NOx	8.554122014
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	360	NOx	9.66771147
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	420	NOx	10.6014495
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	480	NOx	11.35533609
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	540	NOx	11.92937126
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	600	NOx	12.32355499
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	660	NOx	12.5378873
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	720	NOx	12.57236818
2020	Annual	San Bernardino (SC)	HHDT	Dsl	STREX	9999	NOx	12.57236818
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		HC	1.904425773
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		CO	31.06246046
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		NOx	35.29859382
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		SOx	0.058929565
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		PM	0.029806463
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		TOG	2.745610637
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		ROG	2.411764799
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		CO2	6176.800589
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		CH4	0.112020228
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		PM10	0.029627625
2020	Annual	San Bernardino (SC)	HHDT	Dsl	IDLEX		PM2_5	0.028345947
2020	Annual	San Bernardino (SC)	HHDT	Dsl	PMTW		PM	0.036
2020	Annual	San Bernardino (SC)	HHDT	Dsl	PMTW		PM10	0.036
2020	Annual	San Bernardino (SC)	HHDT	Dsl	PMTW		PM2_5	0.009
2020	Annual	San Bernardino (SC)	HHDT	Dsl	PMBW		PM	0.063
2020	Annual	San Bernardino (SC)	HHDT	Dsl	PMBW		PM10	0.06174
2020	Annual	San Bernardino (SC)	HHDT	Dsl	PMBW		PM2_5	0.02646

Inland Center Drive Warehouse Project

EMFAC2017 Raw Output

year	season	sub_area	vehicle_class	fuel	temp	humidity	process	speed_time	pollutant	emission_rate
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	HC	0.774114145
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	CO	2.693226946
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	NOx	11.72892418
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	SOx	0.029103251
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	PM	0.116911496
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	TOG	1.116040363
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	ROG	0.980338154
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	CO2	3050.505796
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	CH4	0.045534168
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	PM10	0.116210027
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	10	PM2_5	0.111182832
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	HC	0.091230673
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	CO	0.476115462
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	NOx	3.643609631
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	SOx	0.013054299
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	PM	0.048188045
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	TOG	0.131527261
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	ROG	0.115534524
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	CO2	1368.308082
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	CH4	0.005366279
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	PM10	0.047898917
2020	Annual	San Bernardino (SC)	HHDT	Dsl	78	50	RUNEX	40	PM2_5	0.045826831
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	HC	5.488453922
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	CO	90.16556628
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	NOx	7.989129439
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	SOx	0.041393217
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	PM	0.009392049
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	TOG	5.942475511
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	ROG	4.07242672
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	CO2	3988.957228

2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	CH4	0.604839763
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	PM10	0.008396491
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	10	PM2_5	0.007720264
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	HC	1.23394104
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	CO	44.78330086
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	NOx	6.134699334
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	SOx	0.019156553
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	PM	0.002146656
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	TOG	1.336016393
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	ROG	0.915582883
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	CO2	1845.409563
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	CH4	0.163676165
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	PM10	0.00191911
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	50	RUNEX	40	PM2_5	0.001764551
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	HC	14.85205423
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	CO	32.26381729
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	NOx	6.420133726
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	PM	0.011776245
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	TOG	15.49116189
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	ROG	1.203488469
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	CO2	4835.522797
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	CH4	14.05956084
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	PM10	0.011705588
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	10	PM2_5	0.011199209
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	HC	2.066273048
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	CO	4.838478294
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	NOx	2.865274726
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	PM	0.005073723
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	TOG	2.14693158
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	ROG	0.155138442
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	CO2	2803.789676
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	CH4	1.961746405
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	PM10	0.005043281
2020	Annual	San Bernardino (SC)	HHDT	NG	78	50	RUNEX	40	PM2_5	0.004825111
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	HC	0.433634699

2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	CO	2.210413437
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	NOx	2.13598318
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	SOx	0.009932314
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	PM	0.060768824
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	TOG	0.625171146
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	ROG	0.549150334
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	CO2	1040.695099
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	CH4	0.025506983
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	PM10	0.060404211
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	10	PM2_5	0.057791152
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	HC	0.067677861
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	CO	0.454927418
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	NOx	2.539614482
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	SOx	0.004331079
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	PM	0.01989961
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	TOG	0.097571172
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	ROG	0.085706517
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	CO2	453.8049304
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	CH4	0.003980904
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	PM10	0.019780212
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	78	50	RUNEX	40	PM2_5	0.018924529
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	HC	0.221373978
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	CO	2.262382762
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	NOx	0.331896893
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	SOx	0.015553146
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	PM	0.006058228
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	TOG	0.239638289
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	ROG	0.165354474
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	CO2	1554.339075
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	CH4	0.032277739
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	PM10	0.00541952
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	10	PM2_5	0.004984776
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	HC	0.053475299
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	CO	1.056017371
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	NOx	0.229220085

2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	SOx	0.007193943
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	PM	0.001227203
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	TOG	0.057884641
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	ROG	0.040002018
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	CO2	719.0832162
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	CH4	0.009069162
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	PM10	0.001098142
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	50	RUNEX	40	PM2_5	0.001010211
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	HC	0.431931598
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	CO	2.225211925
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	NOx	1.824160597
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	SOx	0.011080241
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	PM	0.055414154
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	TOG	0.622715785
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	ROG	0.546993546
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	CO2	1160.97337
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	CH4	0.025406805
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	PM10	0.055081669
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	10	PM2_5	0.05269886
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	HC	0.059348794
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	CO	0.394001804
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	NOx	2.076685014
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	SOx	0.00487129
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	PM	0.018778297
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	TOG	0.085563157
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	ROG	0.075158677
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	CO2	510.4074723
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	CH4	0.003490977
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	PM10	0.018665627
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	78	50	RUNEX	40	PM2_5	0.01785816
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	HC	0.144934004
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	CO	1.350769195
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	NOx	0.309089035
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	SOx	0.017862164
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	PM	0.005042675

2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	TOG	0.156923386
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	ROG	0.10754087
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	CO2	1787.40315
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	CH4	0.023387265
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	PM10	0.004508152
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	10	PM2_5	0.004145079
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	HC	0.031681056
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	CO	0.694776938
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	NOx	0.198495012
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	SOx	0.008263541
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	PM	0.000990594
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	TOG	0.034301809
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	ROG	0.023507308
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	CO2	826.9055487
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	CH4	0.006084266
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	PM10	0.000885591
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	50	RUNEX	40	PM2_5	0.000814268
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	HC	0.920042385
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	CO	2.036016687
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	NOx	7.478720859
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	SOx	0.019330206
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	PM	0.197230051
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	TOG	1.326425107
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	ROG	1.165141676
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	CO2	2026.127725
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	CH4	0.054117813
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	PM10	0.19604667
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	10	PM2_5	0.187565778
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	HC	0.097263331
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	CO	0.458814368
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	NOx	2.576550134
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	SOx	0.008685768
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	PM	0.069802389
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	TOG	0.140224544
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	ROG	0.123174282

2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	CO2	910.4132537
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	CH4	0.005721126
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	PM10	0.069383574
2020	Annual	San Bernardino (SC)	MHDT	Dsl	78	50	RUNEX	40	PM2_5	0.066382072
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	HC	0.494956455
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	CO	4.253251332
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	NOx	0.796892399
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	SOx	0.032410311
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	PM	0.005182392
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	TOG	0.535900758
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	ROG	0.367257141
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	CO2	3239.616352
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	CH4	0.067245926
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	PM10	0.004633059
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	10	PM2_5	0.004259926
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	HC	0.101287064
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	CO	2.381867177
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	NOx	0.497929799
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	SOx	0.014996421
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	PM	0.001017044
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	TOG	0.109665837
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	ROG	0.075154889
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	CO2	1498.742317
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	CH4	0.016848942
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	PM10	0.000909237
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	50	RUNEX	40	PM2_5	0.00083601
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	5	NOx	0.463009822
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	10	NOx	0.636367396
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	20	NOx	0.97933564
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	30	NOx	1.317308011
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	40	NOx	1.650284509
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	50	NOx	1.978265134
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	60	NOx	2.301249886
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	120	NOx	4.134245063
2020	Annual	San Bernardino (SC)	HHDT	Dsl			STREX	180	NOx	5.78738881

2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	240	NOx	7.260681127
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	300	NOx	8.554122014
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	360	NOx	9.66771147
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	420	NOx	10.6014495
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	480	NOx	11.35533609
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	540	NOx	11.92937126
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	600	NOx	12.32355499
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	660	NOx	12.5378873
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	720	NOx	12.57236818
2020	Annual	San Bernardino (SC)	HHDT	Dsl		STREX	9999	NOx	12.57236818
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	HC	0.000328042
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	CO	1.334148015
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	NOx	0.410347097
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	SOx	9.09E-05
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	PM	0.000457006
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	TOG	0.000342384
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	ROG	0.000312715
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	CO2	7.009240759
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	CH4	9.00E-05
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	PM10	0.000408564
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	5	PM2_5	0.000375659
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	HC	0.000639429
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	CO	2.614087569
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	NOx	0.618286243
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	SOx	0.000180515
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	PM	0.000895444
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	TOG	0.000667385
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	ROG	0.000609554
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	CO2	13.97969434
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	CH4	0.00016018
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	PM10	0.000800527
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	10	PM2_5	0.000736055
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	HC	0.00121224
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	CO	5.011341294
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	NOx	0.983456615

2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	SOx	0.000356079
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	PM	0.001716613
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	TOG	0.00126524
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	ROG	0.001155603
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	CO2	27.80423998
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	CH4	0.000278443
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	PM10	0.001534652
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	20	PM2_5	0.001411056
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	HC	0.001718434
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	CO	7.191761175
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	NOx	1.281016423
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	SOx	0.000526693
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	PM	0.002463506
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	TOG	0.001793565
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	ROG	0.001638147
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	CO2	41.47363691
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	CH4	0.00037647
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	PM10	0.002202374
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	30	PM2_5	0.002025002
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	HC	0.00215801
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	CO	9.155347213
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	NOx	1.510965669
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	SOx	0.000692356
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	PM	0.003136123
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	TOG	0.002252359
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	ROG	0.002057186
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	CO2	54.98788514
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	CH4	0.000458393
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	PM10	0.002803694
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	40	PM2_5	0.002577894
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	HC	0.002530969
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	CO	10.90209941
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	NOx	1.673304351
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	SOx	0.000853069
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	PM	0.003734466

2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	TOG	0.002641624
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	ROG	0.00241272
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	CO2	68.34698466
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	CH4	0.000526118
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	PM10	0.003338612
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	50	PM2_5	0.003069731
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	HC	0.00283731
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	CO	12.43201776
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	NOx	1.76803247
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	SOx	0.001008831
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	PM	0.004258532
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	TOG	0.002961359
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	ROG	0.002704748
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	CO2	81.55093548
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	CH4	0.00058073
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	PM10	0.003807128
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	60	PM2_5	0.003500514
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	HC	0.003473309
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	CO	17.08644995
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	NOx	1.773571901
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	SOx	0.001652167
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	PM	0.005838426
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	TOG	0.003625164
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	ROG	0.003311033
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	CO2	138.7041343
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	CH4	0.000691673
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	PM10	0.005219553
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	120	PM2_5	0.004799187
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	HC	0.003685409
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	CO	17.58593329
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	NOx	1.767057284
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	SOx	0.00191112
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	PM	0.0060091
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	TOG	0.003846537
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	ROG	0.003513223

2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	CO2	163.868506
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	CH4	0.000728035
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	PM10	0.005372135
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	180	PM2_5	0.00493948
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	HC	0.00389078
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	CO	18.10188036
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	NOx	1.757101524
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	SOx	0.002155509
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	PM	0.006185398
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	TOG	0.004060887
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	ROG	0.003708999
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	CO2	187.5476199
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	CH4	0.000762974
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	PM10	0.005529746
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	240	PM2_5	0.005084397
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	HC	0.00408942
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	CO	18.63429116
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	NOx	1.743704621
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	SOx	0.002385336
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	PM	0.006367323
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	TOG	0.004268212
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	ROG	0.003898359
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	CO2	209.7414761
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	CH4	0.00079653
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	PM10	0.005692386
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	300	PM2_5	0.005233939
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	HC	0.004281331
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	CO	19.18316569
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	NOx	1.726866576
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	SOx	0.002600599
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	PM	0.006554873
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	TOG	0.004468513
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	ROG	0.004081303
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	CO2	230.4500745
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	CH4	0.000828741

2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	PM10	0.005860056
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	360	PM2_5	0.005388105
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	HC	0.004466512
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	CO	19.74850394
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	NOx	1.706587388
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	SOx	0.002801298
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	PM	0.006748048
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	TOG	0.004661791
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	ROG	0.004257832
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	CO2	249.6734151
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	CH4	0.000859636
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	PM10	0.006032755
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	420	PM2_5	0.005546896
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	HC	0.004644963
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	CO	20.33030592
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	NOx	1.682867057
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	SOx	0.002987435
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	PM	0.00694685
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	TOG	0.004848044
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	ROG	0.004427946
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	CO2	267.411498
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	CH4	0.000889245
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	PM10	0.006210483
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	480	PM2_5	0.00571031
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	HC	0.004816684
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	CO	20.92857163
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	NOx	1.655705583
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	SOx	0.003159008
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	PM	0.007151276
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	TOG	0.005027273
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	ROG	0.004591644
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	CO2	283.6643232
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	CH4	0.000917592
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	PM10	0.006393241
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	540	PM2_5	0.005878349

2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	HC	0.004981676
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	CO	21.54330107
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	NOx	1.625102967
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	SOx	0.003316017
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	PM	0.007361329
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	TOG	0.005199477
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	ROG	0.004748927
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	CO2	298.4318905
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	CH4	0.000944699
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	PM10	0.006581028
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	600	PM2_5	0.006051012
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	HC	0.005139937
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	CO	22.17449424
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	NOx	1.591059207
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	SOx	0.003458464
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	PM	0.007577007
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	TOG	0.005364658
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	ROG	0.004899794
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	CO2	311.7142001
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	CH4	0.000970586
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	PM10	0.006773844
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	660	PM2_5	0.0062283
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	HC	0.005301775
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	CO	22.84344487
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	NOx	1.57215952
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	SOx	0.003593004
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	PM	0.007805587
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	TOG	0.005533572
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	ROG	0.005054071
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	CO2	324.1448774
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	CH4	0.000996946
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	PM10	0.006978195
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	STREX	720	PM2_5	0.006416193
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	HOTSOAK		HC	0.18098607
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	HOTSOAK		TOG	0.193497505

2020	Annual	San Bernardino (SC)	HHDT	Gas	78	HOTSOAK		ROG	0.193497505
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	HOTSOAK		CH4	0.033222056
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	RUNLOSS		HC	10.14650701
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	RUNLOSS		TOG	10.84792759
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	RUNLOSS		ROG	10.84792759
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	RUNLOSS		CH4	1.434053874
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	PRESTLOSS		HC	0.012313842
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	PRESTLOSS		TOG	0.01337485
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	PRESTLOSS		ROG	0.01337485
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	PRESTLOSS		CH4	0.003233589
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	MDRESTLOSS		HC	0.001605721
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	MDRESTLOSS		TOG	0.001744076
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	MDRESTLOSS		ROG	0.001744076
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	MDRESTLOSS		CH4	0.000556292
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	PDIURN		HC	0.01844843
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	PDIURN		TOG	0.020038017
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	PDIURN		ROG	0.020038017
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	PDIURN		CH4	0.004585111
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	MDDIURN		HC	0.002419475
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	MDDIURN		TOG	0.002627946
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	MDDIURN		ROG	0.002627946
2020	Annual	San Bernardino (SC)	HHDT	Gas	78	MDDIURN		CH4	0.000792294
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	HC	0.041979125
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	CO	0.437327044
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	NOx	0.437636672
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	SOx	6.16E-05
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	PM	0.000160914
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	TOG	0.043826417
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	ROG	0.040048048
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	CO2	5.353514125
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	CH4	0.009193734
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	PM10	0.000145171
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	5	PM2_5	0.000134135
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	HC	0.080275294
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	CO	0.860371844

2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	NOx	0.496626824
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	SOx	8.51E-05
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	PM	0.000294699
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	TOG	0.083796814
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	ROG	0.076554724
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	CO2	6.922548049
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	CH4	0.016227328
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	PM10	0.000264625
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	10	PM2_5	0.000243893
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	HC	0.152039456
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	CO	1.664008037
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	NOx	0.601303451
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	SOx	0.00013286
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	PM	0.000547014
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	TOG	0.158698659
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	ROG	0.144966283
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	CO2	10.21686041
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	CH4	0.028308486
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	PM10	0.000489929
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	20	PM2_5	0.000450919
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	HC	0.21736605
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	CO	2.411039688
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	NOx	0.688241842
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	SOx	0.000181595
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	PM	0.000778986
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	TOG	0.226881907
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	ROG	0.207242117
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	CO2	13.71949878
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	CH4	0.03864567
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	PM10	0.000697094
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	30	PM2_5	0.000641291
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	HC	0.276255076
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	CO	3.101466798
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	NOx	0.757441998
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	SOx	0.000231317

2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	PM	0.000990615
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	TOG	0.288346556
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	ROG	0.263382225
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	CO2	17.43046317
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	CH4	0.047635987
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	PM10	0.000886119
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	40	PM2_5	0.000815008
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	HC	0.328706533
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	CO	3.735289367
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	NOx	0.808903917
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	SOx	0.000282027
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	PM	0.001181901
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	TOG	0.343092606
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	ROG	0.313386607
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	CO2	21.34975357
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	CH4	0.05546202
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	PM10	0.001057006
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	50	PM2_5	0.00097207
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	HC	0.374512043
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	CO	4.312507393
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	NOx	0.842627601
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	SOx	0.000333718
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	PM	0.001352845
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	TOG	0.390901347
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	ROG	0.357053529
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	CO2	25.47736999
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	CH4	0.062203473
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	PM10	0.001209754
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	60	PM2_5	0.001112478
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	HC	0.526678012
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	CO	6.437728348
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	NOx	0.887680634
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	SOx	0.000632351
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	PM	0.001929386
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	TOG	0.549721445

2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	ROG	0.502113565
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	CO2	51.58143787
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	CH4	0.084492734
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	PM10	0.001725707
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	120	PM2_5	0.001587141
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	HC	0.561286584
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	CO	6.90860465
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	NOx	0.88463125
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	SOx	0.000719772
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	PM	0.00202902
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	TOG	0.585844609
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	ROG	0.535108951
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	CO2	59.49219978
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	CH4	0.089291975
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	PM10	0.001815265
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	180	PM2_5	0.001669727
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	HC	0.594727969
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	CO	7.334814327
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	NOx	0.878519253
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	SOx	0.000804171
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	PM	0.002123984
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	TOG	0.620749556
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	ROG	0.566991683
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	CO2	67.17404751
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	CH4	0.093890051
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	PM10	0.001900596
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	240	PM2_5	0.001748402
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	HC	0.627547116
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	CO	7.723731167
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	NOx	0.869083339
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	SOx	0.000885681
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	PM	0.002214278
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	TOG	0.655005059
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	ROG	0.598281247
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	CO2	74.62698108

2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	CH4	0.098372065
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	PM10	0.0019817
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	300	PM2_5	0.001823165
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	HC	0.659744022
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	CO	8.07535517
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	NOx	0.856323506
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	SOx	0.000964302
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	PM	0.002299901
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	TOG	0.688611118
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	ROG	0.628977642
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	CO2	81.85100048
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	CH4	0.10274173
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	PM10	0.002058578
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	360	PM2_5	0.001894016
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	HC	0.691318689
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	CO	8.389686336
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	NOx	0.840239756
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	SOx	0.001040034
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	PM	0.002380854
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	TOG	0.721567733
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	ROG	0.65908087
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	CO2	88.8461057
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	CH4	0.107002311
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	PM10	0.002131229
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	420	PM2_5	0.001960955
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	HC	0.722271116
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	CO	8.666724666
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	NOx	0.820832088
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	SOx	0.001112878
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	PM	0.002457137
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	TOG	0.753874903
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	ROG	0.68859093
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	CO2	95.61229675
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	CH4	0.111156703
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	PM10	0.002199654

2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	480	PM2_5	0.002023983
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	HC	0.752601304
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	CO	8.906470158
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	NOx	0.798100502
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	SOx	0.001182832
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	PM	0.002528749
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	TOG	0.785532628
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	ROG	0.717507822
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	CO2	102.1495736
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	CH4	0.115207484
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	PM10	0.002263852
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	540	PM2_5	0.002083098
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	HC	0.782309252
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	CO	9.108922814
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	NOx	0.772044997
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	SOx	0.001249898
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	PM	0.002595691
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	TOG	0.81654091
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	ROG	0.745831545
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	CO2	108.4579363
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	CH4	0.119156962
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	PM10	0.002323823
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	600	PM2_5	0.002138302
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	HC	0.81139496
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	CO	9.274082633
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	NOx	0.742665575
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	SOx	0.001314075
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	PM	0.002657963
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	TOG	0.846899747
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	ROG	0.773562101
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	CO2	114.5373849
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	CH4	0.123007216
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	PM10	0.002379568
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	660	PM2_5	0.002189595
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	HC	0.840812694

2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	CO	9.406251719
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	NOx	0.714734635
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	SOx	0.001376436
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	PM	0.002717462
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	TOG	0.877605135
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	ROG	0.80160919
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	CO2	120.4855875
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	CH4	0.126879716
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	PM10	0.002432783
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	STREX	720	PM2_5	0.002238534
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	HOTSOAK		HC	0.122173512
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	HOTSOAK		TOG	0.130619278
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	HOTSOAK		ROG	0.130619278
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	HOTSOAK		CH4	0.022256027
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	RUNLOSS		HC	8.205046651
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	RUNLOSS		TOG	8.7722555
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	RUNLOSS		ROG	8.7722555
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	RUNLOSS		CH4	1.064872191
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	PRESTLOSS		HC	0.004471577
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	PRESTLOSS		TOG	0.004856866
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	PRESTLOSS		ROG	0.004856866
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	PRESTLOSS		CH4	0.001298731
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	MDRESTLOSS		HC	0.000648334
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	MDRESTLOSS		TOG	0.000704197
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	MDRESTLOSS		ROG	0.000704197
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	MDRESTLOSS		CH4	0.00024195
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	PDIURN		HC	0.008739137
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	PDIURN		TOG	0.009492134
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	PDIURN		ROG	0.009492134
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	PDIURN		CH4	0.002243704
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	MDDIURN		HC	0.001318259
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	MDDIURN		TOG	0.001431845
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	MDDIURN		ROG	0.001431845
2020	Annual	San Bernardino (SC)	LHDT1	Gas	78	MDDIURN		CH4	0.000431535
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	HC	0.036336856

2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	CO	0.407573933
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	NOx	0.451261114
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	SOx	7.35E-05
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	PM	0.000108236
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	TOG	0.037925525
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	ROG	0.034639164
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	CO2	6.61204846
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	CH4	0.008202388
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	PM10	9.68E-05
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	5	PM2_5	8.90E-05
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	HC	0.071271386
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	CO	0.802653724
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	NOx	0.50269763
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	SOx	9.74E-05
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	PM	0.000212553
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	TOG	0.074387413
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	ROG	0.06794152
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	CO2	8.272522429
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	CH4	0.01469587
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	PM10	0.000190022
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	10	PM2_5	0.000174718
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	HC	0.136933469
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	CO	1.555330882
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	NOx	0.594203865
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	SOx	0.000146558
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	PM	0.000409424
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	TOG	0.142920279
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	ROG	0.130535808
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	CO2	11.80821868
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	CH4	0.025886851
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	PM10	0.000366025
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	20	PM2_5	0.000336547
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	HC	0.196986247
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	CO	2.258031474
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	NOx	0.670554368

2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	SOx	0.000197618
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	PM	0.000590615
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	TOG	0.2055986
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	ROG	0.187782865
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	CO2	15.63024602
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	CH4	0.035511775
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	PM10	0.00052801
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	30	PM2_5	0.000485486
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	HC	0.251429722
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	CO	2.910755499
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	NOx	0.731749139
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	SOx	0.000250574
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	PM	0.000756126
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	TOG	0.262422375
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	ROG	0.239682689
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	CO2	19.73860443
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	CH4	0.043934178
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	PM10	0.000675976
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	40	PM2_5	0.000621535
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	HC	0.300263893
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	CO	3.513502958
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	NOx	0.77778818
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	SOx	0.000305425
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	PM	0.000905955
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	TOG	0.313391604
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	ROG	0.286235281
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	CO2	24.13329394
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	CH4	0.051321233
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	PM10	0.000809924
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	50	PM2_5	0.000744695
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	HC	0.343488759
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	CO	4.06627385
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	NOx	0.808671489
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	SOx	0.000362174
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	PM	0.001040104

2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	TOG	0.358506286
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	ROG	0.327440641
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	CO2	28.81431453
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	CH4	0.057768276
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	PM10	0.000929853
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	60	PM2_5	0.000854965
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	HC	0.496285793
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	CO	6.163687894
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	NOx	0.857471593
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	SOx	0.000711179
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	PM	0.00149433
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	TOG	0.517983695
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	ROG	0.473098854
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	CO2	60.0078546
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	CH4	0.08040655
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	PM10	0.001335931
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	120	PM2_5	0.001228339
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	HC	0.529209204
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	CO	6.662026266
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	NOx	0.854568045
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	SOx	0.000809846
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	PM	0.00157429
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	TOG	0.552346536
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	ROG	0.504484052
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	CO2	69.00786952
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	CH4	0.085020484
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	PM10	0.001407416
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	180	PM2_5	0.001294067
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	HC	0.561002733
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	CO	7.109047513
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	NOx	0.848544373
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	SOx	0.000905525
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	PM	0.001649954
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	TOG	0.585530096
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	ROG	0.534792157

2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	CO2	77.79262166
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	CH4	0.089438128
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	PM10	0.001475059
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	240	PM2_5	0.001356262
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	HC	0.592268736
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	CO	7.513051904
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	NOx	0.839115747
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	SOx	0.000998364
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	PM	0.00172132
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	TOG	0.618163067
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	ROG	0.564597383
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	CO2	86.36211101
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	CH4	0.09375319
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	PM10	0.00153886
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	300	PM2_5	0.001414925
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	HC	0.623007213
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	CO	7.874039437
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	NOx	0.826282167
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	SOx	0.001088364
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	PM	0.001788389
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	TOG	0.650245448
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	ROG	0.593899729
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	CO2	94.71633757
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	CH4	0.09796909
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	PM10	0.00159882
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	360	PM2_5	0.001470056
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	HC	0.653218164
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	CO	8.192010113
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	NOx	0.810043633
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	SOx	0.001175525
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	PM	0.001851161
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	TOG	0.68177724
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	ROG	0.622699197
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	CO2	102.8553014
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	CH4	0.10208884

2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	PM10	0.001654938
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	420	PM2_5	0.001521654
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	HC	0.68290159
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	CO	8.466963932
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	NOx	0.790400145
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	SOx	0.001259847
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	PM	0.001909635
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	TOG	0.712758442
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	ROG	0.650995785
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	CO2	110.7790023
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	CH4	0.106115108
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	PM10	0.001707214
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	480	PM2_5	0.00156972
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	HC	0.712057489
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	CO	8.698900895
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	NOx	0.767351703
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	SOx	0.001341329
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	PM	0.001963813
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	TOG	0.743189054
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	ROG	0.678789493
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	CO2	118.4874406
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	CH4	0.110050276
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	PM10	0.001755648
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	540	PM2_5	0.001614254
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	HC	0.740685863
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	CO	8.887821
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	NOx	0.740898307
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	SOx	0.001419971
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	PM	0.002013693
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	TOG	0.773069077
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	ROG	0.706080323
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	CO2	125.980616
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	CH4	0.113896476
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	PM10	0.001800241
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	600	PM2_5	0.001655256

2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	HC	0.768786711
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	CO	9.033724248
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	NOx	0.711039956
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	SOx	0.001495775
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	PM	0.002059276
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	TOG	0.802398511
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	ROG	0.732868272
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	CO2	133.2585286
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	CH4	0.117655625
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	PM10	0.001840993
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	660	PM2_5	0.001692725
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	HC	0.797167889
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	CO	9.140103817
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	NOx	0.681832922
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	SOx	0.001569736
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	PM	0.002101932
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	TOG	0.83202053
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	ROG	0.759923455
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	CO2	140.4130266
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	CH4	0.12143062
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	PM10	0.001879127
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	STREX	720	PM2_5	0.001727788
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	HOTSOAK		HC	0.103395858
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	HOTSOAK		TOG	0.110543538
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	HOTSOAK		ROG	0.110543538
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	HOTSOAK		CH4	0.019223614
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	RUNLOSS		HC	6.87798327
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	RUNLOSS		TOG	7.353453201
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	RUNLOSS		ROG	7.353453201
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	RUNLOSS		CH4	0.913351554
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	PRESTLOSS		HC	0.003623846
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	PRESTLOSS		TOG	0.00393609
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	PRESTLOSS		ROG	0.00393609
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	PRESTLOSS		CH4	0.001096063
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	MDRESTLOSS		HC	0.000540079

2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	MDRESTLOSS		TOG	0.000586614
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	MDRESTLOSS		ROG	0.000586614
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	MDRESTLOSS		CH4	0.000207818
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	PDIURN		HC	0.006913687
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	PDIURN		TOG	0.007509396
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	PDIURN		ROG	0.007509396
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	PDIURN		CH4	0.00185154
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	MDDIURN		HC	0.001085408
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	MDDIURN		TOG	0.001178931
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	MDDIURN		ROG	0.001178931
2020	Annual	San Bernardino (SC)	LHDT2	Gas	78	MDDIURN		CH4	0.000365611
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	5	NOx	0.232489598
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	10	NOx	0.319537067
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	20	NOx	0.491750582
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	30	NOx	0.661455537
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	40	NOx	0.82865193
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	50	NOx	0.993339762
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	60	NOx	1.155519033
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	120	NOx	2.07591487
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	180	NOx	2.906002499
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	240	NOx	3.645781922
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	300	NOx	4.295253139
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	360	NOx	4.854416148
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	420	NOx	5.323270951
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	480	NOx	5.701817546
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	540	NOx	5.990055935
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	600	NOx	6.187986118
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	660	NOx	6.295608093
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	720	NOx	6.312921861
2020	Annual	San Bernardino (SC)	MHDT	Dsl		STREX	9999	NOx	6.312921861
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	HC	0.067839235
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	CO	1.304920514
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	NOx	0.194256102
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	SOx	7.70E-05
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	PM	0.000157953

2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	TOG	0.070805205
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	ROG	0.064669722
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	CO2	5.448055886
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	CH4	0.014354408
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	PM10	0.00014121
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	5	PM2_5	0.000129837
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	HC	0.132234331
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	CO	2.556820125
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	NOx	0.292693373
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	SOx	0.000152711
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	PM	0.000309488
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	TOG	0.138015693
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	ROG	0.126056219
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	CO2	10.86596376
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	CH4	0.025558955
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	PM10	0.000276682
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	10	PM2_5	0.000254399
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	HC	0.250692112
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	CO	4.901556638
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	NOx	0.465563058
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	SOx	0.000300456
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	PM	0.000593304
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	TOG	0.261652515
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	ROG	0.23897954
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	CO2	21.61133545
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	CH4	0.044429389
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	PM10	0.000530413
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	20	PM2_5	0.000487696
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	HC	0.355373341
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	CO	7.034209538
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	NOx	0.606426266
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	SOx	0.000443236
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	PM	0.000851448
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	TOG	0.370910468
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	ROG	0.338769964

2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	CO2	32.23611508
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	CH4	0.060071037
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	PM10	0.000761195
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	30	PM2_5	0.00069989
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	HC	0.446278019
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	CO	8.954778824
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	NOx	0.715282999
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	SOx	0.000581052
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	PM	0.001083921
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	TOG	0.465789551
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	ROG	0.425427489
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	CO2	42.74030264
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	CH4	0.073142894
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	PM10	0.000969026
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	40	PM2_5	0.000890983
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	HC	0.523406145
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	CO	10.6632645
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	NOx	0.792133255
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	SOx	0.000713901
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	PM	0.001290723
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	TOG	0.546289765
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	ROG	0.498952118
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	CO2	53.12389814
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	CH4	0.083949367
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	PM10	0.001153907
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	50	PM2_5	0.001060974
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	HC	0.586757721
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	CO	12.15966656
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	NOx	0.836977036
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	SOx	0.000841786
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	PM	0.001471854
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	TOG	0.612411108
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	ROG	0.559343848
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	CO2	63.38690158
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	CH4	0.092663553

2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	PM10	0.001315837
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	60	PM2_5	0.001209864
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	HC	0.718282734
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	CO	16.7116423
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	NOx	0.839331975
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	SOx	0.001360628
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	PM	0.002017904
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	TOG	0.74968647
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	ROG	0.684723888
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	CO2	107.8102325
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	CH4	0.110365902
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	PM10	0.001804006
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	120	PM2_5	0.001658717
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	HC	0.762145243
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	CO	17.200169
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	NOx	0.836248973
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	SOx	0.00156486
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	PM	0.002076893
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	TOG	0.795466673
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	ROG	0.7265371
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	CO2	127.3696838
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	CH4	0.116168017
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	PM10	0.001856742
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	180	PM2_5	0.001707206
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	HC	0.804616012
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	CO	17.70479827
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	NOx	0.831537471
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	SOx	0.00175778
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	PM	0.002137826
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	TOG	0.839794289
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	ROG	0.767023594
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	CO2	145.7746923
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	CH4	0.121742999
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	PM10	0.001911216
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	240	PM2_5	0.001757293

2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	HC	0.845695041
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	CO	18.22553013
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	NOx	0.825197469
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	SOx	0.001939388
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	PM	0.002200703
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	TOG	0.882669317
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	ROG	0.806183373
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	CO2	163.0252581
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	CH4	0.127097423
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	PM10	0.001967429
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	300	PM2_5	0.001808978
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	HC	0.88538233
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	CO	18.76236457
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	NOx	0.817228968
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	SOx	0.002109685
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	PM	0.002265525
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	TOG	0.924091757
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	ROG	0.844016434
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	CO2	179.1213811
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	CH4	0.132237021
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	PM10	0.00202538
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	360	PM2_5	0.001862262
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	HC	0.923677879
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	CO	19.31530159
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	NOx	0.807631967
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	SOx	0.00226867
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	PM	0.002332292
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	TOG	0.964061609
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	ROG	0.880522779
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	CO2	194.0630613
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	CH4	0.137166832
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	PM10	0.002085069
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	420	PM2_5	0.001917144
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	HC	0.960581687
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	CO	19.88434119

2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	NOx	0.796406467
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	SOx	0.002416344
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	PM	0.002401002
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	TOG	1.002578874
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	ROG	0.915702407
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	CO2	207.8502988
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	CH4	0.141891311
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	PM10	0.002146496
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	480	PM2_5	0.001973624
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	HC	0.996093756
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	CO	20.46948336
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	NOx	0.783552466
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	SOx	0.002552705
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	PM	0.002471657
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	TOG	1.03964355
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	ROG	0.949555318
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	CO2	220.4830935
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	CH4	0.146414422
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	PM10	0.002209661
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	540	PM2_5	0.002031702
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	HC	1.030214084
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	CO	21.07072812
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	NOx	0.769069967
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	SOx	0.002677756
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	PM	0.002544256
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	TOG	1.075255639
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	ROG	0.982081512
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	CO2	231.9614454
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	CH4	0.150739707
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	PM10	0.002274565
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	600	PM2_5	0.002091379
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	HC	1.062942673
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	CO	21.68807546
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	NOx	0.752958967
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	SOx	0.002791494

2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	PM	0.0026188
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	TOG	1.109415141
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	ROG	1.01328099
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	CO2	242.2853546
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	CH4	0.154870342
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	PM10	0.002341207
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	660	PM2_5	0.002152654
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	HC	1.096410878
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	CO	22.34235202
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	NOx	0.744014807
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	SOx	0.002899229
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	PM	0.002697803
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	TOG	1.144346595
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	ROG	1.045185529
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	CO2	251.9473176
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	CH4	0.159076527
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	PM10	0.002411836
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	STREX	720	PM2_5	0.002217594
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	HOTSOAK		HC	0.075553555
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	HOTSOAK		TOG	0.080776517
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	HOTSOAK		ROG	0.080776517
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	HOTSOAK		CH4	0.014861144
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	RUNLOSS		HC	4.666091689
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	RUNLOSS		TOG	4.98865518
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	RUNLOSS		ROG	4.98865518
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	RUNLOSS		CH4	0.67778936
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	PRESTLOSS		HC	0.003855826
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	PRESTLOSS		TOG	0.004188059
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	PRESTLOSS		ROG	0.004188059
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	PRESTLOSS		CH4	0.001130731
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	MDRESTLOSS		HC	0.000569382
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	MDRESTLOSS		TOG	0.000618442
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	MDRESTLOSS		ROG	0.000618442
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	MDRESTLOSS		CH4	0.000214186
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	PDIURN		HC	0.00725864

2020	Annual	San Bernardino (SC)	MHDT	Gas	78	PDIURN	TOG	0.007884073
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	PDIURN	ROG	0.007884073
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	PDIURN	CH4	0.001914068
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	MDDIURN	HC	0.001118134
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	MDDIURN	TOG	0.001214477
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	MDDIURN	ROG	0.001214477
2020	Annual	San Bernardino (SC)	MHDT	Gas	78	MDDIURN	CH4	0.000374757
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	HC	1.904425773
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	CO	31.06246046
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	NOx	35.29859382
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	SOx	0.058929565
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	PM	0.029806463
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	TOG	2.745610637
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	ROG	2.411764799
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	CO2	6176.800589
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	CH4	0.112020228
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	PM10	0.029627625
2020	Annual	San Bernardino (SC)	HHDT	Dsl		IDLEX	PM2_5	0.028345947
2020	Annual	San Bernardino (SC)	HHDT	Dsl		PMTW	PM	0.036
2020	Annual	San Bernardino (SC)	HHDT	Dsl		PMTW	PM10	0.036
2020	Annual	San Bernardino (SC)	HHDT	Dsl		PMTW	PM2_5	0.009
2020	Annual	San Bernardino (SC)	HHDT	Dsl		PMBW	PM	0.063
2020	Annual	San Bernardino (SC)	HHDT	Dsl		PMBW	PM10	0.06174
2020	Annual	San Bernardino (SC)	HHDT	Dsl		PMBW	PM2_5	0.02646
2020	Annual	San Bernardino (SC)	HHDT	Gas		PMTW	PM	0.02
2020	Annual	San Bernardino (SC)	HHDT	Gas		PMTW	PM10	0.02
2020	Annual	San Bernardino (SC)	HHDT	Gas		PMTW	PM2_5	0.005
2020	Annual	San Bernardino (SC)	HHDT	Gas		PMBW	PM	0.063
2020	Annual	San Bernardino (SC)	HHDT	Gas		PMBW	PM10	0.06174
2020	Annual	San Bernardino (SC)	HHDT	Gas		PMBW	PM2_5	0.02646
2020	Annual	San Bernardino (SC)	HHDT	NG		IDLEX	HC	2.161993407
2020	Annual	San Bernardino (SC)	HHDT	NG		IDLEX	CO	30.14233436
2020	Annual	San Bernardino (SC)	HHDT	NG		IDLEX	NOx	40.7455992
2020	Annual	San Bernardino (SC)	HHDT	NG		IDLEX	PM	0.084057572
2020	Annual	San Bernardino (SC)	HHDT	NG		IDLEX	TOG	2.224591559

2020	Annual	San Bernardino (SC)	HHDT	NG	IDLEX	ROG	0.129865928
2020	Annual	San Bernardino (SC)	HHDT	NG	IDLEX	CO2	6431.675302
2020	Annual	San Bernardino (SC)	HHDT	NG	IDLEX	CH4	2.067746251
2020	Annual	San Bernardino (SC)	HHDT	NG	IDLEX	PM10	0.083553227
2020	Annual	San Bernardino (SC)	HHDT	NG	IDLEX	PM2_5	0.079938751
2020	Annual	San Bernardino (SC)	HHDT	NG	PMTW	PM	0.036
2020	Annual	San Bernardino (SC)	HHDT	NG	PMTW	PM10	0.036
2020	Annual	San Bernardino (SC)	HHDT	NG	PMTW	PM2_5	0.009
2020	Annual	San Bernardino (SC)	HHDT	NG	PMBW	PM	0.063
2020	Annual	San Bernardino (SC)	HHDT	NG	PMBW	PM10	0.06174
2020	Annual	San Bernardino (SC)	HHDT	NG	PMBW	PM2_5	0.02646
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	HC	2.5056
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	CO	26.3
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	NOx	68.55693835
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	SOx	0.037805167
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	PM	0.797912488
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	TOG	3.61232352
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	ROG	3.17306498
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	CO2	3961.17674
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	CH4	0.147382803
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	PM10	0.793125013
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	IDLEX	PM2_5	0.758814776
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	PMTW	PM	0.012
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	PMBW	PM	0.078
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	PMBW	PM10	0.07644
2020	Annual	San Bernardino (SC)	LHDT1	Dsl	PMBW	PM2_5	0.03276
2020	Annual	San Bernardino (SC)	LHDT1	Gas	IDLEX	HC	25.72396311
2020	Annual	San Bernardino (SC)	LHDT1	Gas	IDLEX	CO	153.5591537
2020	Annual	San Bernardino (SC)	LHDT1	Gas	IDLEX	NOx	1.667571629
2020	Annual	San Bernardino (SC)	LHDT1	Gas	IDLEX	SOx	0.050060792
2020	Annual	San Bernardino (SC)	LHDT1	Gas	IDLEX	TOG	27.85162531
2020	Annual	San Bernardino (SC)	LHDT1	Gas	IDLEX	ROG	19.093988
2020	Annual	San Bernardino (SC)	LHDT1	Gas	IDLEX	CO2	4693.734897

2020	Annual	San Bernardino (SC)	LHDT1	Gas	IDLEX	CH4	2.482909
2020	Annual	San Bernardino (SC)	LHDT1	Gas	PMTW	PM	0.008
2020	Annual	San Bernardino (SC)	LHDT1	Gas	PMTW	PM10	0.008
2020	Annual	San Bernardino (SC)	LHDT1	Gas	PMTW	PM2_5	0.002
2020	Annual	San Bernardino (SC)	LHDT1	Gas	PMBW	PM	0.078
2020	Annual	San Bernardino (SC)	LHDT1	Gas	PMBW	PM10	0.07644
2020	Annual	San Bernardino (SC)	LHDT1	Gas	PMBW	PM2_5	0.03276
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	HC	2.5056
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	CO	26.3
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	NOx	68.433816
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	SOx	0.060617329
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	PM	0.806237789
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	TOG	3.61232352
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	ROG	3.17306498
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	CO2	6351.405641
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	CH4	0.147382803
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	PM10	0.801400362
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	IDLEX	PM2_5	0.766732137
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMTW	PM	0.012
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMBW	PM	0.091
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMBW	PM10	0.08918
2020	Annual	San Bernardino (SC)	LHDT2	Dsl	PMBW	PM2_5	0.03822
2020	Annual	San Bernardino (SC)	LHDT2	Gas	IDLEX	HC	25.95394357
2020	Annual	San Bernardino (SC)	LHDT2	Gas	IDLEX	CO	154.0871072
2020	Annual	San Bernardino (SC)	LHDT2	Gas	IDLEX	NOx	1.680532981
2020	Annual	San Bernardino (SC)	LHDT2	Gas	IDLEX	SOx	0.057821427
2020	Annual	San Bernardino (SC)	LHDT2	Gas	IDLEX	TOG	28.10093266
2020	Annual	San Bernardino (SC)	LHDT2	Gas	IDLEX	ROG	19.25779733
2020	Annual	San Bernardino (SC)	LHDT2	Gas	IDLEX	CO2	5469.876829
2020	Annual	San Bernardino (SC)	LHDT2	Gas	IDLEX	CH4	2.502175252
2020	Annual	San Bernardino (SC)	LHDT2	Gas	PMTW	PM	0.008
2020	Annual	San Bernardino (SC)	LHDT2	Gas	PMTW	PM10	0.008
2020	Annual	San Bernardino (SC)	LHDT2	Gas	PMTW	PM2_5	0.002

2020	Annual	San Bernardino (SC)	LHDT2	Gas	PMBW	PM	0.091
2020	Annual	San Bernardino (SC)	LHDT2	Gas	PMBW	PM10	0.08918
2020	Annual	San Bernardino (SC)	LHDT2	Gas	PMBW	PM2_5	0.03822
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	HC	0.816464392
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	CO	19.25375964
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	NOx	68.86373851
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	SOx	0.064372915
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	PM	0.258160083
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	TOG	1.177096714
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	ROG	1.033970506
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	CO2	6747.35436
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	CH4	0.048025252
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	PM10	0.256611123
2020	Annual	San Bernardino (SC)	MHDT	Dsl	IDLEX	PM2_5	0.245510239
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMTW	PM	0.012
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMTW	PM10	0.012
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMTW	PM2_5	0.003
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMBW	PM	0.133
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMBW	PM10	0.13034
2020	Annual	San Bernardino (SC)	MHDT	Dsl	PMBW	PM2_5	0.05586
2020	Annual	San Bernardino (SC)	MHDT	Gas	IDLEX	HC	35.85849352
2020	Annual	San Bernardino (SC)	MHDT	Gas	IDLEX	CO	381.6839309
2020	Annual	San Bernardino (SC)	MHDT	Gas	IDLEX	NOx	2.373114327
2020	Annual	San Bernardino (SC)	MHDT	Gas	IDLEX	SOx	0.146758913
2020	Annual	San Bernardino (SC)	MHDT	Gas	IDLEX	TOG	38.82481708
2020	Annual	San Bernardino (SC)	MHDT	Gas	IDLEX	ROG	26.6069624
2020	Annual	San Bernardino (SC)	MHDT	Gas	IDLEX	CO2	13993.32143
2020	Annual	San Bernardino (SC)	MHDT	Gas	IDLEX	CH4	3.309836857
2020	Annual	San Bernardino (SC)	MHDT	Gas	PMTW	PM	0.012
2020	Annual	San Bernardino (SC)	MHDT	Gas	PMTW	PM10	0.012
2020	Annual	San Bernardino (SC)	MHDT	Gas	PMTW	PM2_5	0.003
2020	Annual	San Bernardino (SC)	MHDT	Gas	PMBW	PM	0.133
2020	Annual	San Bernardino (SC)	MHDT	Gas	PMBW	PM10	0.13034
2020	Annual	San Bernardino (SC)	MHDT	Gas	PMBW	PM2_5	0.05586

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INDEX	GRP1	GRP2	POLID	POLABBRE	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK
1	472029.3	3771394	9901	DieselExhP	0.00988	1.04E-05	70YrCancer	*	1.04E-05
2	471922.6	3771265	9901	DieselExhP	0.00942	9.89E-06	70YrCancer	*	9.89E-06
3	472016.2	3771188	9901	DieselExhP	0.00323	3.39E-06	70YrCancer	*	3.39E-06
4	472122.6	3771319	9901	DieselExhP	0.00408	4.28E-06	70YrCancer	*	4.28E-06
5	472028.2	3771395	9901	DieselExhP	0.00973	1.02E-05	70YrCancer	*	1.02E-05
6	472023.1	3771386	9901	DieselExhP	0.01121	1.18E-05	70YrCancer	*	1.18E-05
7	472016.8	3771379	9901	DieselExhP	0.01281	1.34E-05	70YrCancer	*	1.34E-05
8	472010.5	3771371	9901	DieselExhP	0.01468	1.54E-05	70YrCancer	*	1.54E-05
9	472004.2	3771364	9901	DieselExhP	0.01714	1.80E-05	70YrCancer	*	1.80E-05
10	471998	3771356	9901	DieselExhP	0.02023	2.12E-05	70YrCancer	*	2.12E-05
11	471991.7	3771348	9901	DieselExhP	0.02346	2.46E-05	70YrCancer	*	2.46E-05
12	471985.4	3771341	9901	DieselExhP	0.02593	2.72E-05	70YrCancer	*	2.72E-05
13	471979.1	3771333	9901	DieselExhP	0.02738	2.87E-05	70YrCancer	*	2.87E-05
14	471972.8	3771325	9901	DieselExhP	0.02784	2.92E-05	70YrCancer	*	2.92E-05
15	471966.6	3771318	9901	DieselExhP	0.02731	2.87E-05	70YrCancer	*	2.87E-05
16	471960.3	3771310	9901	DieselExhP	0.02559	2.69E-05	70YrCancer	*	2.69E-05
17	471954	3771303	9901	DieselExhP	0.02275	2.39E-05	70YrCancer	*	2.39E-05
18	471947.7	3771295	9901	DieselExhP	0.01965	2.06E-05	70YrCancer	*	2.06E-05
19	471941.5	3771287	9901	DieselExhP	0.01677	1.76E-05	70YrCancer	*	1.76E-05
20	471935.2	3771280	9901	DieselExhP	0.0142	1.49E-05	70YrCancer	*	1.49E-05
21	471928.9	3771272	9901	DieselExhP	0.01168	1.23E-05	70YrCancer	*	1.23E-05
22	471929.8	3771259	9901	DieselExhP	0.01027	1.08E-05	70YrCancer	*	1.08E-05
23	471937	3771253	9901	DieselExhP	0.01006	1.06E-05	70YrCancer	*	1.06E-05
24	471944.2	3771247	9901	DieselExhP	0.00926	9.72E-06	70YrCancer	*	9.72E-06
25	471951.4	3771241	9901	DieselExhP	0.00846	8.88E-06	70YrCancer	*	8.88E-06
26	471958.6	3771235	9901	DieselExhP	0.00772	8.10E-06	70YrCancer	*	8.10E-06
27	471965.8	3771229	9901	DieselExhP	0.007	7.35E-06	70YrCancer	*	7.35E-06
28	471973	3771223	9901	DieselExhP	0.0063	6.61E-06	70YrCancer	*	6.61E-06
29	471980.2	3771217	9901	DieselExhP	0.00564	5.92E-06	70YrCancer	*	5.92E-06
30	471987.4	3771212	9901	DieselExhP	0.00503	5.28E-06	70YrCancer	*	5.28E-06
31	471994.6	3771206	9901	DieselExhP	0.00449	4.71E-06	70YrCancer	*	4.71E-06
32	472001.8	3771200	9901	DieselExhP	0.00401	4.21E-06	70YrCancer	*	4.21E-06
33	472009	3771194	9901	DieselExhP	0.00359	3.77E-06	70YrCancer	*	3.77E-06
34	472022.4	3771196	9901	DieselExhP	0.00347	3.64E-06	70YrCancer	*	3.64E-06
35	472028.7	3771203	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
36	472034.9	3771211	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
37	472041.2	3771219	9901	DieselExhP	0.00424	4.45E-06	70YrCancer	*	4.45E-06
38	472047.5	3771227	9901	DieselExhP	0.00447	4.69E-06	70YrCancer	*	4.69E-06
39	472053.7	3771234	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
40	472060	3771242	9901	DieselExhP	0.00485	5.09E-06	70YrCancer	*	5.09E-06
41	472066.2	3771250	9901	DieselExhP	0.00498	5.23E-06	70YrCancer	*	5.23E-06
42	472072.5	3771258	9901	DieselExhP	0.00507	5.32E-06	70YrCancer	*	5.32E-06
43	472078.7	3771265	9901	DieselExhP	0.0051	5.35E-06	70YrCancer	*	5.35E-06
44	472085	3771273	9901	DieselExhP	0.00507	5.32E-06	70YrCancer	*	5.32E-06
45	472091.3	3771281	9901	DieselExhP	0.005	5.25E-06	70YrCancer	*	5.25E-06
46	472097.5	3771288	9901	DieselExhP	0.00488	5.12E-06	70YrCancer	*	5.12E-06
47	472103.8	3771296	9901	DieselExhP	0.00472	4.95E-06	70YrCancer	*	4.95E-06

48	472110	3771304	9901	DieselExhP	0.00453	4.75E-06	70YrCancer	*	4.75E-06
49	472116.3	3771312	9901	DieselExhP	0.00431	4.52E-06	70YrCancer	*	4.52E-06
50	472115.3	3771325	9901	DieselExhP	0.00458	4.81E-06	70YrCancer	*	4.81E-06
51	472108	3771331	9901	DieselExhP	0.00513	5.38E-06	70YrCancer	*	5.38E-06
52	472100.8	3771337	9901	DieselExhP	0.00575	6.04E-06	70YrCancer	*	6.04E-06
53	472093.5	3771343	9901	DieselExhP	0.00642	6.74E-06	70YrCancer	*	6.74E-06
54	472086.3	3771349	9901	DieselExhP	0.00711	7.46E-06	70YrCancer	*	7.46E-06
55	472079	3771354	9901	DieselExhP	0.0078	8.19E-06	70YrCancer	*	8.19E-06
56	472071.7	3771360	9901	DieselExhP	0.00844	8.86E-06	70YrCancer	*	8.86E-06
57	472064.5	3771366	9901	DieselExhP	0.00897	9.41E-06	70YrCancer	*	9.41E-06
58	472057.2	3771372	9901	DieselExhP	0.0094	9.87E-06	70YrCancer	*	9.87E-06
59	472049.9	3771378	9901	DieselExhP	0.00975	1.02E-05	70YrCancer	*	1.02E-05
60	472042.7	3771384	9901	DieselExhP	0.01006	1.06E-05	70YrCancer	*	1.06E-05
61	472035.4	3771389	9901	DieselExhP	0.01019	1.07E-05	70YrCancer	*	1.07E-05
62	472126.4	3771316	9901	DieselExhP	0.00385	4.04E-06	70YrCancer	*	4.04E-06
63	472120.2	3771308	9901	DieselExhP	0.00404	4.24E-06	70YrCancer	*	4.24E-06
64	472113.9	3771301	9901	DieselExhP	0.00422	4.43E-06	70YrCancer	*	4.43E-06
65	472107.7	3771293	9901	DieselExhP	0.00438	4.60E-06	70YrCancer	*	4.60E-06
66	472101.4	3771285	9901	DieselExhP	0.00451	4.73E-06	70YrCancer	*	4.73E-06
67	472095.2	3771278	9901	DieselExhP	0.00461	4.84E-06	70YrCancer	*	4.84E-06
68	472088.9	3771270	9901	DieselExhP	0.00467	4.90E-06	70YrCancer	*	4.90E-06
69	472082.6	3771262	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
70	472076.4	3771254	9901	DieselExhP	0.00466	4.89E-06	70YrCancer	*	4.89E-06
71	472070.1	3771247	9901	DieselExhP	0.00458	4.81E-06	70YrCancer	*	4.81E-06
72	472063.9	3771239	9901	DieselExhP	0.00447	4.69E-06	70YrCancer	*	4.69E-06
73	472057.6	3771231	9901	DieselExhP	0.00432	4.53E-06	70YrCancer	*	4.53E-06
74	472051.3	3771223	9901	DieselExhP	0.00414	4.35E-06	70YrCancer	*	4.35E-06
75	472045.1	3771216	9901	DieselExhP	0.00394	4.14E-06	70YrCancer	*	4.14E-06
76	472038.8	3771208	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
77	472032.6	3771200	9901	DieselExhP	0.0035	3.67E-06	70YrCancer	*	3.67E-06
78	472026.3	3771193	9901	DieselExhP	0.00327	3.43E-06	70YrCancer	*	3.43E-06
79	472020	3771185	9901	DieselExhP	0.00305	3.20E-06	70YrCancer	*	3.20E-06
80	472130.3	3771313	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
81	472124.1	3771305	9901	DieselExhP	0.00379	3.98E-06	70YrCancer	*	3.98E-06
82	472117.8	3771298	9901	DieselExhP	0.00394	4.14E-06	70YrCancer	*	4.14E-06
83	472111.6	3771290	9901	DieselExhP	0.00407	4.27E-06	70YrCancer	*	4.27E-06
84	472105.3	3771282	9901	DieselExhP	0.00418	4.39E-06	70YrCancer	*	4.39E-06
85	472099	3771274	9901	DieselExhP	0.00426	4.47E-06	70YrCancer	*	4.47E-06
86	472092.8	3771267	9901	DieselExhP	0.00431	4.52E-06	70YrCancer	*	4.52E-06
87	472086.5	3771259	9901	DieselExhP	0.00432	4.53E-06	70YrCancer	*	4.53E-06
88	472080.3	3771251	9901	DieselExhP	0.00429	4.50E-06	70YrCancer	*	4.50E-06
89	472074	3771244	9901	DieselExhP	0.00422	4.43E-06	70YrCancer	*	4.43E-06
90	472067.7	3771236	9901	DieselExhP	0.00413	4.33E-06	70YrCancer	*	4.33E-06
91	472061.5	3771228	9901	DieselExhP	0.00401	4.21E-06	70YrCancer	*	4.21E-06
92	472055.2	3771220	9901	DieselExhP	0.00385	4.04E-06	70YrCancer	*	4.04E-06
93	472049	3771213	9901	DieselExhP	0.00367	3.85E-06	70YrCancer	*	3.85E-06
94	472042.7	3771205	9901	DieselExhP	0.00348	3.65E-06	70YrCancer	*	3.65E-06
95	472036.4	3771197	9901	DieselExhP	0.0033	3.46E-06	70YrCancer	*	3.46E-06
96	472030.2	3771189	9901	DieselExhP	0.00309	3.24E-06	70YrCancer	*	3.24E-06
97	472023.9	3771182	9901	DieselExhP	0.00289	3.03E-06	70YrCancer	*	3.03E-06

98	472135.9	3771315	9901	DieselExhP	0.00342	3.59E-06	70YrCancer	*	3.59E-06
99	472134.7	3771326	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
100	472134.2	3771310	9901	DieselExhP	0.00341	3.58E-06	70YrCancer	*	3.58E-06
101	472128	3771302	9901	DieselExhP	0.00355	3.73E-06	70YrCancer	*	3.73E-06
102	472121.7	3771294	9901	DieselExhP	0.00368	3.86E-06	70YrCancer	*	3.86E-06
103	472115.4	3771287	9901	DieselExhP	0.00379	3.98E-06	70YrCancer	*	3.98E-06
104	472109.2	3771279	9901	DieselExhP	0.00388	4.07E-06	70YrCancer	*	4.07E-06
105	472102.9	3771271	9901	DieselExhP	0.00395	4.15E-06	70YrCancer	*	4.15E-06
106	472096.7	3771264	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
107	472090.4	3771256	9901	DieselExhP	0.00399	4.19E-06	70YrCancer	*	4.19E-06
108	472084.1	3771248	9901	DieselExhP	0.00396	4.16E-06	70YrCancer	*	4.16E-06
109	472077.9	3771240	9901	DieselExhP	0.00391	4.10E-06	70YrCancer	*	4.10E-06
110	472071.6	3771233	9901	DieselExhP	0.00383	4.02E-06	70YrCancer	*	4.02E-06
111	472065.4	3771225	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
112	472059.1	3771217	9901	DieselExhP	0.00359	3.77E-06	70YrCancer	*	3.77E-06
113	472052.8	3771209	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
114	472046.6	3771202	9901	DieselExhP	0.00327	3.43E-06	70YrCancer	*	3.43E-06
115	472040.3	3771194	9901	DieselExhP	0.0031	3.25E-06	70YrCancer	*	3.25E-06
116	472034.1	3771186	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
117	472027.8	3771179	9901	DieselExhP	0.00274	2.88E-06	70YrCancer	*	2.88E-06
118	472140.3	3771314	9901	DieselExhP	0.00323	3.39E-06	70YrCancer	*	3.39E-06
119	472138.8	3771328	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
120	472138.1	3771307	9901	DieselExhP	0.00322	3.38E-06	70YrCancer	*	3.38E-06
121	472131.8	3771299	9901	DieselExhP	0.00334	3.51E-06	70YrCancer	*	3.51E-06
122	472125.6	3771291	9901	DieselExhP	0.00345	3.62E-06	70YrCancer	*	3.62E-06
123	472119.3	3771284	9901	DieselExhP	0.00354	3.72E-06	70YrCancer	*	3.72E-06
124	472113.1	3771276	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
125	472106.8	3771268	9901	DieselExhP	0.00367	3.85E-06	70YrCancer	*	3.85E-06
126	472100.5	3771260	9901	DieselExhP	0.00369	3.87E-06	70YrCancer	*	3.87E-06
127	472094.3	3771253	9901	DieselExhP	0.0037	3.88E-06	70YrCancer	*	3.88E-06
128	472088	3771245	9901	DieselExhP	0.00367	3.85E-06	70YrCancer	*	3.85E-06
129	472081.8	3771237	9901	DieselExhP	0.00363	3.81E-06	70YrCancer	*	3.81E-06
130	472075.5	3771229	9901	DieselExhP	0.00356	3.74E-06	70YrCancer	*	3.74E-06
131	472069.3	3771222	9901	DieselExhP	0.00346	3.63E-06	70YrCancer	*	3.63E-06
132	472063	3771214	9901	DieselExhP	0.00335	3.52E-06	70YrCancer	*	3.52E-06
133	472056.7	3771206	9901	DieselExhP	0.00321	3.37E-06	70YrCancer	*	3.37E-06
134	472050.5	3771199	9901	DieselExhP	0.00307	3.22E-06	70YrCancer	*	3.22E-06
135	472044.2	3771191	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
136	472038	3771183	9901	DieselExhP	0.00276	2.90E-06	70YrCancer	*	2.90E-06
137	472031.7	3771175	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
138	472144.7	3771313	9901	DieselExhP	0.00306	3.21E-06	70YrCancer	*	3.21E-06
139	472142.8	3771330	9901	DieselExhP	0.00328	3.44E-06	70YrCancer	*	3.44E-06
140	472142	3771304	9901	DieselExhP	0.00304	3.19E-06	70YrCancer	*	3.19E-06
141	472135.7	3771296	9901	DieselExhP	0.00314	3.30E-06	70YrCancer	*	3.30E-06
142	472129.5	3771288	9901	DieselExhP	0.00324	3.40E-06	70YrCancer	*	3.40E-06
143	472123.2	3771280	9901	DieselExhP	0.00331	3.47E-06	70YrCancer	*	3.47E-06
144	472117	3771273	9901	DieselExhP	0.00338	3.55E-06	70YrCancer	*	3.55E-06
145	472110.7	3771265	9901	DieselExhP	0.00342	3.59E-06	70YrCancer	*	3.59E-06
146	472104.4	3771257	9901	DieselExhP	0.00344	3.61E-06	70YrCancer	*	3.61E-06
147	472098.2	3771250	9901	DieselExhP	0.00344	3.61E-06	70YrCancer	*	3.61E-06

148	472091.9	3771242	9901	DieselExhP	0.00342	3.59E-06	70YrCancer	*	3.59E-06
149	472085.7	3771234	9901	DieselExhP	0.00338	3.55E-06	70YrCancer	*	3.55E-06
150	472079.4	3771226	9901	DieselExhP	0.00332	3.48E-06	70YrCancer	*	3.48E-06
151	472073.1	3771219	9901	DieselExhP	0.00323	3.39E-06	70YrCancer	*	3.39E-06
152	472066.9	3771211	9901	DieselExhP	0.00313	3.29E-06	70YrCancer	*	3.29E-06
153	472060.6	3771203	9901	DieselExhP	0.00302	3.17E-06	70YrCancer	*	3.17E-06
154	472054.4	3771195	9901	DieselExhP	0.00289	3.03E-06	70YrCancer	*	3.03E-06
155	472048.1	3771188	9901	DieselExhP	0.00276	2.90E-06	70YrCancer	*	2.90E-06
156	472041.8	3771180	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
157	472035.6	3771172	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
158	472148	3771308	9901	DieselExhP	0.0029	3.04E-06	70YrCancer	*	3.04E-06
159	472150.2	3771315	9901	DieselExhP	0.0029	3.04E-06	70YrCancer	*	3.04E-06
160	472148.7	3771329	9901	DieselExhP	0.00307	3.22E-06	70YrCancer	*	3.22E-06
161	472145	3771336	9901	DieselExhP	0.00324	3.40E-06	70YrCancer	*	3.40E-06
162	472145.9	3771300	9901	DieselExhP	0.00287	3.01E-06	70YrCancer	*	3.01E-06
163	472139.6	3771293	9901	DieselExhP	0.00296	3.11E-06	70YrCancer	*	3.11E-06
164	472133.4	3771285	9901	DieselExhP	0.00304	3.19E-06	70YrCancer	*	3.19E-06
165	472127.1	3771277	9901	DieselExhP	0.00311	3.26E-06	70YrCancer	*	3.26E-06
166	472120.8	3771270	9901	DieselExhP	0.00316	3.32E-06	70YrCancer	*	3.32E-06
167	472114.6	3771262	9901	DieselExhP	0.00319	3.35E-06	70YrCancer	*	3.35E-06
168	472108.3	3771254	9901	DieselExhP	0.00321	3.37E-06	70YrCancer	*	3.37E-06
169	472102.1	3771246	9901	DieselExhP	0.00321	3.37E-06	70YrCancer	*	3.37E-06
170	472095.8	3771239	9901	DieselExhP	0.00319	3.35E-06	70YrCancer	*	3.35E-06
171	472089.5	3771231	9901	DieselExhP	0.00315	3.31E-06	70YrCancer	*	3.31E-06
172	472083.3	3771223	9901	DieselExhP	0.0031	3.25E-06	70YrCancer	*	3.25E-06
173	472077	3771215	9901	DieselExhP	0.00303	3.18E-06	70YrCancer	*	3.18E-06
174	472070.8	3771208	9901	DieselExhP	0.00294	3.09E-06	70YrCancer	*	3.09E-06
175	472064.5	3771200	9901	DieselExhP	0.00284	2.98E-06	70YrCancer	*	2.98E-06
176	472058.2	3771192	9901	DieselExhP	0.00273	2.87E-06	70YrCancer	*	2.87E-06
177	472052	3771185	9901	DieselExhP	0.00261	2.74E-06	70YrCancer	*	2.74E-06
178	472045.7	3771177	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
179	472039.5	3771169	9901	DieselExhP	0.00235	2.47E-06	70YrCancer	*	2.47E-06
180	472152.3	3771306	9901	DieselExhP	0.00275	2.89E-06	70YrCancer	*	2.89E-06
181	472154.8	3771314	9901	DieselExhP	0.00276	2.90E-06	70YrCancer	*	2.90E-06
182	472153.1	3771331	9901	DieselExhP	0.00294	3.09E-06	70YrCancer	*	3.09E-06
183	472148.8	3771339	9901	DieselExhP	0.00312	3.27E-06	70YrCancer	*	3.27E-06
184	472149.8	3771297	9901	DieselExhP	0.00272	2.85E-06	70YrCancer	*	2.85E-06
185	472143.5	3771290	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
186	472137.2	3771282	9901	DieselExhP	0.00286	3.00E-06	70YrCancer	*	3.00E-06
187	472131	3771274	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
188	472124.7	3771266	9901	DieselExhP	0.00296	3.11E-06	70YrCancer	*	3.11E-06
189	472118.5	3771259	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
190	472112.2	3771251	9901	DieselExhP	0.003	3.15E-06	70YrCancer	*	3.15E-06
191	472105.9	3771243	9901	DieselExhP	0.003	3.15E-06	70YrCancer	*	3.15E-06
192	472099.7	3771236	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
193	472093.4	3771228	9901	DieselExhP	0.00295	3.10E-06	70YrCancer	*	3.10E-06
194	472087.2	3771220	9901	DieselExhP	0.0029	3.04E-06	70YrCancer	*	3.04E-06
195	472080.9	3771212	9901	DieselExhP	0.00284	2.98E-06	70YrCancer	*	2.98E-06
196	472074.6	3771205	9901	DieselExhP	0.00276	2.90E-06	70YrCancer	*	2.90E-06
197	472068.4	3771197	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06

198	472062.1	3771189	9901	DieselExhP	0.00257	2.70E-06	70YrCancer	*	2.70E-06
199	472055.9	3771181	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
200	472049.6	3771174	9901	DieselExhP	0.00235	2.47E-06	70YrCancer	*	2.47E-06
201	472043.3	3771166	9901	DieselExhP	0.00224	2.35E-06	70YrCancer	*	2.35E-06
202	472155.8	3771302	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
203	472158	3771309	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
204	472160.2	3771316	9901	DieselExhP	0.00263	2.76E-06	70YrCancer	*	2.76E-06
205	472158.7	3771330	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
206	472155	3771337	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
207	472151.3	3771344	9901	DieselExhP	0.00305	3.20E-06	70YrCancer	*	3.20E-06
208	472153.6	3771294	9901	DieselExhP	0.00257	2.70E-06	70YrCancer	*	2.70E-06
209	472147.4	3771286	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
210	472141.1	3771279	9901	DieselExhP	0.0027	2.83E-06	70YrCancer	*	2.83E-06
211	472134.9	3771271	9901	DieselExhP	0.00275	2.89E-06	70YrCancer	*	2.89E-06
212	472128.6	3771263	9901	DieselExhP	0.00278	2.92E-06	70YrCancer	*	2.92E-06
213	472122.3	3771256	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
214	472116.1	3771248	9901	DieselExhP	0.00282	2.96E-06	70YrCancer	*	2.96E-06
215	472109.8	3771240	9901	DieselExhP	0.00281	2.95E-06	70YrCancer	*	2.95E-06
216	472103.6	3771232	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
217	472097.3	3771225	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
218	472091.1	3771217	9901	DieselExhP	0.00273	2.87E-06	70YrCancer	*	2.87E-06
219	472084.8	3771209	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06
220	472078.5	3771201	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
221	472072.3	3771194	9901	DieselExhP	0.00252	2.64E-06	70YrCancer	*	2.64E-06
222	472066	3771186	9901	DieselExhP	0.00243	2.55E-06	70YrCancer	*	2.55E-06
223	472059.8	3771178	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
224	472053.5	3771171	9901	DieselExhP	0.00224	2.35E-06	70YrCancer	*	2.35E-06
225	472047.2	3771163	9901	DieselExhP	0.00213	2.24E-06	70YrCancer	*	2.24E-06
226	472160	3771299	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
227	472162.4	3771308	9901	DieselExhP	0.00249	2.61E-06	70YrCancer	*	2.61E-06
228	472164.9	3771316	9901	DieselExhP	0.0025	2.62E-06	70YrCancer	*	2.62E-06
229	472163.2	3771332	9901	DieselExhP	0.00265	2.78E-06	70YrCancer	*	2.78E-06
230	472159	3771339	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
231	472154.9	3771347	9901	DieselExhP	0.00295	3.10E-06	70YrCancer	*	3.10E-06
232	472157.5	3771291	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
233	472151.3	3771283	9901	DieselExhP	0.0025	2.62E-06	70YrCancer	*	2.62E-06
234	472145	3771276	9901	DieselExhP	0.00255	2.68E-06	70YrCancer	*	2.68E-06
235	472138.8	3771268	9901	DieselExhP	0.00259	2.72E-06	70YrCancer	*	2.72E-06
236	472132.5	3771260	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
237	472126.2	3771252	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
238	472120	3771245	9901	DieselExhP	0.00265	2.78E-06	70YrCancer	*	2.78E-06
239	472113.7	3771237	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
240	472107.5	3771229	9901	DieselExhP	0.00263	2.76E-06	70YrCancer	*	2.76E-06
241	472101.2	3771221	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
242	472094.9	3771214	9901	DieselExhP	0.00257	2.70E-06	70YrCancer	*	2.70E-06
243	472088.7	3771206	9901	DieselExhP	0.00252	2.64E-06	70YrCancer	*	2.64E-06
244	472082.4	3771198	9901	DieselExhP	0.00246	2.58E-06	70YrCancer	*	2.58E-06
245	472076.2	3771191	9901	DieselExhP	0.00238	2.50E-06	70YrCancer	*	2.50E-06
246	472069.9	3771183	9901	DieselExhP	0.0023	2.41E-06	70YrCancer	*	2.41E-06
247	472063.6	3771175	9901	DieselExhP	0.00222	2.33E-06	70YrCancer	*	2.33E-06

248	472057.4	3771167	9901	DieselExhP	0.00212	2.23E-06	70YrCancer	*	2.23E-06
249	472051.1	3771160	9901	DieselExhP	0.00203	2.13E-06	70YrCancer	*	2.13E-06
250	472164.1	3771297	9901	DieselExhP	0.00235	2.47E-06	70YrCancer	*	2.47E-06
251	472166.8	3771306	9901	DieselExhP	0.00237	2.49E-06	70YrCancer	*	2.49E-06
252	472169.6	3771315	9901	DieselExhP	0.00239	2.51E-06	70YrCancer	*	2.51E-06
253	472167.7	3771333	9901	DieselExhP	0.00254	2.67E-06	70YrCancer	*	2.67E-06
254	472163.1	3771341	9901	DieselExhP	0.00269	2.82E-06	70YrCancer	*	2.82E-06
255	472158.5	3771350	9901	DieselExhP	0.00285	2.99E-06	70YrCancer	*	2.99E-06
256	472161.4	3771288	9901	DieselExhP	0.00231	2.42E-06	70YrCancer	*	2.42E-06
257	472155.2	3771280	9901	DieselExhP	0.00236	2.48E-06	70YrCancer	*	2.48E-06
258	472148.9	3771272	9901	DieselExhP	0.00241	2.53E-06	70YrCancer	*	2.53E-06
259	472142.6	3771265	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
260	472136.4	3771257	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
261	472130.1	3771249	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
262	472123.9	3771242	9901	DieselExhP	0.00249	2.61E-06	70YrCancer	*	2.61E-06
263	472117.6	3771234	9901	DieselExhP	0.00249	2.61E-06	70YrCancer	*	2.61E-06
264	472111.3	3771226	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
265	472105.1	3771218	9901	DieselExhP	0.00245	2.57E-06	70YrCancer	*	2.57E-06
266	472098.8	3771211	9901	DieselExhP	0.00242	2.54E-06	70YrCancer	*	2.54E-06
267	472092.6	3771203	9901	DieselExhP	0.00237	2.49E-06	70YrCancer	*	2.49E-06
268	472086.3	3771195	9901	DieselExhP	0.00232	2.44E-06	70YrCancer	*	2.44E-06
269	472080	3771187	9901	DieselExhP	0.00226	2.37E-06	70YrCancer	*	2.37E-06
270	472073.8	3771180	9901	DieselExhP	0.00218	2.29E-06	70YrCancer	*	2.29E-06
271	472067.5	3771172	9901	DieselExhP	0.00211	2.21E-06	70YrCancer	*	2.21E-06
272	472061.3	3771164	9901	DieselExhP	0.00202	2.12E-06	70YrCancer	*	2.12E-06
273	472055	3771157	9901	DieselExhP	0.00193	2.03E-06	70YrCancer	*	2.03E-06
274	472183.6	3771281	9901	DieselExhP	0.00184	1.93E-06	70YrCancer	*	1.93E-06
275	472186.3	3771291	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
276	472189	3771300	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
277	472191.7	3771309	9901	DieselExhP	0.00191	2.00E-06	70YrCancer	*	2.00E-06
278	472194.4	3771318	9901	DieselExhP	0.00191	2.00E-06	70YrCancer	*	2.00E-06
279	472192.5	3771336	9901	DieselExhP	0.00203	2.13E-06	70YrCancer	*	2.13E-06
280	472188	3771344	9901	DieselExhP	0.00214	2.25E-06	70YrCancer	*	2.25E-06
281	472183.4	3771353	9901	DieselExhP	0.00225	2.36E-06	70YrCancer	*	2.36E-06
282	472178.8	3771361	9901	DieselExhP	0.00236	2.48E-06	70YrCancer	*	2.48E-06
283	472174.2	3771369	9901	DieselExhP	0.00246	2.58E-06	70YrCancer	*	2.58E-06
284	472180.8	3771272	9901	DieselExhP	0.00181	1.90E-06	70YrCancer	*	1.90E-06
285	472174.6	3771264	9901	DieselExhP	0.00183	1.92E-06	70YrCancer	*	1.92E-06
286	472168.3	3771257	9901	DieselExhP	0.00186	1.95E-06	70YrCancer	*	1.95E-06
287	472162.1	3771249	9901	DieselExhP	0.00188	1.97E-06	70YrCancer	*	1.97E-06
288	472155.8	3771241	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
289	472149.5	3771234	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
290	472143.3	3771226	9901	DieselExhP	0.0019	1.99E-06	70YrCancer	*	1.99E-06
291	472137	3771218	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
292	472130.8	3771210	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
293	472124.5	3771203	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
294	472118.2	3771195	9901	DieselExhP	0.00185	1.94E-06	70YrCancer	*	1.94E-06
295	472112	3771187	9901	DieselExhP	0.00183	1.92E-06	70YrCancer	*	1.92E-06
296	472105.7	3771179	9901	DieselExhP	0.00179	1.88E-06	70YrCancer	*	1.88E-06
297	472099.5	3771172	9901	DieselExhP	0.00176	1.85E-06	70YrCancer	*	1.85E-06

298	472093.2	3771164	9901	DieselExhP	0.00171	1.79E-06	70YrCancer	*	1.79E-06
299	472086.9	3771156	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
300	472080.7	3771149	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
301	472074.4	3771141	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
302	472203	3771266	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
303	472205.7	3771275	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
304	472208.4	3771284	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
305	472211.1	3771293	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
306	472213.8	3771302	9901	DieselExhP	0.00155	1.63E-06	70YrCancer	*	1.63E-06
307	472216.6	3771312	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
308	472219.3	3771321	9901	DieselExhP	0.00157	1.65E-06	70YrCancer	*	1.65E-06
309	472217.4	3771338	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
310	472212.8	3771347	9901	DieselExhP	0.00174	1.83E-06	70YrCancer	*	1.83E-06
311	472208.2	3771355	9901	DieselExhP	0.00183	1.92E-06	70YrCancer	*	1.92E-06
312	472203.6	3771364	9901	DieselExhP	0.00191	2.00E-06	70YrCancer	*	2.00E-06
313	472199	3771372	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
314	472194.4	3771380	9901	DieselExhP	0.00206	2.16E-06	70YrCancer	*	2.16E-06
315	472189.8	3771389	9901	DieselExhP	0.00213	2.24E-06	70YrCancer	*	2.24E-06
316	472200.3	3771256	9901	DieselExhP	0.00144	1.51E-06	70YrCancer	*	1.51E-06
317	472194	3771249	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
318	472187.7	3771241	9901	DieselExhP	0.00146	1.53E-06	70YrCancer	*	1.53E-06
319	472181.5	3771233	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
320	472175.2	3771225	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
321	472169	3771218	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
322	472162.7	3771210	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
323	472156.4	3771202	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
324	472150.2	3771195	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
325	472143.9	3771187	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
326	472137.7	3771179	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
327	472131.4	3771171	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
328	472125.2	3771164	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
329	472118.9	3771156	9901	DieselExhP	0.00141	1.48E-06	70YrCancer	*	1.48E-06
330	472112.6	3771148	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
331	472106.4	3771141	9901	DieselExhP	0.00135	1.42E-06	70YrCancer	*	1.42E-06
332	472100.1	3771133	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
333	472093.9	3771125	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
334	472222.4	3771250	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
335	472225.1	3771259	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
336	472227.8	3771268	9901	DieselExhP	0.00124	1.30E-06	70YrCancer	*	1.30E-06
337	472230.6	3771277	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
338	472233.3	3771287	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
339	472236	3771296	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
340	472238.7	3771305	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
341	472241.4	3771314	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
342	472244.1	3771323	9901	DieselExhP	0.00132	1.39E-06	70YrCancer	*	1.39E-06
343	472242.3	3771341	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
344	472237.7	3771349	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
345	472233.1	3771358	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
346	472228.5	3771366	9901	DieselExhP	0.00158	1.66E-06	70YrCancer	*	1.66E-06
347	472223.9	3771375	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06

348	472219.3	3771383	9901	DieselExhP	0.00171	1.79E-06	70YrCancer	*	1.79E-06
349	472214.7	3771392	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
350	472210.1	3771400	9901	DieselExhP	0.00182	1.91E-06	70YrCancer	*	1.91E-06
351	472205.5	3771408	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
352	472219.7	3771241	9901	DieselExhP	0.00117	1.23E-06	70YrCancer	*	1.23E-06
353	472213.4	3771233	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
354	472207.2	3771225	9901	DieselExhP	0.00119	1.25E-06	70YrCancer	*	1.25E-06
355	472200.9	3771217	9901	DieselExhP	0.00119	1.25E-06	70YrCancer	*	1.25E-06
356	472194.7	3771210	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
357	472188.4	3771202	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
358	472182.1	3771194	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
359	472175.9	3771187	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
360	472169.6	3771179	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
361	472163.4	3771171	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
362	472157.1	3771163	9901	DieselExhP	0.00119	1.25E-06	70YrCancer	*	1.25E-06
363	472150.8	3771156	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
364	472144.6	3771148	9901	DieselExhP	0.00117	1.23E-06	70YrCancer	*	1.23E-06
365	472138.3	3771140	9901	DieselExhP	0.00115	1.21E-06	70YrCancer	*	1.21E-06
366	472132.1	3771132	9901	DieselExhP	0.00113	1.19E-06	70YrCancer	*	1.19E-06
367	472125.8	3771125	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
368	472119.5	3771117	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
369	472113.3	3771109	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
370	472241.8	3771234	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
371	472244.5	3771243	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
372	472247.3	3771253	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
373	472250	3771262	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
374	472252.7	3771271	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
375	472255.4	3771280	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
376	472258.1	3771289	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
377	472260.9	3771298	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
378	472263.6	3771308	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
379	472266.3	3771317	9901	DieselExhP	0.00112	1.18E-06	70YrCancer	*	1.18E-06
380	472269	3771326	9901	DieselExhP	0.00113	1.19E-06	70YrCancer	*	1.19E-06
381	472267.1	3771344	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
382	472262.5	3771352	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
383	472257.9	3771360	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
384	472253.3	3771369	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
385	472248.7	3771377	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
386	472244.1	3771386	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
387	472239.6	3771394	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
388	472235	3771403	9901	DieselExhP	0.00153	1.61E-06	70YrCancer	*	1.61E-06
389	472230.4	3771411	9901	DieselExhP	0.00157	1.65E-06	70YrCancer	*	1.65E-06
390	472225.8	3771419	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
391	472221.2	3771428	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
392	472239.1	3771225	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
393	472232.9	3771217	9901	DieselExhP	0.00098	1.03E-06	70YrCancer	*	1.03E-06
394	472226.6	3771209	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
395	472220.3	3771202	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
396	472214.1	3771194	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06
397	472207.8	3771186	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06

398	472201.6	3771179	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06
399	472195.3	3771171	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06
400	472189	3771163	9901	DieselExhP	0.001	1.05E-06	70YrCancer	*	1.05E-06
401	472182.8	3771155	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
402	472176.5	3771148	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
403	472170.3	3771140	9901	DieselExhP	0.00098	1.03E-06	70YrCancer	*	1.03E-06
404	472164	3771132	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
405	472157.7	3771124	9901	DieselExhP	0.00096	1.01E-06	70YrCancer	*	1.01E-06
406	472151.5	3771117	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
407	472145.2	3771109	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
408	472139	3771101	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
409	472132.7	3771094	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
410	472261.3	3771218	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
411	472264	3771228	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
412	472266.7	3771237	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
413	472269.4	3771246	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
414	472272.1	3771255	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
415	472274.8	3771264	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
416	472277.6	3771274	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
417	472280.3	3771283	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
418	472283	3771292	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
419	472285.7	3771301	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
420	472288.4	3771310	9901	DieselExhP	0.00096	1.01E-06	70YrCancer	*	1.01E-06
421	472291.1	3771320	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
422	472293.9	3771329	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
423	472292	3771346	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
424	472287.4	3771355	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
425	472282.8	3771363	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
426	472278.2	3771372	9901	DieselExhP	0.00114	1.20E-06	70YrCancer	*	1.20E-06
427	472273.6	3771380	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
428	472269	3771388	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
429	472264.4	3771397	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
430	472259.8	3771405	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
431	472255.2	3771414	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
432	472250.6	3771422	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
433	472246	3771430	9901	DieselExhP	0.00141	1.48E-06	70YrCancer	*	1.48E-06
434	472241.4	3771439	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
435	472236.8	3771447	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
436	472258.5	3771209	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
437	472252.3	3771201	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
438	472246	3771194	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
439	472239.8	3771186	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
440	472233.5	3771178	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
441	472227.2	3771171	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
442	472221	3771163	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
443	472214.7	3771155	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
444	472208.5	3771147	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
445	472202.2	3771140	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
446	472195.9	3771132	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
447	472189.7	3771124	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07

448	472183.4	3771116	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
449	472177.2	3771109	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
450	472170.9	3771101	9901	DieselExhP	0.00081	8.50E-07	70YrCancer	*	8.50E-07
451	472164.6	3771093	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
452	472158.4	3771086	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
453	472152.1	3771078	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
454	472280.7	3771203	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
455	472283.4	3771212	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
456	472286.1	3771221	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
457	472288.8	3771230	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
458	472291.5	3771239	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07
459	472294.3	3771249	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
460	472297	3771258	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
461	472299.7	3771267	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
462	472302.4	3771276	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
463	472305.1	3771285	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
464	472307.9	3771295	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
465	472310.6	3771304	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
466	472313.3	3771313	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
467	472316	3771322	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
468	472318.7	3771331	9901	DieselExhP	0.00081	8.50E-07	70YrCancer	*	8.50E-07
469	472316.8	3771349	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
470	472312.2	3771357	9901	DieselExhP	0.00087	9.13E-07	70YrCancer	*	9.13E-07
471	472307.7	3771366	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
472	472303.1	3771374	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
473	472298.5	3771383	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
474	472293.9	3771391	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
475	472289.3	3771399	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
476	472284.7	3771408	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
477	472280.1	3771416	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
478	472275.5	3771425	9901	DieselExhP	0.00115	1.21E-06	70YrCancer	*	1.21E-06
479	472270.9	3771433	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
480	472266.3	3771442	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
481	472261.7	3771450	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
482	472257.1	3771458	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
483	472252.5	3771467	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
484	472278	3771193	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
485	472271.7	3771186	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
486	472265.4	3771178	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
487	472259.2	3771170	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
488	472252.9	3771163	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
489	472246.7	3771155	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
490	472240.4	3771147	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
491	472234.1	3771139	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
492	472227.9	3771132	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
493	472221.6	3771124	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
494	472215.4	3771116	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
495	472209.1	3771108	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
496	472202.9	3771101	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07
497	472196.6	3771093	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07

498	472190.3	3771085	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
499	472184.1	3771078	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
500	472177.8	3771070	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
501	472171.6	3771062	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
502	472013	3771184	9901	DieselExhP	0.00311	3.26E-06	70YrCancer	*	3.26E-06
503	472005.8	3771190	9901	DieselExhP	0.00344	3.61E-06	70YrCancer	*	3.61E-06
504	471998.6	3771196	9901	DieselExhP	0.00382	4.01E-06	70YrCancer	*	4.01E-06
505	471991.4	3771202	9901	DieselExhP	0.00425	4.46E-06	70YrCancer	*	4.46E-06
506	471984.2	3771208	9901	DieselExhP	0.00473	4.96E-06	70YrCancer	*	4.96E-06
507	471977	3771214	9901	DieselExhP	0.00526	5.52E-06	70YrCancer	*	5.52E-06
508	471969.8	3771219	9901	DieselExhP	0.00582	6.11E-06	70YrCancer	*	6.11E-06
509	471962.6	3771225	9901	DieselExhP	0.00641	6.73E-06	70YrCancer	*	6.73E-06
510	471955.4	3771231	9901	DieselExhP	0.007	7.35E-06	70YrCancer	*	7.35E-06
511	471948.2	3771237	9901	DieselExhP	0.0076	7.98E-06	70YrCancer	*	7.98E-06
512	471941	3771243	9901	DieselExhP	0.0082	8.61E-06	70YrCancer	*	8.61E-06
513	471933.8	3771249	9901	DieselExhP	0.00874	9.17E-06	70YrCancer	*	9.17E-06
514	471926.7	3771255	9901	DieselExhP	0.00889	9.33E-06	70YrCancer	*	9.33E-06
515	471919.5	3771261	9901	DieselExhP	0.0083	8.71E-06	70YrCancer	*	8.71E-06
516	472009.8	3771180	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
517	472002.6	3771186	9901	DieselExhP	0.0033	3.46E-06	70YrCancer	*	3.46E-06
518	471995.4	3771192	9901	DieselExhP	0.00364	3.82E-06	70YrCancer	*	3.82E-06
519	471988.2	3771198	9901	DieselExhP	0.00403	4.23E-06	70YrCancer	*	4.23E-06
520	471981	3771204	9901	DieselExhP	0.00445	4.67E-06	70YrCancer	*	4.67E-06
521	471973.8	3771210	9901	DieselExhP	0.00491	5.15E-06	70YrCancer	*	5.15E-06
522	471966.7	3771216	9901	DieselExhP	0.00539	5.66E-06	70YrCancer	*	5.66E-06
523	471959.5	3771221	9901	DieselExhP	0.00589	6.18E-06	70YrCancer	*	6.18E-06
524	471952.3	3771227	9901	DieselExhP	0.00638	6.70E-06	70YrCancer	*	6.70E-06
525	471945.1	3771233	9901	DieselExhP	0.00685	7.19E-06	70YrCancer	*	7.19E-06
526	471937.9	3771239	9901	DieselExhP	0.0073	7.66E-06	70YrCancer	*	7.66E-06
527	471930.7	3771245	9901	DieselExhP	0.00766	8.04E-06	70YrCancer	*	8.04E-06
528	471923.5	3771251	9901	DieselExhP	0.00773	8.11E-06	70YrCancer	*	8.11E-06
529	471916.3	3771257	9901	DieselExhP	0.00729	7.65E-06	70YrCancer	*	7.65E-06
530	472012.2	3771175	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
531	472022.7	3771176	9901	DieselExhP	0.0027	2.83E-06	70YrCancer	*	2.83E-06
532	472006.7	3771176	9901	DieselExhP	0.00288	3.02E-06	70YrCancer	*	3.02E-06
533	471999.5	3771182	9901	DieselExhP	0.00316	3.32E-06	70YrCancer	*	3.32E-06
534	471992.3	3771188	9901	DieselExhP	0.00347	3.64E-06	70YrCancer	*	3.64E-06
535	471985.1	3771194	9901	DieselExhP	0.00381	4.00E-06	70YrCancer	*	4.00E-06
536	471977.9	3771200	9901	DieselExhP	0.00419	4.40E-06	70YrCancer	*	4.40E-06
537	471970.7	3771206	9901	DieselExhP	0.00459	4.82E-06	70YrCancer	*	4.82E-06
538	471963.5	3771212	9901	DieselExhP	0.00501	5.26E-06	70YrCancer	*	5.26E-06
539	471956.3	3771218	9901	DieselExhP	0.00542	5.69E-06	70YrCancer	*	5.69E-06
540	471949.1	3771223	9901	DieselExhP	0.00583	6.12E-06	70YrCancer	*	6.12E-06
541	471941.9	3771229	9901	DieselExhP	0.00621	6.52E-06	70YrCancer	*	6.52E-06
542	471934.7	3771235	9901	DieselExhP	0.00655	6.87E-06	70YrCancer	*	6.87E-06
543	471927.5	3771241	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06
544	471920.3	3771247	9901	DieselExhP	0.00679	7.13E-06	70YrCancer	*	7.13E-06
545	471913.1	3771253	9901	DieselExhP	0.00648	6.80E-06	70YrCancer	*	6.80E-06
546	472010.8	3771170	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
547	472024.9	3771172	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06

548	472003.5	3771173	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
549	471996.3	3771178	9901	DieselExhP	0.00302	3.17E-06	70YrCancer	*	3.17E-06
550	471989.1	3771184	9901	DieselExhP	0.00331	3.47E-06	70YrCancer	*	3.47E-06
551	471981.9	3771190	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
552	471974.7	3771196	9901	DieselExhP	0.00395	4.15E-06	70YrCancer	*	4.15E-06
553	471967.5	3771202	9901	DieselExhP	0.0043	4.51E-06	70YrCancer	*	4.51E-06
554	471960.3	3771208	9901	DieselExhP	0.00466	4.89E-06	70YrCancer	*	4.89E-06
555	471953.1	3771214	9901	DieselExhP	0.00501	5.26E-06	70YrCancer	*	5.26E-06
556	471945.9	3771220	9901	DieselExhP	0.00535	5.62E-06	70YrCancer	*	5.62E-06
557	471938.7	3771226	9901	DieselExhP	0.00566	5.94E-06	70YrCancer	*	5.94E-06
558	471931.5	3771231	9901	DieselExhP	0.00591	6.20E-06	70YrCancer	*	6.20E-06
559	471924.3	3771237	9901	DieselExhP	0.00607	6.37E-06	70YrCancer	*	6.37E-06
560	471917.2	3771243	9901	DieselExhP	0.00605	6.35E-06	70YrCancer	*	6.35E-06
561	471910	3771249	9901	DieselExhP	0.0058	6.09E-06	70YrCancer	*	6.09E-06
562	472006.5	3771167	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06
563	472012.6	3771165	9901	DieselExhP	0.00246	2.58E-06	70YrCancer	*	2.58E-06
564	472024.3	3771166	9901	DieselExhP	0.00241	2.53E-06	70YrCancer	*	2.53E-06
565	472030	3771169	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
566	472000.3	3771169	9901	DieselExhP	0.00266	2.79E-06	70YrCancer	*	2.79E-06
567	471993.1	3771175	9901	DieselExhP	0.0029	3.04E-06	70YrCancer	*	3.04E-06
568	471985.9	3771180	9901	DieselExhP	0.00315	3.31E-06	70YrCancer	*	3.31E-06
569	471978.7	3771186	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
570	471971.5	3771192	9901	DieselExhP	0.00373	3.91E-06	70YrCancer	*	3.91E-06
571	471964.4	3771198	9901	DieselExhP	0.00403	4.23E-06	70YrCancer	*	4.23E-06
572	471957.2	3771204	9901	DieselExhP	0.00434	4.56E-06	70YrCancer	*	4.56E-06
573	471950	3771210	9901	DieselExhP	0.00465	4.88E-06	70YrCancer	*	4.88E-06
574	471942.8	3771216	9901	DieselExhP	0.00493	5.17E-06	70YrCancer	*	5.17E-06
575	471935.6	3771222	9901	DieselExhP	0.00518	5.44E-06	70YrCancer	*	5.44E-06
576	471928.4	3771228	9901	DieselExhP	0.00537	5.64E-06	70YrCancer	*	5.64E-06
577	471921.2	3771233	9901	DieselExhP	0.00548	5.75E-06	70YrCancer	*	5.75E-06
578	471914	3771239	9901	DieselExhP	0.00544	5.71E-06	70YrCancer	*	5.71E-06
579	471906.8	3771245	9901	DieselExhP	0.00524	5.50E-06	70YrCancer	*	5.50E-06
580	472004.5	3771163	9901	DieselExhP	0.00245	2.57E-06	70YrCancer	*	2.57E-06
581	472011.9	3771160	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
582	472026	3771162	9901	DieselExhP	0.00228	2.39E-06	70YrCancer	*	2.39E-06
583	472032.7	3771165	9901	DieselExhP	0.00232	2.44E-06	70YrCancer	*	2.44E-06
584	471997.2	3771165	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06
585	471990	3771171	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
586	471982.8	3771177	9901	DieselExhP	0.00301	3.16E-06	70YrCancer	*	3.16E-06
587	471975.6	3771182	9901	DieselExhP	0.00326	3.42E-06	70YrCancer	*	3.42E-06
588	471968.4	3771188	9901	DieselExhP	0.00352	3.69E-06	70YrCancer	*	3.69E-06
589	471961.2	3771194	9901	DieselExhP	0.00379	3.98E-06	70YrCancer	*	3.98E-06
590	471954	3771200	9901	DieselExhP	0.00406	4.26E-06	70YrCancer	*	4.26E-06
591	471946.8	3771206	9901	DieselExhP	0.00432	4.53E-06	70YrCancer	*	4.53E-06
592	471939.6	3771212	9901	DieselExhP	0.00455	4.78E-06	70YrCancer	*	4.78E-06
593	471932.4	3771218	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
594	471925.2	3771224	9901	DieselExhP	0.00491	5.15E-06	70YrCancer	*	5.15E-06
595	471918	3771230	9901	DieselExhP	0.00498	5.23E-06	70YrCancer	*	5.23E-06
596	471910.8	3771235	9901	DieselExhP	0.00494	5.18E-06	70YrCancer	*	5.18E-06
597	471903.6	3771241	9901	DieselExhP	0.00478	5.02E-06	70YrCancer	*	5.02E-06

598	472002.6	3771158	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
599	472011.1	3771156	9901	DieselExhP	0.00223	2.34E-06	70YrCancer	*	2.34E-06
600	472027.6	3771157	9901	DieselExhP	0.00217	2.28E-06	70YrCancer	*	2.28E-06
601	472035.5	3771162	9901	DieselExhP	0.00221	2.32E-06	70YrCancer	*	2.32E-06
602	471994	3771161	9901	DieselExhP	0.00246	2.58E-06	70YrCancer	*	2.58E-06
603	471986.8	3771167	9901	DieselExhP	0.00266	2.79E-06	70YrCancer	*	2.79E-06
604	471979.6	3771173	9901	DieselExhP	0.00287	3.01E-06	70YrCancer	*	3.01E-06
605	471972.4	3771179	9901	DieselExhP	0.00309	3.24E-06	70YrCancer	*	3.24E-06
606	471965.2	3771184	9901	DieselExhP	0.00333	3.50E-06	70YrCancer	*	3.50E-06
607	471958	3771190	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
608	471950.8	3771196	9901	DieselExhP	0.0038	3.99E-06	70YrCancer	*	3.99E-06
609	471943.6	3771202	9901	DieselExhP	0.00402	4.22E-06	70YrCancer	*	4.22E-06
610	471936.4	3771208	9901	DieselExhP	0.00422	4.43E-06	70YrCancer	*	4.43E-06
611	471929.2	3771214	9901	DieselExhP	0.00439	4.61E-06	70YrCancer	*	4.61E-06
612	471922	3771220	9901	DieselExhP	0.00451	4.73E-06	70YrCancer	*	4.73E-06
613	471914.9	3771226	9901	DieselExhP	0.00456	4.79E-06	70YrCancer	*	4.79E-06
614	471907.7	3771232	9901	DieselExhP	0.00451	4.73E-06	70YrCancer	*	4.73E-06
615	471900.5	3771237	9901	DieselExhP	0.00438	4.60E-06	70YrCancer	*	4.60E-06
616	471998.2	3771155	9901	DieselExhP	0.00227	2.38E-06	70YrCancer	*	2.38E-06
617	472005.5	3771153	9901	DieselExhP	0.00218	2.29E-06	70YrCancer	*	2.29E-06
618	472012.9	3771150	9901	DieselExhP	0.0021	2.20E-06	70YrCancer	*	2.20E-06
619	472027	3771152	9901	DieselExhP	0.00205	2.15E-06	70YrCancer	*	2.15E-06
620	472033.7	3771156	9901	DieselExhP	0.00208	2.18E-06	70YrCancer	*	2.18E-06
621	472040.5	3771159	9901	DieselExhP	0.00211	2.21E-06	70YrCancer	*	2.21E-06
622	471990.8	3771157	9901	DieselExhP	0.00237	2.49E-06	70YrCancer	*	2.49E-06
623	471983.6	3771163	9901	DieselExhP	0.00255	2.68E-06	70YrCancer	*	2.68E-06
624	471976.4	3771169	9901	DieselExhP	0.00274	2.88E-06	70YrCancer	*	2.88E-06
625	471969.2	3771175	9901	DieselExhP	0.00294	3.09E-06	70YrCancer	*	3.09E-06
626	471962	3771181	9901	DieselExhP	0.00315	3.31E-06	70YrCancer	*	3.31E-06
627	471954.9	3771186	9901	DieselExhP	0.00336	3.53E-06	70YrCancer	*	3.53E-06
628	471947.7	3771192	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
629	471940.5	3771198	9901	DieselExhP	0.00376	3.95E-06	70YrCancer	*	3.95E-06
630	471933.3	3771204	9901	DieselExhP	0.00393	4.12E-06	70YrCancer	*	4.12E-06
631	471926.1	3771210	9901	DieselExhP	0.00407	4.27E-06	70YrCancer	*	4.27E-06
632	471918.9	3771216	9901	DieselExhP	0.00416	4.37E-06	70YrCancer	*	4.37E-06
633	471911.7	3771222	9901	DieselExhP	0.00419	4.40E-06	70YrCancer	*	4.40E-06
634	471904.5	3771228	9901	DieselExhP	0.00415	4.36E-06	70YrCancer	*	4.36E-06
635	471897.3	3771234	9901	DieselExhP	0.00403	4.23E-06	70YrCancer	*	4.23E-06
636	471995.9	3771151	9901	DieselExhP	0.00218	2.29E-06	70YrCancer	*	2.29E-06
637	472012.5	3771146	9901	DieselExhP	0.002	2.10E-06	70YrCancer	*	2.10E-06
638	472028.3	3771147	9901	DieselExhP	0.00195	2.05E-06	70YrCancer	*	2.05E-06
639	472035.9	3771151	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
640	472043.5	3771156	9901	DieselExhP	0.00201	2.11E-06	70YrCancer	*	2.11E-06
641	471987.7	3771153	9901	DieselExhP	0.00227	2.38E-06	70YrCancer	*	2.38E-06
642	471980.5	3771159	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
643	471973.3	3771165	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
644	471966.1	3771171	9901	DieselExhP	0.0028	2.94E-06	70YrCancer	*	2.94E-06
645	471958.9	3771177	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
646	471951.7	3771183	9901	DieselExhP	0.00317	3.33E-06	70YrCancer	*	3.33E-06
647	471944.5	3771188	9901	DieselExhP	0.00335	3.52E-06	70YrCancer	*	3.52E-06

648	471937.3	3771194	9901	DieselExhP	0.00352	3.69E-06	70YrCancer	*	3.69E-06
649	471930.1	3771200	9901	DieselExhP	0.00367	3.85E-06	70YrCancer	*	3.85E-06
650	471922.9	3771206	9901	DieselExhP	0.00378	3.97E-06	70YrCancer	*	3.97E-06
651	471915.7	3771212	9901	DieselExhP	0.00385	4.04E-06	70YrCancer	*	4.04E-06
652	471908.5	3771218	9901	DieselExhP	0.00388	4.07E-06	70YrCancer	*	4.07E-06
653	471901.3	3771224	9901	DieselExhP	0.00384	4.03E-06	70YrCancer	*	4.03E-06
654	471894.1	3771230	9901	DieselExhP	0.00373	3.91E-06	70YrCancer	*	3.91E-06
655	471991.8	3771147	9901	DieselExhP	0.00211	2.21E-06	70YrCancer	*	2.21E-06
656	471999.2	3771145	9901	DieselExhP	0.00204	2.14E-06	70YrCancer	*	2.14E-06
657	472006.5	3771143	9901	DieselExhP	0.00197	2.07E-06	70YrCancer	*	2.07E-06
658	472013.9	3771140	9901	DieselExhP	0.0019	1.99E-06	70YrCancer	*	1.99E-06
659	472028	3771142	9901	DieselExhP	0.00186	1.95E-06	70YrCancer	*	1.95E-06
660	472034.8	3771146	9901	DieselExhP	0.00188	1.97E-06	70YrCancer	*	1.97E-06
661	472041.5	3771149	9901	DieselExhP	0.0019	1.99E-06	70YrCancer	*	1.99E-06
662	472048.3	3771153	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
663	471984.5	3771149	9901	DieselExhP	0.00219	2.30E-06	70YrCancer	*	2.30E-06
664	471977.3	3771155	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
665	471970.1	3771161	9901	DieselExhP	0.0025	2.62E-06	70YrCancer	*	2.62E-06
666	471962.9	3771167	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06
667	471955.7	3771173	9901	DieselExhP	0.00284	2.98E-06	70YrCancer	*	2.98E-06
668	471948.5	3771179	9901	DieselExhP	0.003	3.15E-06	70YrCancer	*	3.15E-06
669	471941.3	3771185	9901	DieselExhP	0.00316	3.32E-06	70YrCancer	*	3.32E-06
670	471934.1	3771191	9901	DieselExhP	0.00331	3.47E-06	70YrCancer	*	3.47E-06
671	471926.9	3771196	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
672	471919.7	3771202	9901	DieselExhP	0.00353	3.70E-06	70YrCancer	*	3.70E-06
673	471912.5	3771208	9901	DieselExhP	0.00359	3.77E-06	70YrCancer	*	3.77E-06
674	471905.4	3771214	9901	DieselExhP	0.0036	3.78E-06	70YrCancer	*	3.78E-06
675	471898.2	3771220	9901	DieselExhP	0.00356	3.74E-06	70YrCancer	*	3.74E-06
676	471891	3771226	9901	DieselExhP	0.00347	3.64E-06	70YrCancer	*	3.64E-06
677	471976.5	3771128	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
678	471984.4	3771125	9901	DieselExhP	0.00171	1.79E-06	70YrCancer	*	1.79E-06
679	471992.3	3771123	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
680	472000.2	3771120	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
681	472008	3771118	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
682	472015.9	3771116	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
683	472031	3771117	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
684	472038.3	3771121	9901	DieselExhP	0.0015	1.57E-06	70YrCancer	*	1.57E-06
685	472045.5	3771125	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
686	472052.7	3771129	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
687	472060	3771133	9901	DieselExhP	0.00155	1.63E-06	70YrCancer	*	1.63E-06
688	472067.2	3771137	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
689	471968.7	3771130	9901	DieselExhP	0.00182	1.91E-06	70YrCancer	*	1.91E-06
690	471961.5	3771136	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
691	471954.3	3771142	9901	DieselExhP	0.00202	2.12E-06	70YrCancer	*	2.12E-06
692	471947.1	3771148	9901	DieselExhP	0.00212	2.23E-06	70YrCancer	*	2.23E-06
693	471939.9	3771154	9901	DieselExhP	0.00222	2.33E-06	70YrCancer	*	2.33E-06
694	471932.7	3771159	9901	DieselExhP	0.00232	2.44E-06	70YrCancer	*	2.44E-06
695	471925.5	3771165	9901	DieselExhP	0.0024	2.52E-06	70YrCancer	*	2.52E-06
696	471918.3	3771171	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
697	471911.1	3771177	9901	DieselExhP	0.00254	2.67E-06	70YrCancer	*	2.67E-06

698	471903.9	3771183	9901	DieselExhP	0.00259	2.72E-06	70YrCancer	*	2.72E-06
699	471896.7	3771189	9901	DieselExhP	0.00261	2.74E-06	70YrCancer	*	2.74E-06
700	471889.5	3771195	9901	DieselExhP	0.00261	2.74E-06	70YrCancer	*	2.74E-06
701	471882.3	3771201	9901	DieselExhP	0.00258	2.71E-06	70YrCancer	*	2.71E-06
702	471875.1	3771206	9901	DieselExhP	0.00253	2.66E-06	70YrCancer	*	2.66E-06
703	471961	3771108	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
704	471969.2	3771106	9901	DieselExhP	0.00146	1.53E-06	70YrCancer	*	1.53E-06
705	471977.3	3771103	9901	DieselExhP	0.00142	1.49E-06	70YrCancer	*	1.49E-06
706	471985.5	3771101	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
707	471993.7	3771098	9901	DieselExhP	0.00135	1.42E-06	70YrCancer	*	1.42E-06
708	472001.8	3771096	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
709	472010	3771093	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
710	472018.2	3771091	9901	DieselExhP	0.00124	1.30E-06	70YrCancer	*	1.30E-06
711	472033.8	3771093	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
712	472041.3	3771097	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
713	472048.8	3771101	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
714	472056.3	3771105	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
715	472063.9	3771109	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
716	472071.4	3771113	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
717	472078.9	3771117	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
718	472086.4	3771121	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
719	471952.8	3771111	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
720	471945.6	3771116	9901	DieselExhP	0.00159	1.67E-06	70YrCancer	*	1.67E-06
721	471938.4	3771122	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06
722	471931.2	3771128	9901	DieselExhP	0.00172	1.81E-06	70YrCancer	*	1.81E-06
723	471924.1	3771134	9901	DieselExhP	0.00178	1.87E-06	70YrCancer	*	1.87E-06
724	471916.9	3771140	9901	DieselExhP	0.00184	1.93E-06	70YrCancer	*	1.93E-06
725	471909.7	3771146	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
726	471902.5	3771152	9901	DieselExhP	0.00194	2.04E-06	70YrCancer	*	2.04E-06
727	471895.3	3771158	9901	DieselExhP	0.00197	2.07E-06	70YrCancer	*	2.07E-06
728	471888.1	3771164	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
729	471880.9	3771169	9901	DieselExhP	0.002	2.10E-06	70YrCancer	*	2.10E-06
730	471873.7	3771175	9901	DieselExhP	0.002	2.10E-06	70YrCancer	*	2.10E-06
731	471866.5	3771181	9901	DieselExhP	0.00198	2.08E-06	70YrCancer	*	2.08E-06
732	471859.3	3771187	9901	DieselExhP	0.00195	2.05E-06	70YrCancer	*	2.05E-06
733	471945.4	3771089	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
734	471953.7	3771086	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
735	471962.1	3771084	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
736	471970.4	3771081	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
737	471978.8	3771079	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
738	471987.1	3771076	9901	DieselExhP	0.00115	1.21E-06	70YrCancer	*	1.21E-06
739	471995.5	3771074	9901	DieselExhP	0.00112	1.18E-06	70YrCancer	*	1.18E-06
740	472003.8	3771071	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
741	472012.2	3771069	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
742	472020.5	3771066	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
743	472036.6	3771068	9901	DieselExhP	0.00102	1.07E-06	70YrCancer	*	1.07E-06
744	472044.2	3771072	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
745	472051.9	3771076	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
746	472059.6	3771080	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
747	472067.3	3771084	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06

748	472074.9	3771089	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
749	472082.6	3771093	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
750	472090.3	3771097	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
751	472097.9	3771101	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
752	472105.6	3771105	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
753	471937	3771091	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
754	471929.8	3771097	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
755	471922.6	3771103	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
756	471915.4	3771109	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
757	471908.2	3771115	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
758	471901	3771121	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
759	471893.8	3771127	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
760	471886.6	3771132	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
761	471879.4	3771138	9901	DieselExhP	0.00158	1.66E-06	70YrCancer	*	1.66E-06
762	471872.3	3771144	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
763	471865.1	3771150	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
764	471857.9	3771156	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
765	471850.7	3771162	9901	DieselExhP	0.00159	1.67E-06	70YrCancer	*	1.67E-06
766	471843.5	3771168	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
767	471929.7	3771069	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
768	471938.1	3771067	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
769	471946.6	3771064	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
770	471955.1	3771062	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
771	471963.6	3771059	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
772	471972.1	3771057	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
773	471980.5	3771054	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
774	471989	3771052	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
775	471997.5	3771049	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
776	472006	3771046	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
777	472014.5	3771044	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
778	472023	3771041	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
779	472039.2	3771043	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
780	472047	3771047	9901	DieselExhP	0.00087	9.13E-07	70YrCancer	*	9.13E-07
781	472054.8	3771051	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
782	472062.6	3771056	9901	DieselExhP	0.00089	9.34E-07	70YrCancer	*	9.34E-07
783	472070.4	3771060	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
784	472078.2	3771064	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
785	472086	3771068	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
786	472093.8	3771073	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
787	472101.5	3771077	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
788	472109.3	3771081	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
789	472117.1	3771085	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
790	472124.9	3771089	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
791	471921.2	3771072	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
792	471914	3771078	9901	DieselExhP	0.00114	1.20E-06	70YrCancer	*	1.20E-06
793	471906.8	3771084	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
794	471899.6	3771090	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
795	471892.4	3771095	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
796	471885.2	3771101	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
797	471878	3771107	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06

798	471870.8	3771113	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
799	471863.6	3771119	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
800	471856.4	3771125	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
801	471849.2	3771131	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
802	471842	3771137	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
803	471834.8	3771143	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
804	471827.6	3771148	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
805	471913.9	3771050	9901	DieselExhP	0.00095	9.97E-07	70YrCancer	*	9.97E-07
806	471922.5	3771047	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
807	471931.1	3771045	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
808	471939.6	3771042	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
809	471948.2	3771040	9901	DieselExhP	0.00091	9.55E-07	70YrCancer	*	9.55E-07
810	471956.8	3771037	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
811	471965.4	3771035	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
812	471974	3771032	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
813	471982.5	3771029	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07
814	471991.1	3771027	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
815	471999.7	3771024	9901	DieselExhP	0.00081	8.50E-07	70YrCancer	*	8.50E-07
816	472008.3	3771022	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
817	472016.8	3771019	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
818	472025.4	3771016	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
819	472041.9	3771018	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
820	472049.7	3771022	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
821	472057.6	3771027	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
822	472065.5	3771031	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
823	472073.4	3771035	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
824	472081.2	3771039	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
825	472089.1	3771044	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
826	472097	3771048	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
827	472104.9	3771052	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
828	472112.7	3771057	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
829	472120.6	3771061	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
830	472128.5	3771065	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
831	472136.4	3771069	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
832	472144.3	3771074	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
833	471905.3	3771053	9901	DieselExhP	0.00096	1.01E-06	70YrCancer	*	1.01E-06
834	471898.1	3771058	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
835	471891	3771064	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
836	471883.8	3771070	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
837	471876.6	3771076	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
838	471869.4	3771082	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
839	471862.2	3771088	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
840	471855	3771094	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
841	471847.8	3771100	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
842	471840.6	3771106	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
843	471833.4	3771111	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
844	471826.2	3771117	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
845	471819	3771123	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
846	471811.8	3771129	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
847	471898.2	3771031	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07

848	471906.8	3771028	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
849	471915.5	3771025	9901	DieselExhP	0.00083	8.71E-07	70YrCancer	*	8.71E-07
850	471924.1	3771023	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
851	471932.8	3771020	9901	DieselExhP	0.00081	8.50E-07	70YrCancer	*	8.50E-07
852	471941.4	3771018	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
853	471950.1	3771015	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
854	471958.7	3771012	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
855	471967.3	3771010	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
856	471976	3771007	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
857	471984.6	3771005	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
858	471993.3	3771002	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
859	472001.9	3770999	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07
860	472010.6	3770997	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
861	472019.2	3770994	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
862	472027.9	3770992	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
863	472044.5	3770993	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
864	472052.4	3770998	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
865	472060.4	3771002	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
866	472068.3	3771006	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
867	472076.2	3771011	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
868	472084.2	3771015	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
869	472092.1	3771019	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
870	472100.1	3771023	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
871	472108	3771028	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
872	472116	3771032	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
873	472123.9	3771036	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
874	472131.8	3771041	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
875	472139.8	3771045	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
876	472147.7	3771049	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
877	472155.7	3771054	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
878	472163.6	3771058	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
879	471889.5	3771033	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
880	471882.3	3771039	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
881	471875.1	3771045	9901	DieselExhP	0.00088	9.24E-07	70YrCancer	*	9.24E-07
882	471867.9	3771051	9901	DieselExhP	0.00089	9.34E-07	70YrCancer	*	9.34E-07
883	471860.7	3771057	9901	DieselExhP	0.0009	9.45E-07	70YrCancer	*	9.45E-07
884	471853.5	3771063	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
885	471846.3	3771069	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
886	471839.1	3771074	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
887	471832	3771080	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
888	471824.8	3771086	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
889	471817.6	3771092	9901	DieselExhP	0.00094	9.87E-07	70YrCancer	*	9.87E-07
890	471810.4	3771098	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
891	471803.2	3771104	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
892	471796	3771110	9901	DieselExhP	0.00092	9.66E-07	70YrCancer	*	9.66E-07
893	472054.8	3770894	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
894	472062.9	3770898	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
895	472071	3770903	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
896	472079.1	3770907	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
897	472087.2	3770911	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07

898	472095.3	3770916	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
899	472103.4	3770920	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
900	472111.5	3770925	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
901	472119.6	3770929	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
902	472127.7	3770933	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
903	472135.8	3770938	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
904	472143.9	3770942	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
905	472152	3770947	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
906	472160.1	3770951	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
907	472168.2	3770955	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
908	472176.3	3770960	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
909	472184.4	3770964	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
910	472192.5	3770968	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
911	472200.6	3770973	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
912	472208.7	3770977	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
913	472216.8	3770982	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
914	471771.5	3770876	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
915	471780.2	3770873	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
916	471788.8	3770871	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
917	471797.5	3770868	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
918	471806.1	3770865	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
919	471814.8	3770863	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
920	471823.4	3770860	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
921	471832.1	3770858	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
922	472136.3	3770833	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
923	472144.3	3770837	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
924	472152.2	3770842	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
925	472160.2	3770846	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
926	472168.1	3770850	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
927	472176.1	3770855	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
928	472184	3770859	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
929	472191.9	3770863	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
930	472199.9	3770867	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
931	471762.9	3770878	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
932	471755.7	3770884	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
933	471748.5	3770890	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
934	471741.3	3770896	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
935	471734.1	3770902	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
936	471726.9	3770908	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
937	471719.7	3770914	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
938	471712.5	3770920	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
939	471705.3	3770926	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
940	471698.1	3770931	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
941	471690.9	3770937	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
942	471683.7	3770943	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
943	471676.5	3770949	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
944	471669.3	3770955	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
945	471708.3	3770798	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
946	471717.1	3770796	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
947	471725.8	3770793	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07

948	471734.6	3770791	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
949	471743.3	3770788	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
950	471752.1	3770785	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
951	471760.8	3770783	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
952	471769.6	3770780	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
953	471778.3	3770777	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
954	471787.1	3770775	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
955	471795.8	3770772	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
956	471804.6	3770769	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
957	471813.3	3770767	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
958	471822.1	3770764	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
959	471830.8	3770762	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
960	471839.6	3770759	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
961	471699.5	3770801	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
962	471692.4	3770807	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
963	471685.2	3770813	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
964	471678	3770819	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
965	471670.8	3770825	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
966	471663.6	3770830	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
967	471656.4	3770836	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
968	471649.2	3770842	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
969	471642	3770848	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
970	471634.8	3770854	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
971	471627.6	3770860	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
972	471620.4	3770866	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
973	471613.2	3770872	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
974	471606	3770878	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
975	471994.1	3771359	9901	DieselExhP	0.0177	1.86E-05	70YrCancer	*	1.86E-05
976	472000.4	3771367	9901	DieselExhP	0.01538	1.61E-05	70YrCancer	*	1.61E-05
977	472006.7	3771374	9901	DieselExhP	0.01343	1.41E-05	70YrCancer	*	1.41E-05
978	472012.9	3771382	9901	DieselExhP	0.01188	1.25E-05	70YrCancer	*	1.25E-05
979	472019.2	3771390	9901	DieselExhP	0.01053	1.11E-05	70YrCancer	*	1.11E-05
980	472025.5	3771397	9901	DieselExhP	0.00942	9.89E-06	70YrCancer	*	9.89E-06
981	471990.2	3771362	9901	DieselExhP	0.01548	1.62E-05	70YrCancer	*	1.62E-05
982	471996.5	3771370	9901	DieselExhP	0.01371	1.44E-05	70YrCancer	*	1.44E-05
983	472002.8	3771378	9901	DieselExhP	0.01216	1.28E-05	70YrCancer	*	1.28E-05
984	472009.1	3771385	9901	DieselExhP	0.01087	1.14E-05	70YrCancer	*	1.14E-05
985	472015.3	3771393	9901	DieselExhP	0.0097	1.02E-05	70YrCancer	*	1.02E-05
986	472021.6	3771400	9901	DieselExhP	0.00877	9.20E-06	70YrCancer	*	9.20E-06
987	471986.4	3771366	9901	DieselExhP	0.01352	1.42E-05	70YrCancer	*	1.42E-05
988	471992.7	3771373	9901	DieselExhP	0.01216	1.28E-05	70YrCancer	*	1.28E-05
989	471998.9	3771381	9901	DieselExhP	0.0109	1.14E-05	70YrCancer	*	1.14E-05
990	472005.2	3771388	9901	DieselExhP	0.00981	1.03E-05	70YrCancer	*	1.03E-05
991	472011.5	3771396	9901	DieselExhP	0.00883	9.27E-06	70YrCancer	*	9.27E-06
992	472017.8	3771404	9901	DieselExhP	0.00802	8.42E-06	70YrCancer	*	8.42E-06
993	471982.5	3771369	9901	DieselExhP	0.01184	1.24E-05	70YrCancer	*	1.24E-05
994	471988.8	3771376	9901	DieselExhP	0.01076	1.13E-05	70YrCancer	*	1.13E-05
995	471995.1	3771384	9901	DieselExhP	0.00973	1.02E-05	70YrCancer	*	1.02E-05
996	472001.4	3771392	9901	DieselExhP	0.00881	9.25E-06	70YrCancer	*	9.25E-06
997	472007.6	3771399	9901	DieselExhP	0.00798	8.38E-06	70YrCancer	*	8.38E-06

998	472013.9	3771407	9901	DieselExhP	0.00728	7.64E-06	70YrCancer	*	7.64E-06
999	471972.4	3771364	9901	DieselExhP	0.01122	1.18E-05	70YrCancer	*	1.18E-05
1000	471978.7	3771372	9901	DieselExhP	0.01041	1.09E-05	70YrCancer	*	1.09E-05
1001	471984.9	3771380	9901	DieselExhP	0.00954	1.00E-05	70YrCancer	*	1.00E-05
1002	471991.2	3771387	9901	DieselExhP	0.00869	9.12E-06	70YrCancer	*	9.12E-06
1003	471997.5	3771395	9901	DieselExhP	0.00791	8.30E-06	70YrCancer	*	8.30E-06
1004	472003.8	3771402	9901	DieselExhP	0.00719	7.55E-06	70YrCancer	*	7.55E-06
1005	472010	3771410	9901	DieselExhP	0.00658	6.91E-06	70YrCancer	*	6.91E-06
1006	471968.5	3771367	9901	DieselExhP	0.00984	1.03E-05	70YrCancer	*	1.03E-05
1007	471974.8	3771375	9901	DieselExhP	0.00919	9.65E-06	70YrCancer	*	9.65E-06
1008	471981.1	3771383	9901	DieselExhP	0.00848	8.90E-06	70YrCancer	*	8.90E-06
1009	471987.4	3771390	9901	DieselExhP	0.00777	8.16E-06	70YrCancer	*	8.16E-06
1010	471993.6	3771398	9901	DieselExhP	0.0071	7.45E-06	70YrCancer	*	7.45E-06
1011	471999.9	3771406	9901	DieselExhP	0.00649	6.81E-06	70YrCancer	*	6.81E-06
1012	472006.2	3771413	9901	DieselExhP	0.00594	6.23E-06	70YrCancer	*	6.23E-06
1013	471964.7	3771371	9901	DieselExhP	0.00869	9.12E-06	70YrCancer	*	9.12E-06
1014	471970.9	3771378	9901	DieselExhP	0.00814	8.54E-06	70YrCancer	*	8.54E-06
1015	471977.2	3771386	9901	DieselExhP	0.00756	7.93E-06	70YrCancer	*	7.93E-06
1016	471983.5	3771393	9901	DieselExhP	0.00697	7.32E-06	70YrCancer	*	7.32E-06
1017	471989.8	3771401	9901	DieselExhP	0.0064	6.72E-06	70YrCancer	*	6.72E-06
1018	471996.1	3771409	9901	DieselExhP	0.00587	6.16E-06	70YrCancer	*	6.16E-06
1019	472002.3	3771416	9901	DieselExhP	0.0054	5.67E-06	70YrCancer	*	5.67E-06
1020	471954.5	3771366	9901	DieselExhP	0.00807	8.47E-06	70YrCancer	*	8.47E-06
1021	471960.8	3771374	9901	DieselExhP	0.00772	8.10E-06	70YrCancer	*	8.10E-06
1022	471967.1	3771381	9901	DieselExhP	0.00726	7.62E-06	70YrCancer	*	7.62E-06
1023	471973.4	3771389	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06
1024	471979.6	3771397	9901	DieselExhP	0.00628	6.59E-06	70YrCancer	*	6.59E-06
1025	471985.9	3771404	9901	DieselExhP	0.00579	6.08E-06	70YrCancer	*	6.08E-06
1026	471992.2	3771412	9901	DieselExhP	0.00534	5.60E-06	70YrCancer	*	5.60E-06
1027	471998.5	3771420	9901	DieselExhP	0.00493	5.17E-06	70YrCancer	*	5.17E-06
1028	471950.7	3771369	9901	DieselExhP	0.00721	7.57E-06	70YrCancer	*	7.57E-06
1029	471956.9	3771377	9901	DieselExhP	0.00691	7.25E-06	70YrCancer	*	7.25E-06
1030	471963.2	3771385	9901	DieselExhP	0.00654	6.86E-06	70YrCancer	*	6.86E-06
1031	471969.5	3771392	9901	DieselExhP	0.00613	6.43E-06	70YrCancer	*	6.43E-06
1032	471975.8	3771400	9901	DieselExhP	0.00571	5.99E-06	70YrCancer	*	5.99E-06
1033	471982.1	3771407	9901	DieselExhP	0.0053	5.56E-06	70YrCancer	*	5.56E-06
1034	471988.3	3771415	9901	DieselExhP	0.0049	5.14E-06	70YrCancer	*	5.14E-06
1035	471994.6	3771423	9901	DieselExhP	0.00454	4.77E-06	70YrCancer	*	4.77E-06
1036	471940.5	3771365	9901	DieselExhP	0.00661	6.94E-06	70YrCancer	*	6.94E-06
1037	471946.8	3771373	9901	DieselExhP	0.00648	6.80E-06	70YrCancer	*	6.80E-06
1038	471953.1	3771380	9901	DieselExhP	0.00623	6.54E-06	70YrCancer	*	6.54E-06
1039	471959.4	3771388	9901	DieselExhP	0.00593	6.22E-06	70YrCancer	*	6.22E-06
1040	471965.6	3771395	9901	DieselExhP	0.00559	5.87E-06	70YrCancer	*	5.87E-06
1041	471971.9	3771403	9901	DieselExhP	0.00523	5.49E-06	70YrCancer	*	5.49E-06
1042	471978.2	3771411	9901	DieselExhP	0.00487	5.11E-06	70YrCancer	*	5.11E-06
1043	471984.5	3771418	9901	DieselExhP	0.00453	4.75E-06	70YrCancer	*	4.75E-06
1044	471990.8	3771426	9901	DieselExhP	0.0042	4.41E-06	70YrCancer	*	4.41E-06
1045	471908.7	3771366	9901	DieselExhP	0.00417	4.38E-06	70YrCancer	*	4.38E-06
1046	471915	3771373	9901	DieselExhP	0.0042	4.41E-06	70YrCancer	*	4.41E-06
1047	471921.2	3771381	9901	DieselExhP	0.00419	4.40E-06	70YrCancer	*	4.40E-06

1048	471927.5	3771388	9901	DieselExhP	0.00414	4.35E-06	70YrCancer	*	4.35E-06
1049	471933.8	3771396	9901	DieselExhP	0.00404	4.24E-06	70YrCancer	*	4.24E-06
1050	471940.1	3771404	9901	DieselExhP	0.0039	4.09E-06	70YrCancer	*	4.09E-06
1051	471946.3	3771411	9901	DieselExhP	0.00374	3.93E-06	70YrCancer	*	3.93E-06
1052	471952.6	3771419	9901	DieselExhP	0.00356	3.74E-06	70YrCancer	*	3.74E-06
1053	471958.9	3771427	9901	DieselExhP	0.00338	3.55E-06	70YrCancer	*	3.55E-06
1054	471965.2	3771434	9901	DieselExhP	0.00319	3.35E-06	70YrCancer	*	3.35E-06
1055	471971.5	3771442	9901	DieselExhP	0.00301	3.16E-06	70YrCancer	*	3.16E-06
1056	471876.8	3771366	9901	DieselExhP	0.00281	2.95E-06	70YrCancer	*	2.95E-06
1057	471883.1	3771374	9901	DieselExhP	0.00287	3.01E-06	70YrCancer	*	3.01E-06
1058	471889.4	3771381	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
1059	471895.7	3771389	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
1060	471901.9	3771397	9901	DieselExhP	0.00292	3.06E-06	70YrCancer	*	3.06E-06
1061	471908.2	3771404	9901	DieselExhP	0.00289	3.03E-06	70YrCancer	*	3.03E-06
1062	471914.5	3771412	9901	DieselExhP	0.00284	2.98E-06	70YrCancer	*	2.98E-06
1063	471920.8	3771420	9901	DieselExhP	0.00278	2.92E-06	70YrCancer	*	2.92E-06
1064	471927	3771427	9901	DieselExhP	0.0027	2.83E-06	70YrCancer	*	2.83E-06
1065	471933.3	3771435	9901	DieselExhP	0.0026	2.73E-06	70YrCancer	*	2.73E-06
1066	471939.6	3771442	9901	DieselExhP	0.0025	2.62E-06	70YrCancer	*	2.62E-06
1067	471945.9	3771450	9901	DieselExhP	0.00239	2.51E-06	70YrCancer	*	2.51E-06
1068	471952.2	3771458	9901	DieselExhP	0.00228	2.39E-06	70YrCancer	*	2.39E-06
1069	471845	3771367	9901	DieselExhP	0.00201	2.11E-06	70YrCancer	*	2.11E-06
1070	471851.2	3771374	9901	DieselExhP	0.00206	2.16E-06	70YrCancer	*	2.16E-06
1071	471857.5	3771382	9901	DieselExhP	0.0021	2.20E-06	70YrCancer	*	2.20E-06
1072	471863.8	3771390	9901	DieselExhP	0.00214	2.25E-06	70YrCancer	*	2.25E-06
1073	471870.1	3771397	9901	DieselExhP	0.00216	2.27E-06	70YrCancer	*	2.27E-06
1074	471876.4	3771405	9901	DieselExhP	0.00217	2.28E-06	70YrCancer	*	2.28E-06
1075	471882.6	3771413	9901	DieselExhP	0.00216	2.27E-06	70YrCancer	*	2.27E-06
1076	471888.9	3771420	9901	DieselExhP	0.00215	2.26E-06	70YrCancer	*	2.26E-06
1077	471895.2	3771428	9901	DieselExhP	0.00212	2.23E-06	70YrCancer	*	2.23E-06
1078	471901.5	3771435	9901	DieselExhP	0.00208	2.18E-06	70YrCancer	*	2.18E-06
1079	471907.7	3771443	9901	DieselExhP	0.00203	2.13E-06	70YrCancer	*	2.13E-06
1080	471914	3771451	9901	DieselExhP	0.00198	2.08E-06	70YrCancer	*	2.08E-06
1081	471920.3	3771458	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
1082	471926.6	3771466	9901	DieselExhP	0.00186	1.95E-06	70YrCancer	*	1.95E-06
1083	471932.9	3771474	9901	DieselExhP	0.00179	1.88E-06	70YrCancer	*	1.88E-06
1084	471813.1	3771368	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
1085	471819.4	3771375	9901	DieselExhP	0.00155	1.63E-06	70YrCancer	*	1.63E-06
1086	471825.7	3771383	9901	DieselExhP	0.00159	1.67E-06	70YrCancer	*	1.67E-06
1087	471832	3771390	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
1088	471838.2	3771398	9901	DieselExhP	0.00164	1.72E-06	70YrCancer	*	1.72E-06
1089	471844.5	3771406	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
1090	471850.8	3771413	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
1091	471857.1	3771421	9901	DieselExhP	0.00168	1.76E-06	70YrCancer	*	1.76E-06
1092	471863.3	3771428	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
1093	471869.6	3771436	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
1094	471875.9	3771444	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06
1095	471882.2	3771451	9901	DieselExhP	0.00163	1.71E-06	70YrCancer	*	1.71E-06
1096	471888.5	3771459	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
1097	471894.7	3771467	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06

1098	471901	3771474	9901	DieselExhP	0.00152	1.60E-06	70YrCancer	*	1.60E-06
1099	471907.3	3771482	9901	DieselExhP	0.00148	1.55E-06	70YrCancer	*	1.55E-06
1100	471913.6	3771489	9901	DieselExhP	0.00144	1.51E-06	70YrCancer	*	1.51E-06
1101	471787.5	3771376	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
1102	471793.8	3771383	9901	DieselExhP	0.00123	1.29E-06	70YrCancer	*	1.29E-06
1103	471800.1	3771391	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
1104	471806.4	3771399	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
1105	471812.7	3771406	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
1106	471818.9	3771414	9901	DieselExhP	0.00132	1.39E-06	70YrCancer	*	1.39E-06
1107	471825.2	3771422	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
1108	471831.5	3771429	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1109	471837.8	3771437	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1110	471844	3771444	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1111	471850.3	3771452	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
1112	471856.6	3771460	9901	DieselExhP	0.00132	1.39E-06	70YrCancer	*	1.39E-06
1113	471862.9	3771467	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
1114	471869.2	3771475	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
1115	471875.4	3771482	9901	DieselExhP	0.00127	1.33E-06	70YrCancer	*	1.33E-06
1116	471881.7	3771490	9901	DieselExhP	0.00124	1.30E-06	70YrCancer	*	1.30E-06
1117	471888	3771498	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
1118	471894.3	3771505	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
1119	471765.5	3771383	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1120	471762.7	3771373	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1121	471791.5	3771118	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
1122	471768.2	3771392	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1123	471774.5	3771399	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
1124	471780.8	3771407	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
1125	471787.1	3771415	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
1126	471793.4	3771422	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
1127	471799.6	3771430	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
1128	471805.9	3771437	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
1129	471812.2	3771445	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
1130	471818.5	3771453	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
1131	471824.7	3771460	9901	DieselExhP	0.0011	1.15E-06	70YrCancer	*	1.15E-06
1132	471831	3771468	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
1133	471837.3	3771476	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
1134	471843.6	3771483	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
1135	471849.9	3771491	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
1136	471856.1	3771498	9901	DieselExhP	0.00105	1.10E-06	70YrCancer	*	1.10E-06
1137	471862.4	3771506	9901	DieselExhP	0.00103	1.08E-06	70YrCancer	*	1.08E-06
1138	471868.7	3771514	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1139	471875	3771521	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
1140	471688.3	3771446	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1141	471685.5	3771437	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1142	471682.7	3771428	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1143	471679.9	3771419	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1144	471677.1	3771409	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1145	471674.3	3771400	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1146	471671.5	3771391	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1147	471668.7	3771382	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07

1148	471665.9	3771373	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1149	471691.1	3771455	9901	DieselExhP	0.00056	5.88E-07	70YrCancer	*	5.88E-07
1150	471697.3	3771463	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1151	471703.6	3771470	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1152	471709.9	3771478	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1153	471716.2	3771486	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1154	471722.4	3771493	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1155	471728.7	3771501	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1156	471735	3771509	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1157	471741.3	3771516	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1158	471747.6	3771524	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1159	471753.8	3771531	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1160	471760.1	3771539	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1161	471766.4	3771547	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1162	471772.7	3771554	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1163	471778.9	3771562	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1164	471785.2	3771570	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1165	471791.5	3771577	9901	DieselExhP	0.00056	5.88E-07	70YrCancer	*	5.88E-07
1166	471797.8	3771585	9901	DieselExhP	0.00055	5.77E-07	70YrCancer	*	5.77E-07
1167	471611.1	3771510	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1168	471608.3	3771500	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1169	471605.5	3771491	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1170	471602.7	3771482	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1171	471599.9	3771473	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1172	471597.1	3771464	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1173	471594.3	3771455	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1174	471591.5	3771445	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1175	471588.7	3771436	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1176	471586	3771427	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1177	471583.2	3771418	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1178	471580.4	3771409	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1179	471577.6	3771400	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1180	471574.8	3771390	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1181	471572	3771381	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1182	471535.7	3771262	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1183	471532.9	3771253	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1184	471530.1	3771244	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1185	471527.3	3771235	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1186	471529.1	3771217	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1187	471533.6	3771208	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1188	471538.1	3771200	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1189	471542.6	3771192	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1190	471547.2	3771183	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1191	471551.7	3771175	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1192	471556.2	3771166	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1193	471560.7	3771158	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1194	471565.3	3771149	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1195	471569.8	3771141	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1196	471574.3	3771132	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1197	471578.8	3771124	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07

1198	471583.4	3771116	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1199	471587.9	3771107	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1200	471592.4	3771099	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1201	471596.9	3771090	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1202	471601.5	3771082	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1203	471606	3771073	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1204	471610.5	3771065	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1205	471615	3771056	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1206	471619.6	3771048	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1207	471624.1	3771039	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1208	471628.6	3771031	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1209	471633.1	3771023	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1210	471637.7	3771014	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1211	471642.2	3771006	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1212	471646.7	3770997	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1213	471651.2	3770989	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1214	471655.8	3770980	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1215	471660.3	3770972	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1216	471664.8	3770963	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1217	471613.9	3771519	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1218	471620.1	3771526	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1219	471626.4	3771534	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1220	471632.7	3771542	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1221	471639	3771549	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1222	471645.3	3771557	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1223	471651.5	3771565	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1224	471657.8	3771572	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1225	471664.1	3771580	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1226	471670.4	3771587	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1227	471676.6	3771595	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1228	471682.9	3771603	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1229	471689.2	3771610	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1230	471695.5	3771618	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1231	471701.8	3771626	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1232	471708	3771633	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1233	471714.3	3771641	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1234	471720.6	3771648	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1235	471533.8	3771573	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
1236	471531	3771564	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07
1237	471528.1	3771554	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07
1238	471525.2	3771545	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
1239	471522.4	3771535	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
1240	471519.5	3771526	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1241	471516.6	3771517	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1242	471513.8	3771507	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1243	471510.9	3771498	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1244	471508.1	3771488	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1245	471505.2	3771479	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1246	471502.3	3771470	9901	DieselExhP	0.00019	1.99E-07	70YrCancer	*	1.99E-07
1247	471499.5	3771460	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07

1248	471496.6	3771451	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
1249	471493.7	3771441	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1250	471490.9	3771432	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1251	471488	3771423	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1252	471485.1	3771413	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1253	471482.3	3771404	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1254	471479.4	3771394	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1255	471456.5	3771319	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1256	471453.7	3771310	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1257	471450.8	3771300	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1258	471447.9	3771291	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1259	471445.1	3771281	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1260	471442.2	3771272	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1261	471439.3	3771263	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1262	471436.5	3771253	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1263	471433.6	3771244	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1264	471430.8	3771234	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1265	471427.9	3771225	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
1266	471429.7	3771207	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1267	471434.3	3771198	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1268	471438.9	3771190	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1269	471443.6	3771181	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1270	471448.2	3771172	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1271	471452.9	3771164	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1272	471457.5	3771155	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1273	471462.2	3771146	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1274	471466.8	3771138	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1275	471471.4	3771129	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1276	471476.1	3771120	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1277	471480.7	3771112	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1278	471485.4	3771103	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1279	471490	3771094	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1280	471494.6	3771086	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1281	471499.3	3771077	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1282	471503.9	3771068	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1283	471508.6	3771060	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1284	471513.2	3771051	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1285	471517.8	3771042	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1286	471522.5	3771034	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1287	471527.1	3771025	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1288	471531.8	3771016	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1289	471536.4	3771008	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1290	471541	3770999	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1291	471545.7	3770990	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1292	471550.3	3770982	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1293	471555	3770973	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1294	471559.6	3770964	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1295	471564.3	3770956	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1296	471568.9	3770947	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1297	471573.5	3770938	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07

1298	471578.2	3770930	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1299	471582.8	3770921	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1300	471587.5	3770912	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1301	471592.1	3770904	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1302	471596.7	3770895	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1303	471601.4	3770886	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1304	471536.7	3771582	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1305	471543	3771590	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1306	471549.2	3771598	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1307	471555.5	3771605	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1308	471561.8	3771613	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1309	471568.1	3771621	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1310	471574.3	3771628	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1311	471580.6	3771636	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1312	471586.9	3771643	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1313	471593.2	3771651	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1314	471599.5	3771659	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1315	471605.7	3771666	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1316	471612	3771674	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1317	471618.3	3771681	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1318	471624.6	3771689	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1319	471630.8	3771697	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1320	471637.1	3771704	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1321	471643.4	3771712	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1322	472025.8	3771391	9901	DieselExhP	0.01047	1.10E-05	70YrCancer	*	1.10E-05
1323	472018.7	3771383	9901	DieselExhP	0.01178	1.24E-05	70YrCancer	*	1.24E-05
1324	472011.7	3771376	9901	DieselExhP	0.01321	1.39E-05	70YrCancer	*	1.39E-05
1325	472004.6	3771369	9901	DieselExhP	0.01489	1.56E-05	70YrCancer	*	1.56E-05
1326	471997.5	3771362	9901	DieselExhP	0.01687	1.77E-05	70YrCancer	*	1.77E-05
1327	471675.8	3771041	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1328	471605.1	3770970	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1329	472031.3	3771399	9901	DieselExhP	0.0092	9.66E-06	70YrCancer	*	9.66E-06
1330	472038.6	3771393	9901	DieselExhP	0.00948	9.95E-06	70YrCancer	*	9.95E-06
1331	472045.8	3771387	9901	DieselExhP	0.00927	9.73E-06	70YrCancer	*	9.73E-06
1332	472053.1	3771382	9901	DieselExhP	0.00896	9.40E-06	70YrCancer	*	9.40E-06
1333	472060.3	3771376	9901	DieselExhP	0.00863	9.06E-06	70YrCancer	*	9.06E-06
1334	472067.6	3771370	9901	DieselExhP	0.00825	8.66E-06	70YrCancer	*	8.66E-06
1335	472074.9	3771364	9901	DieselExhP	0.0078	8.19E-06	70YrCancer	*	8.19E-06
1336	472082.1	3771358	9901	DieselExhP	0.00726	7.62E-06	70YrCancer	*	7.62E-06
1337	472089.4	3771352	9901	DieselExhP	0.00667	7.00E-06	70YrCancer	*	7.00E-06
1338	472096.7	3771347	9901	DieselExhP	0.00607	6.37E-06	70YrCancer	*	6.37E-06
1339	472103.9	3771341	9901	DieselExhP	0.00548	5.75E-06	70YrCancer	*	5.75E-06
1340	472111.2	3771335	9901	DieselExhP	0.00493	5.17E-06	70YrCancer	*	5.17E-06
1341	472118.4	3771329	9901	DieselExhP	0.00443	4.65E-06	70YrCancer	*	4.65E-06
1342	472125.7	3771323	9901	DieselExhP	0.00397	4.17E-06	70YrCancer	*	4.17E-06
1343	472027.6	3771403	9901	DieselExhP	0.00873	9.16E-06	70YrCancer	*	9.16E-06
1344	472020.9	3771395	9901	DieselExhP	0.00961	1.01E-05	70YrCancer	*	1.01E-05
1345	472034.4	3771403	9901	DieselExhP	0.00871	9.14E-06	70YrCancer	*	9.14E-06
1346	472041.7	3771397	9901	DieselExhP	0.00888	9.32E-06	70YrCancer	*	9.32E-06
1347	472049	3771391	9901	DieselExhP	0.0086	9.03E-06	70YrCancer	*	9.03E-06

1348	472056.2	3771386	9901	DieselExhP	0.00828	8.69E-06	70YrCancer	*	8.69E-06
1349	472063.5	3771380	9901	DieselExhP	0.00797	8.37E-06	70YrCancer	*	8.37E-06
1350	472070.7	3771374	9901	DieselExhP	0.00764	8.02E-06	70YrCancer	*	8.02E-06
1351	472078	3771368	9901	DieselExhP	0.00724	7.60E-06	70YrCancer	*	7.60E-06
1352	472085.3	3771362	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06
1353	472092.5	3771356	9901	DieselExhP	0.00628	6.59E-06	70YrCancer	*	6.59E-06
1354	472099.8	3771351	9901	DieselExhP	0.00575	6.04E-06	70YrCancer	*	6.04E-06
1355	472107	3771345	9901	DieselExhP	0.00523	5.49E-06	70YrCancer	*	5.49E-06
1356	472114.3	3771339	9901	DieselExhP	0.00473	4.96E-06	70YrCancer	*	4.96E-06
1357	472121.6	3771333	9901	DieselExhP	0.00427	4.48E-06	70YrCancer	*	4.48E-06
1358	472128.8	3771327	9901	DieselExhP	0.00385	4.04E-06	70YrCancer	*	4.04E-06
1359	472030.7	3771406	9901	DieselExhP	0.00833	8.74E-06	70YrCancer	*	8.74E-06
1360	472023.9	3771406	9901	DieselExhP	0.00809	8.49E-06	70YrCancer	*	8.49E-06
1361	472017.2	3771398	9901	DieselExhP	0.00882	9.26E-06	70YrCancer	*	9.26E-06
1362	472037.6	3771407	9901	DieselExhP	0.00831	8.72E-06	70YrCancer	*	8.72E-06
1363	472044.8	3771401	9901	DieselExhP	0.00839	8.81E-06	70YrCancer	*	8.81E-06
1364	472052.1	3771395	9901	DieselExhP	0.00803	8.43E-06	70YrCancer	*	8.43E-06
1365	472059.4	3771389	9901	DieselExhP	0.0077	8.08E-06	70YrCancer	*	8.08E-06
1366	472066.6	3771384	9901	DieselExhP	0.00741	7.78E-06	70YrCancer	*	7.78E-06
1367	472073.9	3771378	9901	DieselExhP	0.0071	7.45E-06	70YrCancer	*	7.45E-06
1368	472081.1	3771372	9901	DieselExhP	0.00675	7.08E-06	70YrCancer	*	7.08E-06
1369	472088.4	3771366	9901	DieselExhP	0.00635	6.66E-06	70YrCancer	*	6.66E-06
1370	472095.7	3771360	9901	DieselExhP	0.00591	6.20E-06	70YrCancer	*	6.20E-06
1371	472102.9	3771354	9901	DieselExhP	0.00545	5.72E-06	70YrCancer	*	5.72E-06
1372	472110.2	3771349	9901	DieselExhP	0.00499	5.24E-06	70YrCancer	*	5.24E-06
1373	472117.4	3771343	9901	DieselExhP	0.00454	4.77E-06	70YrCancer	*	4.77E-06
1374	472124.7	3771337	9901	DieselExhP	0.00412	4.32E-06	70YrCancer	*	4.32E-06
1375	472132	3771331	9901	DieselExhP	0.00374	3.93E-06	70YrCancer	*	3.93E-06
1376	472040.7	3771411	9901	DieselExhP	0.00796	8.35E-06	70YrCancer	*	8.35E-06
1377	472048	3771405	9901	DieselExhP	0.00796	8.35E-06	70YrCancer	*	8.35E-06
1378	472055.2	3771399	9901	DieselExhP	0.00756	7.93E-06	70YrCancer	*	7.93E-06
1379	472062.5	3771393	9901	DieselExhP	0.00721	7.57E-06	70YrCancer	*	7.57E-06
1380	472069.7	3771387	9901	DieselExhP	0.00692	7.26E-06	70YrCancer	*	7.26E-06
1381	472077	3771382	9901	DieselExhP	0.00663	6.96E-06	70YrCancer	*	6.96E-06
1382	472084.3	3771376	9901	DieselExhP	0.00632	6.63E-06	70YrCancer	*	6.63E-06
1383	472091.5	3771370	9901	DieselExhP	0.00597	6.27E-06	70YrCancer	*	6.27E-06
1384	472098.8	3771364	9901	DieselExhP	0.00558	5.86E-06	70YrCancer	*	5.86E-06
1385	472106.1	3771358	9901	DieselExhP	0.00517	5.43E-06	70YrCancer	*	5.43E-06
1386	472113.3	3771352	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1387	472120.6	3771347	9901	DieselExhP	0.00436	4.58E-06	70YrCancer	*	4.58E-06
1388	472127.8	3771341	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
1389	472135.1	3771335	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
1390	472035.3	3771414	9901	DieselExhP	0.00762	8.00E-06	70YrCancer	*	8.00E-06
1391	472026.7	3771413	9901	DieselExhP	0.00725	7.61E-06	70YrCancer	*	7.61E-06
1392	472018.1	3771413	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06
1393	472009.8	3771403	9901	DieselExhP	0.00749	7.86E-06	70YrCancer	*	7.86E-06
1394	472043.8	3771415	9901	DieselExhP	0.00764	8.02E-06	70YrCancer	*	8.02E-06
1395	472051.1	3771409	9901	DieselExhP	0.00759	7.97E-06	70YrCancer	*	7.97E-06
1396	472058.4	3771403	9901	DieselExhP	0.00715	7.50E-06	70YrCancer	*	7.50E-06
1397	472065.6	3771397	9901	DieselExhP	0.00678	7.12E-06	70YrCancer	*	7.12E-06

1398	472072.9	3771391	9901	DieselExhP	0.00649	6.81E-06	70YrCancer	*	6.81E-06
1399	472080.1	3771386	9901	DieselExhP	0.00622	6.53E-06	70YrCancer	*	6.53E-06
1400	472087.4	3771380	9901	DieselExhP	0.00593	6.22E-06	70YrCancer	*	6.22E-06
1401	472094.7	3771374	9901	DieselExhP	0.00562	5.90E-06	70YrCancer	*	5.90E-06
1402	472101.9	3771368	9901	DieselExhP	0.00528	5.54E-06	70YrCancer	*	5.54E-06
1403	472109.2	3771362	9901	DieselExhP	0.00492	5.16E-06	70YrCancer	*	5.16E-06
1404	472116.4	3771356	9901	DieselExhP	0.00455	4.78E-06	70YrCancer	*	4.78E-06
1405	472123.7	3771351	9901	DieselExhP	0.00418	4.39E-06	70YrCancer	*	4.39E-06
1406	472131	3771345	9901	DieselExhP	0.00384	4.03E-06	70YrCancer	*	4.03E-06
1407	472138.2	3771339	9901	DieselExhP	0.00351	3.68E-06	70YrCancer	*	3.68E-06
1408	472038.7	3771418	9901	DieselExhP	0.00735	7.71E-06	70YrCancer	*	7.71E-06
1409	472030.5	3771417	9901	DieselExhP	0.007	7.35E-06	70YrCancer	*	7.35E-06
1410	472022.3	3771417	9901	DieselExhP	0.00655	6.87E-06	70YrCancer	*	6.87E-06
1411	472014.1	3771416	9901	DieselExhP	0.0061	6.40E-06	70YrCancer	*	6.40E-06
1412	472006.1	3771407	9901	DieselExhP	0.00669	7.02E-06	70YrCancer	*	7.02E-06
1413	472047	3771419	9901	DieselExhP	0.00738	7.75E-06	70YrCancer	*	7.75E-06
1414	472054.2	3771413	9901	DieselExhP	0.00728	7.64E-06	70YrCancer	*	7.64E-06
1415	472061.5	3771407	9901	DieselExhP	0.0068	7.14E-06	70YrCancer	*	7.14E-06
1416	472068.8	3771401	9901	DieselExhP	0.00641	6.73E-06	70YrCancer	*	6.73E-06
1417	472076	3771395	9901	DieselExhP	0.00612	6.42E-06	70YrCancer	*	6.42E-06
1418	472083.3	3771389	9901	DieselExhP	0.00586	6.15E-06	70YrCancer	*	6.15E-06
1419	472090.5	3771384	9901	DieselExhP	0.00559	5.87E-06	70YrCancer	*	5.87E-06
1420	472097.8	3771378	9901	DieselExhP	0.00531	5.57E-06	70YrCancer	*	5.57E-06
1421	472105.1	3771372	9901	DieselExhP	0.005	5.25E-06	70YrCancer	*	5.25E-06
1422	472112.3	3771366	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
1423	472119.6	3771360	9901	DieselExhP	0.00435	4.57E-06	70YrCancer	*	4.57E-06
1424	472126.8	3771354	9901	DieselExhP	0.00402	4.22E-06	70YrCancer	*	4.22E-06
1425	472134.1	3771349	9901	DieselExhP	0.0037	3.88E-06	70YrCancer	*	3.88E-06
1426	472141.4	3771343	9901	DieselExhP	0.0034	3.57E-06	70YrCancer	*	3.57E-06
1427	472042.1	3771422	9901	DieselExhP	0.00711	7.46E-06	70YrCancer	*	7.46E-06
1428	472034.1	3771421	9901	DieselExhP	0.00677	7.11E-06	70YrCancer	*	7.11E-06
1429	472026.1	3771421	9901	DieselExhP	0.00634	6.65E-06	70YrCancer	*	6.65E-06
1430	472018.1	3771420	9901	DieselExhP	0.0059	6.19E-06	70YrCancer	*	6.19E-06
1431	472010.1	3771419	9901	DieselExhP	0.0055	5.77E-06	70YrCancer	*	5.77E-06
1432	472002.3	3771411	9901	DieselExhP	0.00601	6.31E-06	70YrCancer	*	6.31E-06
1433	472050.1	3771423	9901	DieselExhP	0.00712	7.47E-06	70YrCancer	*	7.47E-06
1434	472057.4	3771417	9901	DieselExhP	0.00699	7.34E-06	70YrCancer	*	7.34E-06
1435	472064.6	3771411	9901	DieselExhP	0.0065	6.82E-06	70YrCancer	*	6.82E-06
1436	472071.9	3771405	9901	DieselExhP	0.00609	6.39E-06	70YrCancer	*	6.39E-06
1437	472079.1	3771399	9901	DieselExhP	0.00579	6.08E-06	70YrCancer	*	6.08E-06
1438	472086.4	3771393	9901	DieselExhP	0.00553	5.80E-06	70YrCancer	*	5.80E-06
1439	472093.7	3771388	9901	DieselExhP	0.00528	5.54E-06	70YrCancer	*	5.54E-06
1440	472100.9	3771382	9901	DieselExhP	0.00502	5.27E-06	70YrCancer	*	5.27E-06
1441	472108.2	3771376	9901	DieselExhP	0.00475	4.99E-06	70YrCancer	*	4.99E-06
1442	472115.5	3771370	9901	DieselExhP	0.00446	4.68E-06	70YrCancer	*	4.68E-06
1443	472122.7	3771364	9901	DieselExhP	0.00416	4.37E-06	70YrCancer	*	4.37E-06
1444	472130	3771358	9901	DieselExhP	0.00386	4.05E-06	70YrCancer	*	4.05E-06
1445	472137.2	3771352	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
1446	472144.5	3771347	9901	DieselExhP	0.00329	3.45E-06	70YrCancer	*	3.45E-06
1447	472053.2	3771426	9901	DieselExhP	0.00692	7.26E-06	70YrCancer	*	7.26E-06

1448	472060.5	3771421	9901	DieselExhP	0.00675	7.08E-06	70YrCancer	*	7.08E-06
1449	472067.8	3771415	9901	DieselExhP	0.00623	6.54E-06	70YrCancer	*	6.54E-06
1450	472075	3771409	9901	DieselExhP	0.00581	6.10E-06	70YrCancer	*	6.10E-06
1451	472082.3	3771403	9901	DieselExhP	0.0055	5.77E-06	70YrCancer	*	5.77E-06
1452	472089.5	3771397	9901	DieselExhP	0.00525	5.51E-06	70YrCancer	*	5.51E-06
1453	472096.8	3771391	9901	DieselExhP	0.00501	5.26E-06	70YrCancer	*	5.26E-06
1454	472104.1	3771386	9901	DieselExhP	0.00477	5.01E-06	70YrCancer	*	5.01E-06
1455	472111.3	3771380	9901	DieselExhP	0.00452	4.74E-06	70YrCancer	*	4.74E-06
1456	472118.6	3771374	9901	DieselExhP	0.00425	4.46E-06	70YrCancer	*	4.46E-06
1457	472125.9	3771368	9901	DieselExhP	0.00398	4.18E-06	70YrCancer	*	4.18E-06
1458	472133.1	3771362	9901	DieselExhP	0.00371	3.89E-06	70YrCancer	*	3.89E-06
1459	472140.4	3771356	9901	DieselExhP	0.00344	3.61E-06	70YrCancer	*	3.61E-06
1460	472147.6	3771351	9901	DieselExhP	0.00319	3.35E-06	70YrCancer	*	3.35E-06
1461	472047.6	3771430	9901	DieselExhP	0.00665	6.98E-06	70YrCancer	*	6.98E-06
1462	472038.7	3771429	9901	DieselExhP	0.00626	6.57E-06	70YrCancer	*	6.57E-06
1463	472029.9	3771428	9901	DieselExhP	0.00576	6.05E-06	70YrCancer	*	6.05E-06
1464	472021.1	3771427	9901	DieselExhP	0.00529	5.55E-06	70YrCancer	*	5.55E-06
1465	472012.3	3771427	9901	DieselExhP	0.0049	5.14E-06	70YrCancer	*	5.14E-06
1466	472003.5	3771426	9901	DieselExhP	0.0046	4.83E-06	70YrCancer	*	4.83E-06
1467	471994.9	3771416	9901	DieselExhP	0.00505	5.30E-06	70YrCancer	*	5.30E-06
1468	471995.6	3771390	9901	DieselExhP	0.00858	9.01E-06	70YrCancer	*	9.01E-06
1469	472056.4	3771430	9901	DieselExhP	0.00674	7.07E-06	70YrCancer	*	7.07E-06
1470	472063.6	3771424	9901	DieselExhP	0.00655	6.87E-06	70YrCancer	*	6.87E-06
1471	472070.9	3771419	9901	DieselExhP	0.006	6.30E-06	70YrCancer	*	6.30E-06
1472	472078.2	3771413	9901	DieselExhP	0.00556	5.84E-06	70YrCancer	*	5.84E-06
1473	472085.4	3771407	9901	DieselExhP	0.00524	5.50E-06	70YrCancer	*	5.50E-06
1474	472092.7	3771401	9901	DieselExhP	0.00499	5.24E-06	70YrCancer	*	5.24E-06
1475	472099.9	3771395	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1476	472107.2	3771389	9901	DieselExhP	0.00453	4.75E-06	70YrCancer	*	4.75E-06
1477	472114.5	3771384	9901	DieselExhP	0.0043	4.51E-06	70YrCancer	*	4.51E-06
1478	472121.7	3771378	9901	DieselExhP	0.00406	4.26E-06	70YrCancer	*	4.26E-06
1479	472129	3771372	9901	DieselExhP	0.00381	4.00E-06	70YrCancer	*	4.00E-06
1480	472136.2	3771366	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
1481	472143.5	3771360	9901	DieselExhP	0.00332	3.48E-06	70YrCancer	*	3.48E-06
1482	472150.8	3771354	9901	DieselExhP	0.00308	3.23E-06	70YrCancer	*	3.23E-06
1483	472050.9	3771434	9901	DieselExhP	0.00647	6.79E-06	70YrCancer	*	6.79E-06
1484	472042.4	3771433	9901	DieselExhP	0.0061	6.40E-06	70YrCancer	*	6.40E-06
1485	472033.8	3771432	9901	DieselExhP	0.00562	5.90E-06	70YrCancer	*	5.90E-06
1486	472025.2	3771431	9901	DieselExhP	0.00515	5.41E-06	70YrCancer	*	5.41E-06
1487	472016.7	3771431	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1488	472008.1	3771430	9901	DieselExhP	0.00446	4.68E-06	70YrCancer	*	4.68E-06
1489	471999.5	3771429	9901	DieselExhP	0.00423	4.44E-06	70YrCancer	*	4.44E-06
1490	472059.5	3771434	9901	DieselExhP	0.00657	6.90E-06	70YrCancer	*	6.90E-06
1491	472066.8	3771428	9901	DieselExhP	0.00635	6.66E-06	70YrCancer	*	6.66E-06
1492	472074	3771423	9901	DieselExhP	0.00578	6.07E-06	70YrCancer	*	6.07E-06
1493	472081.3	3771417	9901	DieselExhP	0.00533	5.59E-06	70YrCancer	*	5.59E-06
1494	472088.5	3771411	9901	DieselExhP	0.00501	5.26E-06	70YrCancer	*	5.26E-06
1495	472095.8	3771405	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1496	472103.1	3771399	9901	DieselExhP	0.00454	4.77E-06	70YrCancer	*	4.77E-06
1497	472110.3	3771393	9901	DieselExhP	0.00432	4.53E-06	70YrCancer	*	4.53E-06

1498	472117.6	3771388	9901	DieselExhP	0.00411	4.31E-06	70YrCancer	*	4.31E-06
1499	472124.9	3771382	9901	DieselExhP	0.00389	4.08E-06	70YrCancer	*	4.08E-06
1500	472132.1	3771376	9901	DieselExhP	0.00366	3.84E-06	70YrCancer	*	3.84E-06
1501	472139.4	3771370	9901	DieselExhP	0.00343	3.60E-06	70YrCancer	*	3.60E-06
1502	472146.6	3771364	9901	DieselExhP	0.0032	3.36E-06	70YrCancer	*	3.36E-06
1503	472153.9	3771358	9901	DieselExhP	0.00299	3.14E-06	70YrCancer	*	3.14E-06
1504	472066.6	3771453	9901	DieselExhP	0.00579	6.08E-06	70YrCancer	*	6.08E-06
1505	472058	3771452	9901	DieselExhP	0.00535	5.62E-06	70YrCancer	*	5.62E-06
1506	472049.5	3771452	9901	DieselExhP	0.00487	5.11E-06	70YrCancer	*	5.11E-06
1507	472040.9	3771451	9901	DieselExhP	0.0044	4.62E-06	70YrCancer	*	4.62E-06
1508	472032.3	3771450	9901	DieselExhP	0.00401	4.21E-06	70YrCancer	*	4.21E-06
1509	472023.8	3771450	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
1510	472015.2	3771449	9901	DieselExhP	0.00351	3.68E-06	70YrCancer	*	3.68E-06
1511	472006.6	3771448	9901	DieselExhP	0.00335	3.52E-06	70YrCancer	*	3.52E-06
1512	471998.1	3771447	9901	DieselExhP	0.00322	3.38E-06	70YrCancer	*	3.38E-06
1513	471989.5	3771447	9901	DieselExhP	0.00311	3.26E-06	70YrCancer	*	3.26E-06
1514	471980.9	3771446	9901	DieselExhP	0.003	3.15E-06	70YrCancer	*	3.15E-06
1515	471972.6	3771437	9901	DieselExhP	0.00322	3.38E-06	70YrCancer	*	3.38E-06
1516	471972.8	3771428	9901	DieselExhP	0.00362	3.80E-06	70YrCancer	*	3.80E-06
1517	471973	3771420	9901	DieselExhP	0.00409	4.29E-06	70YrCancer	*	4.29E-06
1518	471973.3	3771411	9901	DieselExhP	0.00466	4.89E-06	70YrCancer	*	4.89E-06
1519	472075.2	3771454	9901	DieselExhP	0.00585	6.14E-06	70YrCancer	*	6.14E-06
1520	472082.4	3771448	9901	DieselExhP	0.0056	5.88E-06	70YrCancer	*	5.88E-06
1521	472089.7	3771442	9901	DieselExhP	0.00499	5.24E-06	70YrCancer	*	5.24E-06
1522	472097	3771436	9901	DieselExhP	0.00449	4.71E-06	70YrCancer	*	4.71E-06
1523	472104.2	3771430	9901	DieselExhP	0.00415	4.36E-06	70YrCancer	*	4.36E-06
1524	472111.5	3771425	9901	DieselExhP	0.00389	4.08E-06	70YrCancer	*	4.08E-06
1525	472118.7	3771419	9901	DieselExhP	0.00368	3.86E-06	70YrCancer	*	3.86E-06
1526	472126	3771413	9901	DieselExhP	0.0035	3.67E-06	70YrCancer	*	3.67E-06
1527	472133.3	3771407	9901	DieselExhP	0.00334	3.51E-06	70YrCancer	*	3.51E-06
1528	472140.5	3771401	9901	DieselExhP	0.00318	3.34E-06	70YrCancer	*	3.34E-06
1529	472147.8	3771395	9901	DieselExhP	0.00302	3.17E-06	70YrCancer	*	3.17E-06
1530	472155	3771389	9901	DieselExhP	0.00286	3.00E-06	70YrCancer	*	3.00E-06
1531	472162.3	3771384	9901	DieselExhP	0.0027	2.83E-06	70YrCancer	*	2.83E-06
1532	472169.6	3771378	9901	DieselExhP	0.00255	2.68E-06	70YrCancer	*	2.68E-06
1533	472081.7	3771472	9901	DieselExhP	0.00519	5.45E-06	70YrCancer	*	5.45E-06
1534	472072.6	3771472	9901	DieselExhP	0.00476	5.00E-06	70YrCancer	*	5.00E-06
1535	472063.4	3771471	9901	DieselExhP	0.00426	4.47E-06	70YrCancer	*	4.47E-06
1536	472054.3	3771470	9901	DieselExhP	0.00376	3.95E-06	70YrCancer	*	3.95E-06
1537	472045.1	3771469	9901	DieselExhP	0.00337	3.54E-06	70YrCancer	*	3.54E-06
1538	472036	3771469	9901	DieselExhP	0.0031	3.25E-06	70YrCancer	*	3.25E-06
1539	472026.9	3771468	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
1540	472017.7	3771467	9901	DieselExhP	0.00277	2.91E-06	70YrCancer	*	2.91E-06
1541	472008.6	3771467	9901	DieselExhP	0.00266	2.79E-06	70YrCancer	*	2.79E-06
1542	471999.4	3771466	9901	DieselExhP	0.00257	2.70E-06	70YrCancer	*	2.70E-06
1543	471990.3	3771465	9901	DieselExhP	0.00249	2.61E-06	70YrCancer	*	2.61E-06
1544	471981.2	3771464	9901	DieselExhP	0.00242	2.54E-06	70YrCancer	*	2.54E-06
1545	471972	3771464	9901	DieselExhP	0.00234	2.46E-06	70YrCancer	*	2.46E-06
1546	471962.9	3771463	9901	DieselExhP	0.00227	2.38E-06	70YrCancer	*	2.38E-06
1547	471954	3771453	9901	DieselExhP	0.00242	2.54E-06	70YrCancer	*	2.54E-06

1548	471954.2	3771444	9901	DieselExhP	0.00268	2.81E-06	70YrCancer	*	2.81E-06
1549	471954.5	3771435	9901	DieselExhP	0.00298	3.13E-06	70YrCancer	*	3.13E-06
1550	471955.2	3771407	9901	DieselExhP	0.00425	4.46E-06	70YrCancer	*	4.46E-06
1551	471955.5	3771398	9901	DieselExhP	0.00487	5.11E-06	70YrCancer	*	5.11E-06
1552	471956.2	3771370	9901	DieselExhP	0.00769	8.07E-06	70YrCancer	*	8.07E-06
1553	472090.8	3771473	9901	DieselExhP	0.00534	5.60E-06	70YrCancer	*	5.60E-06
1554	472098.1	3771467	9901	DieselExhP	0.0051	5.35E-06	70YrCancer	*	5.35E-06
1555	472105.4	3771462	9901	DieselExhP	0.00449	4.71E-06	70YrCancer	*	4.71E-06
1556	472112.6	3771456	9901	DieselExhP	0.00397	4.17E-06	70YrCancer	*	4.17E-06
1557	472119.9	3771450	9901	DieselExhP	0.0036	3.78E-06	70YrCancer	*	3.78E-06
1558	472127.1	3771444	9901	DieselExhP	0.00333	3.50E-06	70YrCancer	*	3.50E-06
1559	472134.4	3771438	9901	DieselExhP	0.00312	3.27E-06	70YrCancer	*	3.27E-06
1560	472141.7	3771432	9901	DieselExhP	0.00295	3.10E-06	70YrCancer	*	3.10E-06
1561	472148.9	3771426	9901	DieselExhP	0.00281	2.95E-06	70YrCancer	*	2.95E-06
1562	472156.2	3771421	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06
1563	472163.5	3771415	9901	DieselExhP	0.00255	2.68E-06	70YrCancer	*	2.68E-06
1564	472170.7	3771409	9901	DieselExhP	0.00243	2.55E-06	70YrCancer	*	2.55E-06
1565	472178	3771403	9901	DieselExhP	0.00231	2.42E-06	70YrCancer	*	2.42E-06
1566	472185.2	3771397	9901	DieselExhP	0.0022	2.31E-06	70YrCancer	*	2.31E-06
1567	472097.5	3771492	9901	DieselExhP	0.00477	5.01E-06	70YrCancer	*	5.01E-06
1568	472088.5	3771491	9901	DieselExhP	0.00434	4.56E-06	70YrCancer	*	4.56E-06
1569	472079.5	3771490	9901	DieselExhP	0.00388	4.07E-06	70YrCancer	*	4.07E-06
1570	472070.4	3771490	9901	DieselExhP	0.0034	3.57E-06	70YrCancer	*	3.57E-06
1571	472061.4	3771489	9901	DieselExhP	0.00301	3.16E-06	70YrCancer	*	3.16E-06
1572	472052.4	3771488	9901	DieselExhP	0.00273	2.87E-06	70YrCancer	*	2.87E-06
1573	472043.4	3771488	9901	DieselExhP	0.00254	2.67E-06	70YrCancer	*	2.67E-06
1574	472034.4	3771487	9901	DieselExhP	0.0024	2.52E-06	70YrCancer	*	2.52E-06
1575	472025.3	3771486	9901	DieselExhP	0.0023	2.41E-06	70YrCancer	*	2.41E-06
1576	472016.3	3771485	9901	DieselExhP	0.00222	2.33E-06	70YrCancer	*	2.33E-06
1577	472007.3	3771485	9901	DieselExhP	0.00215	2.26E-06	70YrCancer	*	2.26E-06
1578	471998.3	3771484	9901	DieselExhP	0.00209	2.19E-06	70YrCancer	*	2.19E-06
1579	471989.3	3771483	9901	DieselExhP	0.00204	2.14E-06	70YrCancer	*	2.14E-06
1580	471980.2	3771482	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
1581	471971.2	3771482	9901	DieselExhP	0.00194	2.04E-06	70YrCancer	*	2.04E-06
1582	471962.2	3771481	9901	DieselExhP	0.00189	1.98E-06	70YrCancer	*	1.98E-06
1583	471953.2	3771480	9901	DieselExhP	0.00183	1.92E-06	70YrCancer	*	1.92E-06
1584	471944.2	3771479	9901	DieselExhP	0.00178	1.87E-06	70YrCancer	*	1.87E-06
1585	471935.4	3771470	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
1586	471935.6	3771461	9901	DieselExhP	0.00204	2.14E-06	70YrCancer	*	2.14E-06
1587	471935.9	3771452	9901	DieselExhP	0.00223	2.34E-06	70YrCancer	*	2.34E-06
1588	471936.6	3771424	9901	DieselExhP	0.00297	3.12E-06	70YrCancer	*	3.12E-06
1589	471936.8	3771415	9901	DieselExhP	0.0033	3.46E-06	70YrCancer	*	3.46E-06
1590	471937.6	3771388	9901	DieselExhP	0.00463	4.86E-06	70YrCancer	*	4.86E-06
1591	471937.8	3771379	9901	DieselExhP	0.00522	5.48E-06	70YrCancer	*	5.48E-06
1592	471938.1	3771370	9901	DieselExhP	0.00593	6.22E-06	70YrCancer	*	6.22E-06
1593	472106.5	3771493	9901	DieselExhP	0.00492	5.16E-06	70YrCancer	*	5.16E-06
1594	472113.8	3771487	9901	DieselExhP	0.00468	4.91E-06	70YrCancer	*	4.91E-06
1595	472121	3771481	9901	DieselExhP	0.00407	4.27E-06	70YrCancer	*	4.27E-06
1596	472128.3	3771475	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
1597	472135.6	3771469	9901	DieselExhP	0.0032	3.36E-06	70YrCancer	*	3.36E-06

1598	472142.8	3771463	9901	DieselExhP	0.00293	3.08E-06	70YrCancer	*	3.08E-06
1599	472150.1	3771458	9901	DieselExhP	0.00272	2.85E-06	70YrCancer	*	2.85E-06
1600	472157.3	3771452	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06
1601	472164.6	3771446	9901	DieselExhP	0.00243	2.55E-06	70YrCancer	*	2.55E-06
1602	472171.9	3771440	9901	DieselExhP	0.00231	2.42E-06	70YrCancer	*	2.42E-06
1603	472179.1	3771434	9901	DieselExhP	0.0022	2.31E-06	70YrCancer	*	2.31E-06
1604	472186.4	3771428	9901	DieselExhP	0.0021	2.20E-06	70YrCancer	*	2.20E-06
1605	472193.6	3771423	9901	DieselExhP	0.00201	2.11E-06	70YrCancer	*	2.11E-06
1606	472200.9	3771417	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
1607	472113.2	3771511	9901	DieselExhP	0.00441	4.63E-06	70YrCancer	*	4.63E-06
1608	472104.3	3771511	9901	DieselExhP	0.004	4.20E-06	70YrCancer	*	4.20E-06
1609	472095.4	3771510	9901	DieselExhP	0.00355	3.73E-06	70YrCancer	*	3.73E-06
1610	472086.4	3771509	9901	DieselExhP	0.00306	3.21E-06	70YrCancer	*	3.21E-06
1611	472077.5	3771509	9901	DieselExhP	0.00268	2.81E-06	70YrCancer	*	2.81E-06
1612	472068.5	3771508	9901	DieselExhP	0.00243	2.55E-06	70YrCancer	*	2.55E-06
1613	472059.6	3771507	9901	DieselExhP	0.00225	2.36E-06	70YrCancer	*	2.36E-06
1614	472050.6	3771506	9901	DieselExhP	0.00211	2.21E-06	70YrCancer	*	2.21E-06
1615	472041.7	3771506	9901	DieselExhP	0.00201	2.11E-06	70YrCancer	*	2.11E-06
1616	472032.8	3771505	9901	DieselExhP	0.00193	2.03E-06	70YrCancer	*	2.03E-06
1617	472023.8	3771504	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
1618	472014.9	3771503	9901	DieselExhP	0.00182	1.91E-06	70YrCancer	*	1.91E-06
1619	472005.9	3771503	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
1620	471997	3771502	9901	DieselExhP	0.00173	1.82E-06	70YrCancer	*	1.82E-06
1621	471988.1	3771501	9901	DieselExhP	0.0017	1.78E-06	70YrCancer	*	1.78E-06
1622	471979.1	3771501	9901	DieselExhP	0.00166	1.74E-06	70YrCancer	*	1.74E-06
1623	471970.2	3771500	9901	DieselExhP	0.00163	1.71E-06	70YrCancer	*	1.71E-06
1624	471961.2	3771499	9901	DieselExhP	0.00159	1.67E-06	70YrCancer	*	1.67E-06
1625	471952.3	3771498	9901	DieselExhP	0.00155	1.63E-06	70YrCancer	*	1.63E-06
1626	471943.4	3771498	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
1627	471934.4	3771497	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
1628	471925.5	3771496	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
1629	471917	3771478	9901	DieselExhP	0.0016	1.68E-06	70YrCancer	*	1.68E-06
1630	471917.3	3771469	9901	DieselExhP	0.00173	1.82E-06	70YrCancer	*	1.82E-06
1631	471918	3771442	9901	DieselExhP	0.0022	2.31E-06	70YrCancer	*	2.31E-06
1632	471918.2	3771433	9901	DieselExhP	0.0024	2.52E-06	70YrCancer	*	2.52E-06
1633	471918.5	3771424	9901	DieselExhP	0.00262	2.75E-06	70YrCancer	*	2.75E-06
1634	471918.7	3771415	9901	DieselExhP	0.00287	3.01E-06	70YrCancer	*	3.01E-06
1635	471919	3771406	9901	DieselExhP	0.00314	3.30E-06	70YrCancer	*	3.30E-06
1636	471919.2	3771397	9901	DieselExhP	0.00346	3.63E-06	70YrCancer	*	3.63E-06
1637	471919.4	3771388	9901	DieselExhP	0.00381	4.00E-06	70YrCancer	*	4.00E-06
1638	471919.9	3771370	9901	DieselExhP	0.00464	4.87E-06	70YrCancer	*	4.87E-06
1639	472122.2	3771512	9901	DieselExhP	0.00459	4.82E-06	70YrCancer	*	4.82E-06
1640	472129.4	3771506	9901	DieselExhP	0.00438	4.60E-06	70YrCancer	*	4.60E-06
1641	472136.7	3771500	9901	DieselExhP	0.0038	3.99E-06	70YrCancer	*	3.99E-06
1642	472144	3771495	9901	DieselExhP	0.00328	3.44E-06	70YrCancer	*	3.44E-06
1643	472151.2	3771489	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
1644	472158.5	3771483	9901	DieselExhP	0.00264	2.77E-06	70YrCancer	*	2.77E-06
1645	472165.7	3771477	9901	DieselExhP	0.00244	2.56E-06	70YrCancer	*	2.56E-06
1646	472173	3771471	9901	DieselExhP	0.00228	2.39E-06	70YrCancer	*	2.39E-06
1647	472180.3	3771465	9901	DieselExhP	0.00214	2.25E-06	70YrCancer	*	2.25E-06

1648	472187.5	3771460	9901	DieselExhP	0.00203	2.13E-06	70YrCancer	*	2.13E-06
1649	472194.8	3771454	9901	DieselExhP	0.00194	2.04E-06	70YrCancer	*	2.04E-06
1650	472202.1	3771448	9901	DieselExhP	0.00185	1.94E-06	70YrCancer	*	1.94E-06
1651	472209.3	3771442	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
1652	472216.6	3771436	9901	DieselExhP	0.0017	1.78E-06	70YrCancer	*	1.78E-06
1653	472128.6	3771531	9901	DieselExhP	0.0041	4.30E-06	70YrCancer	*	4.30E-06
1654	472119.4	3771530	9901	DieselExhP	0.00364	3.82E-06	70YrCancer	*	3.82E-06
1655	472110.2	3771529	9901	DieselExhP	0.00318	3.34E-06	70YrCancer	*	3.34E-06
1656	472100.9	3771529	9901	DieselExhP	0.00273	2.87E-06	70YrCancer	*	2.87E-06
1657	472091.7	3771528	9901	DieselExhP	0.00238	2.50E-06	70YrCancer	*	2.50E-06
1658	472082.5	3771527	9901	DieselExhP	0.00214	2.25E-06	70YrCancer	*	2.25E-06
1659	472073.3	3771526	9901	DieselExhP	0.00197	2.07E-06	70YrCancer	*	2.07E-06
1660	472064	3771526	9901	DieselExhP	0.00184	1.93E-06	70YrCancer	*	1.93E-06
1661	472054.8	3771525	9901	DieselExhP	0.00175	1.84E-06	70YrCancer	*	1.84E-06
1662	472045.6	3771524	9901	DieselExhP	0.00167	1.75E-06	70YrCancer	*	1.75E-06
1663	472036.3	3771523	9901	DieselExhP	0.00162	1.70E-06	70YrCancer	*	1.70E-06
1664	472027.1	3771523	9901	DieselExhP	0.00157	1.65E-06	70YrCancer	*	1.65E-06
1665	472017.9	3771522	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
1666	472008.7	3771521	9901	DieselExhP	0.0015	1.57E-06	70YrCancer	*	1.57E-06
1667	471999.4	3771520	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
1668	471990.2	3771520	9901	DieselExhP	0.00145	1.52E-06	70YrCancer	*	1.52E-06
1669	471981	3771519	9901	DieselExhP	0.00142	1.49E-06	70YrCancer	*	1.49E-06
1670	471971.7	3771518	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
1671	471962.5	3771517	9901	DieselExhP	0.00137	1.44E-06	70YrCancer	*	1.44E-06
1672	471953.3	3771517	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1673	471944.1	3771516	9901	DieselExhP	0.00131	1.37E-06	70YrCancer	*	1.37E-06
1674	471934.8	3771515	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
1675	471925.6	3771514	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
1676	471916.4	3771514	9901	DieselExhP	0.00121	1.27E-06	70YrCancer	*	1.27E-06
1677	471907.1	3771513	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
1678	471898.2	3771503	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
1679	471898.4	3771494	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
1680	471898.7	3771484	9901	DieselExhP	0.0014	1.47E-06	70YrCancer	*	1.47E-06
1681	471899.4	3771457	9901	DieselExhP	0.00173	1.82E-06	70YrCancer	*	1.82E-06
1682	471899.7	3771447	9901	DieselExhP	0.00187	1.96E-06	70YrCancer	*	1.96E-06
1683	471900.2	3771429	9901	DieselExhP	0.00218	2.29E-06	70YrCancer	*	2.29E-06
1684	471900.4	3771420	9901	DieselExhP	0.00236	2.48E-06	70YrCancer	*	2.48E-06
1685	471900.7	3771410	9901	DieselExhP	0.00256	2.69E-06	70YrCancer	*	2.69E-06
1686	471901.2	3771392	9901	DieselExhP	0.00302	3.17E-06	70YrCancer	*	3.17E-06
1687	471901.4	3771383	9901	DieselExhP	0.00328	3.44E-06	70YrCancer	*	3.44E-06
1688	471901.7	3771373	9901	DieselExhP	0.00357	3.75E-06	70YrCancer	*	3.75E-06
1689	472137.8	3771532	9901	DieselExhP	0.00434	4.56E-06	70YrCancer	*	4.56E-06
1690	472145.1	3771526	9901	DieselExhP	0.00414	4.35E-06	70YrCancer	*	4.35E-06
1691	472152.4	3771520	9901	DieselExhP	0.00356	3.74E-06	70YrCancer	*	3.74E-06
1692	472159.6	3771514	9901	DieselExhP	0.00305	3.20E-06	70YrCancer	*	3.20E-06
1693	472166.9	3771508	9901	DieselExhP	0.00267	2.80E-06	70YrCancer	*	2.80E-06
1694	472174.2	3771502	9901	DieselExhP	0.00239	2.51E-06	70YrCancer	*	2.51E-06
1695	472181.4	3771497	9901	DieselExhP	0.00219	2.30E-06	70YrCancer	*	2.30E-06
1696	472188.7	3771491	9901	DieselExhP	0.00204	2.14E-06	70YrCancer	*	2.14E-06
1697	472195.9	3771485	9901	DieselExhP	0.00191	2.00E-06	70YrCancer	*	2.00E-06

1698	472203.2	3771479	9901	DieselExhP	0.00181	1.90E-06	70YrCancer	*	1.90E-06
1699	472210.5	3771473	9901	DieselExhP	0.00172	1.81E-06	70YrCancer	*	1.81E-06
1700	472217.7	3771467	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06
1701	472225	3771462	9901	DieselExhP	0.00158	1.66E-06	70YrCancer	*	1.66E-06
1702	472232.2	3771456	9901	DieselExhP	0.00151	1.58E-06	70YrCancer	*	1.58E-06
1703	472144.4	3771550	9901	DieselExhP	0.00384	4.03E-06	70YrCancer	*	4.03E-06
1704	472135.2	3771550	9901	DieselExhP	0.00337	3.54E-06	70YrCancer	*	3.54E-06
1705	472126.1	3771549	9901	DieselExhP	0.00291	3.05E-06	70YrCancer	*	3.05E-06
1706	472117	3771548	9901	DieselExhP	0.00248	2.60E-06	70YrCancer	*	2.60E-06
1707	472107.8	3771547	9901	DieselExhP	0.00217	2.28E-06	70YrCancer	*	2.28E-06
1708	472098.7	3771547	9901	DieselExhP	0.00194	2.04E-06	70YrCancer	*	2.04E-06
1709	472089.5	3771546	9901	DieselExhP	0.00177	1.86E-06	70YrCancer	*	1.86E-06
1710	472080.4	3771545	9901	DieselExhP	0.00165	1.73E-06	70YrCancer	*	1.73E-06
1711	472071.3	3771544	9901	DieselExhP	0.00156	1.64E-06	70YrCancer	*	1.64E-06
1712	472062.1	3771544	9901	DieselExhP	0.00149	1.56E-06	70YrCancer	*	1.56E-06
1713	472053	3771543	9901	DieselExhP	0.00143	1.50E-06	70YrCancer	*	1.50E-06
1714	472043.8	3771542	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
1715	472034.7	3771541	9901	DieselExhP	0.00135	1.42E-06	70YrCancer	*	1.42E-06
1716	472025.6	3771541	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
1717	472016.4	3771540	9901	DieselExhP	0.0013	1.36E-06	70YrCancer	*	1.36E-06
1718	472007.3	3771539	9901	DieselExhP	0.00128	1.34E-06	70YrCancer	*	1.34E-06
1719	471998.1	3771539	9901	DieselExhP	0.00126	1.32E-06	70YrCancer	*	1.32E-06
1720	471989	3771538	9901	DieselExhP	0.00124	1.30E-06	70YrCancer	*	1.30E-06
1721	471979.9	3771537	9901	DieselExhP	0.00122	1.28E-06	70YrCancer	*	1.28E-06
1722	471970.7	3771536	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
1723	471961.6	3771536	9901	DieselExhP	0.00118	1.24E-06	70YrCancer	*	1.24E-06
1724	471952.4	3771535	9901	DieselExhP	0.00116	1.22E-06	70YrCancer	*	1.22E-06
1725	471943.3	3771534	9901	DieselExhP	0.00114	1.20E-06	70YrCancer	*	1.20E-06
1726	471934.2	3771533	9901	DieselExhP	0.00111	1.17E-06	70YrCancer	*	1.17E-06
1727	471925	3771533	9901	DieselExhP	0.00109	1.14E-06	70YrCancer	*	1.14E-06
1728	471915.9	3771532	9901	DieselExhP	0.00107	1.12E-06	70YrCancer	*	1.12E-06
1729	471906.7	3771531	9901	DieselExhP	0.00104	1.09E-06	70YrCancer	*	1.09E-06
1730	471897.6	3771530	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1731	471888.5	3771530	9901	DieselExhP	0.00099	1.04E-06	70YrCancer	*	1.04E-06
1732	471879.6	3771520	9901	DieselExhP	0.00102	1.07E-06	70YrCancer	*	1.07E-06
1733	471879.8	3771511	9901	DieselExhP	0.00108	1.13E-06	70YrCancer	*	1.13E-06
1734	471880.1	3771501	9901	DieselExhP	0.00114	1.20E-06	70YrCancer	*	1.20E-06
1735	471880.6	3771483	9901	DieselExhP	0.00129	1.35E-06	70YrCancer	*	1.35E-06
1736	471880.8	3771474	9901	DieselExhP	0.00138	1.45E-06	70YrCancer	*	1.45E-06
1737	471881	3771465	9901	DieselExhP	0.00147	1.54E-06	70YrCancer	*	1.54E-06
1738	471881.5	3771446	9901	DieselExhP	0.00168	1.76E-06	70YrCancer	*	1.76E-06
1739	471881.8	3771437	9901	DieselExhP	0.0018	1.89E-06	70YrCancer	*	1.89E-06
1740	471882	3771428	9901	DieselExhP	0.00192	2.02E-06	70YrCancer	*	2.02E-06
1741	471882.3	3771419	9901	DieselExhP	0.00206	2.16E-06	70YrCancer	*	2.16E-06
1742	471882.8	3771401	9901	DieselExhP	0.00236	2.48E-06	70YrCancer	*	2.48E-06
1743	471883	3771391	9901	DieselExhP	0.00253	2.66E-06	70YrCancer	*	2.66E-06
1744	471883.3	3771382	9901	DieselExhP	0.00271	2.84E-06	70YrCancer	*	2.84E-06
1745	472153.5	3771551	9901	DieselExhP	0.00412	4.32E-06	70YrCancer	*	4.32E-06
1746	472160.8	3771545	9901	DieselExhP	0.00397	4.17E-06	70YrCancer	*	4.17E-06
1747	472168	3771539	9901	DieselExhP	0.00338	3.55E-06	70YrCancer	*	3.55E-06

1748	472175.3	3771534	9901	DieselExhP	0.00285	2.99E-06	70YrCancer	*	2.99E-06
1749	472182.6	3771528	9901	DieselExhP	0.00247	2.59E-06	70YrCancer	*	2.59E-06
1750	472189.8	3771522	9901	DieselExhP	0.00219	2.30E-06	70YrCancer	*	2.30E-06
1751	472197.1	3771516	9901	DieselExhP	0.00199	2.09E-06	70YrCancer	*	2.09E-06
1752	472204.3	3771510	9901	DieselExhP	0.00184	1.93E-06	70YrCancer	*	1.93E-06
1753	472211.6	3771504	9901	DieselExhP	0.00172	1.81E-06	70YrCancer	*	1.81E-06
1754	472218.9	3771499	9901	DieselExhP	0.00163	1.71E-06	70YrCancer	*	1.71E-06
1755	472226.1	3771493	9901	DieselExhP	0.00154	1.62E-06	70YrCancer	*	1.62E-06
1756	472233.4	3771487	9901	DieselExhP	0.00146	1.53E-06	70YrCancer	*	1.53E-06
1757	472240.7	3771481	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
1758	472247.9	3771475	9901	DieselExhP	0.00133	1.40E-06	70YrCancer	*	1.40E-06
1759	472060.8	3771616	9901	DieselExhP	0.00079	8.29E-07	70YrCancer	*	8.29E-07
1760	472051.7	3771616	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
1761	472042.5	3771615	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
1762	472033.4	3771614	9901	DieselExhP	0.00077	8.08E-07	70YrCancer	*	8.08E-07
1763	472024.3	3771613	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
1764	472015.1	3771613	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
1765	472006	3771612	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
1766	471996.8	3771611	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
1767	471987.7	3771610	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
1768	471978.6	3771610	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
1769	471969.4	3771609	9901	DieselExhP	0.00073	7.66E-07	70YrCancer	*	7.66E-07
1770	471960.3	3771608	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
1771	471951.1	3771608	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
1772	471942	3771607	9901	DieselExhP	0.00071	7.45E-07	70YrCancer	*	7.45E-07
1773	471932.9	3771606	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
1774	471923.7	3771605	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
1775	471914.6	3771605	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
1776	471905.4	3771604	9901	DieselExhP	0.00067	7.03E-07	70YrCancer	*	7.03E-07
1777	471896.3	3771603	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
1778	471887.2	3771602	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
1779	471878	3771602	9901	DieselExhP	0.00064	6.72E-07	70YrCancer	*	6.72E-07
1780	471868.9	3771601	9901	DieselExhP	0.00063	6.61E-07	70YrCancer	*	6.61E-07
1781	471859.7	3771600	9901	DieselExhP	0.00062	6.51E-07	70YrCancer	*	6.51E-07
1782	471850.6	3771599	9901	DieselExhP	0.0006	6.30E-07	70YrCancer	*	6.30E-07
1783	471841.5	3771599	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1784	471832.3	3771598	9901	DieselExhP	0.00058	6.09E-07	70YrCancer	*	6.09E-07
1785	471823.2	3771597	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1786	471814	3771596	9901	DieselExhP	0.00055	5.77E-07	70YrCancer	*	5.77E-07
1787	471805.1	3771586	9901	DieselExhP	0.00056	5.88E-07	70YrCancer	*	5.88E-07
1788	471805.4	3771577	9901	DieselExhP	0.00059	6.19E-07	70YrCancer	*	6.19E-07
1789	471805.6	3771568	9901	DieselExhP	0.00061	6.40E-07	70YrCancer	*	6.40E-07
1790	471805.9	3771559	9901	DieselExhP	0.00063	6.61E-07	70YrCancer	*	6.61E-07
1791	471806.1	3771550	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
1792	471806.4	3771541	9901	DieselExhP	0.00069	7.24E-07	70YrCancer	*	7.24E-07
1793	471806.6	3771531	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
1794	471806.9	3771522	9901	DieselExhP	0.00075	7.87E-07	70YrCancer	*	7.87E-07
1795	471807.1	3771513	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
1796	471807.4	3771504	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
1797	471807.6	3771495	9901	DieselExhP	0.00085	8.92E-07	70YrCancer	*	8.92E-07

1798	471807.9	3771486	9901	DieselExhP	0.00089	9.34E-07	70YrCancer	*	9.34E-07
1799	471808.1	3771476	9901	DieselExhP	0.00093	9.76E-07	70YrCancer	*	9.76E-07
1800	471808.4	3771467	9901	DieselExhP	0.00097	1.02E-06	70YrCancer	*	1.02E-06
1801	471808.6	3771458	9901	DieselExhP	0.00101	1.06E-06	70YrCancer	*	1.06E-06
1802	471808.9	3771449	9901	DieselExhP	0.00106	1.11E-06	70YrCancer	*	1.11E-06
1803	471809.3	3771431	9901	DieselExhP	0.00115	1.21E-06	70YrCancer	*	1.21E-06
1804	471809.6	3771421	9901	DieselExhP	0.0012	1.26E-06	70YrCancer	*	1.26E-06
1805	471809.8	3771412	9901	DieselExhP	0.00125	1.31E-06	70YrCancer	*	1.31E-06
1806	471810.3	3771394	9901	DieselExhP	0.00134	1.41E-06	70YrCancer	*	1.41E-06
1807	471810.6	3771385	9901	DieselExhP	0.00139	1.46E-06	70YrCancer	*	1.46E-06
1808	471810.8	3771376	9901	DieselExhP	0.00144	1.51E-06	70YrCancer	*	1.51E-06
1809	472050.4	3771688	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1810	472041.2	3771688	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1811	472032.1	3771687	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1812	472022.9	3771686	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1813	472013.8	3771685	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1814	472004.7	3771685	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1815	471995.5	3771684	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1816	471986.4	3771683	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1817	471977.2	3771682	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1818	471968.1	3771682	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1819	471959	3771681	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1820	471949.8	3771680	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1821	471940.7	3771680	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1822	471931.5	3771679	9901	DieselExhP	0.00048	5.04E-07	70YrCancer	*	5.04E-07
1823	471922.4	3771678	9901	DieselExhP	0.00048	5.04E-07	70YrCancer	*	5.04E-07
1824	471913.3	3771677	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1825	471904.1	3771677	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1826	471895	3771676	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1827	471885.8	3771675	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1828	471876.7	3771674	9901	DieselExhP	0.00045	4.72E-07	70YrCancer	*	4.72E-07
1829	471867.6	3771674	9901	DieselExhP	0.00045	4.72E-07	70YrCancer	*	4.72E-07
1830	471858.4	3771673	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
1831	471849.3	3771672	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
1832	471840.1	3771671	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1833	471831	3771671	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1834	471821.9	3771670	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1835	471812.7	3771669	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1836	471803.6	3771668	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1837	471794.4	3771668	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
1838	471785.3	3771667	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1839	471776.2	3771666	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1840	471767	3771665	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1841	471757.9	3771665	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1842	471748.7	3771664	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1843	471739.6	3771663	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1844	471730.7	3771653	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1845	471731	3771644	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1846	471731.2	3771635	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1847	471731.5	3771626	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07

1848	471731.7	3771617	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1849	471732	3771607	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1850	471732.2	3771598	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1851	471732.4	3771589	9901	DieselExhP	0.00045	4.72E-07	70YrCancer	*	4.72E-07
1852	471732.7	3771580	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1853	471732.9	3771571	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1854	471733.2	3771562	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1855	471733.4	3771552	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1856	471733.7	3771543	9901	DieselExhP	0.00052	5.46E-07	70YrCancer	*	5.46E-07
1857	471733.9	3771534	9901	DieselExhP	0.00054	5.67E-07	70YrCancer	*	5.67E-07
1858	471734.2	3771525	9901	DieselExhP	0.00055	5.77E-07	70YrCancer	*	5.77E-07
1859	471734.4	3771516	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1860	471734.9	3771497	9901	DieselExhP	0.00061	6.40E-07	70YrCancer	*	6.40E-07
1861	471735.2	3771488	9901	DieselExhP	0.00063	6.61E-07	70YrCancer	*	6.61E-07
1862	471735.4	3771479	9901	DieselExhP	0.00065	6.82E-07	70YrCancer	*	6.82E-07
1863	471735.7	3771470	9901	DieselExhP	0.00066	6.93E-07	70YrCancer	*	6.93E-07
1864	471735.9	3771461	9901	DieselExhP	0.00068	7.14E-07	70YrCancer	*	7.14E-07
1865	471736.2	3771452	9901	DieselExhP	0.0007	7.35E-07	70YrCancer	*	7.35E-07
1866	471736.4	3771442	9901	DieselExhP	0.00072	7.56E-07	70YrCancer	*	7.56E-07
1867	471736.7	3771433	9901	DieselExhP	0.00074	7.77E-07	70YrCancer	*	7.77E-07
1868	471736.9	3771424	9901	DieselExhP	0.00076	7.98E-07	70YrCancer	*	7.98E-07
1869	471737.2	3771415	9901	DieselExhP	0.00078	8.19E-07	70YrCancer	*	8.19E-07
1870	471737.4	3771406	9901	DieselExhP	0.0008	8.40E-07	70YrCancer	*	8.40E-07
1871	471737.6	3771397	9901	DieselExhP	0.00082	8.61E-07	70YrCancer	*	8.61E-07
1872	471737.9	3771387	9901	DieselExhP	0.00084	8.82E-07	70YrCancer	*	8.82E-07
1873	471738.1	3771378	9901	DieselExhP	0.00086	9.03E-07	70YrCancer	*	9.03E-07
1874	472045.1	3771761	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1875	472035.8	3771760	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1876	472026.6	3771759	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1877	472017.3	3771759	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1878	472008.1	3771758	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1879	471998.8	3771757	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1880	471989.5	3771756	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1881	471980.3	3771756	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1882	471971	3771755	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1883	471961.7	3771754	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1884	471952.5	3771753	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1885	471943.2	3771753	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1886	471933.9	3771752	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1887	471924.7	3771751	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1888	471915.4	3771750	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1889	471906.2	3771750	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1890	471896.9	3771749	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1891	471887.6	3771748	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1892	471878.4	3771747	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1893	471869.1	3771747	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1894	471859.8	3771746	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1895	471850.6	3771745	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1896	471841.3	3771744	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1897	471832	3771744	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07

1898	471822.8	3771743	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1899	471813.5	3771742	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1900	471804.3	3771741	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1901	471795	3771741	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1902	471785.7	3771740	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1903	471776.5	3771739	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1904	471767.2	3771738	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1905	471757.9	3771738	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1906	471748.7	3771737	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1907	471739.4	3771736	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1908	471730.2	3771735	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1909	471720.9	3771734	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1910	471711.6	3771734	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1911	471702.4	3771733	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1912	471693.1	3771732	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1913	471683.8	3771731	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1914	471674.6	3771731	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1915	471665.3	3771730	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1916	471656.3	3771720	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1917	471656.5	3771711	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1918	471656.8	3771701	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1919	471657	3771692	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1920	471657.3	3771683	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1921	471657.5	3771673	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1922	471657.8	3771664	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1923	471658	3771655	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1924	471658.3	3771646	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1925	471658.6	3771636	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1926	471658.8	3771627	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1927	471659.1	3771618	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1928	471659.3	3771608	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1929	471659.6	3771599	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1930	471659.8	3771590	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1931	471660.6	3771562	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
1932	471660.8	3771553	9901	DieselExhP	0.00039	4.09E-07	70YrCancer	*	4.09E-07
1933	471661.1	3771543	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
1934	471661.3	3771534	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1935	471661.6	3771525	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1936	471661.8	3771516	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1937	471662.1	3771506	9901	DieselExhP	0.00044	4.62E-07	70YrCancer	*	4.62E-07
1938	471662.3	3771497	9901	DieselExhP	0.00045	4.72E-07	70YrCancer	*	4.72E-07
1939	471662.6	3771488	9901	DieselExhP	0.00046	4.83E-07	70YrCancer	*	4.83E-07
1940	471662.8	3771478	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1941	471663.1	3771469	9901	DieselExhP	0.00048	5.04E-07	70YrCancer	*	5.04E-07
1942	471663.3	3771460	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1943	471663.6	3771451	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1944	471663.8	3771441	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1945	471664.1	3771432	9901	DieselExhP	0.00052	5.46E-07	70YrCancer	*	5.46E-07
1946	471664.3	3771423	9901	DieselExhP	0.00053	5.56E-07	70YrCancer	*	5.56E-07
1947	471664.6	3771413	9901	DieselExhP	0.00054	5.67E-07	70YrCancer	*	5.67E-07

1948	471664.8	3771404	9901	DieselExhP	0.00055	5.77E-07	70YrCancer	*	5.77E-07
1949	471665.1	3771395	9901	DieselExhP	0.00056	5.88E-07	70YrCancer	*	5.88E-07
1950	471665.3	3771385	9901	DieselExhP	0.00057	5.98E-07	70YrCancer	*	5.98E-07
1951	471672.9	3771107	9901	DieselExhP	0.00052	5.46E-07	70YrCancer	*	5.46E-07
1952	471673.1	3771097	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1953	471673.4	3771088	9901	DieselExhP	0.00051	5.35E-07	70YrCancer	*	5.35E-07
1954	471673.6	3771079	9901	DieselExhP	0.0005	5.25E-07	70YrCancer	*	5.25E-07
1955	471673.9	3771070	9901	DieselExhP	0.00049	5.14E-07	70YrCancer	*	5.14E-07
1956	471674.1	3771060	9901	DieselExhP	0.00048	5.04E-07	70YrCancer	*	5.04E-07
1957	471674.4	3771051	9901	DieselExhP	0.00047	4.93E-07	70YrCancer	*	4.93E-07
1958	471583.9	3771713	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
1959	471584.1	3771703	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
1960	471584.4	3771694	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
1961	471584.6	3771685	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
1962	471584.9	3771676	9901	DieselExhP	0.00024	2.52E-07	70YrCancer	*	2.52E-07
1963	471585.1	3771666	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1964	471585.4	3771657	9901	DieselExhP	0.00025	2.62E-07	70YrCancer	*	2.62E-07
1965	471585.6	3771648	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1966	471585.9	3771638	9901	DieselExhP	0.00026	2.73E-07	70YrCancer	*	2.73E-07
1967	471586.1	3771629	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1968	471586.4	3771620	9901	DieselExhP	0.00027	2.83E-07	70YrCancer	*	2.83E-07
1969	471586.6	3771611	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1970	471586.9	3771601	9901	DieselExhP	0.00028	2.94E-07	70YrCancer	*	2.94E-07
1971	471587.1	3771592	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1972	471587.4	3771583	9901	DieselExhP	0.00029	3.04E-07	70YrCancer	*	3.04E-07
1973	471587.6	3771574	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1974	471587.9	3771564	9901	DieselExhP	0.0003	3.15E-07	70YrCancer	*	3.15E-07
1975	471588.1	3771555	9901	DieselExhP	0.00031	3.25E-07	70YrCancer	*	3.25E-07
1976	471588.4	3771546	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1977	471588.6	3771536	9901	DieselExhP	0.00032	3.36E-07	70YrCancer	*	3.36E-07
1978	471588.9	3771527	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1979	471589.1	3771518	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1980	471589.4	3771509	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1981	471589.6	3771499	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1982	471589.9	3771490	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
1983	471590.1	3771481	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1984	471590.4	3771472	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
1985	471590.6	3771462	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
1986	471591.6	3771425	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1987	471591.9	3771416	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1988	471592.1	3771407	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1989	471592.4	3771397	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1990	471592.6	3771388	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
1991	471592.9	3771379	9901	DieselExhP	0.00033	3.46E-07	70YrCancer	*	3.46E-07
1992	471597.6	3771203	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1993	471597.9	3771193	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1994	471598.1	3771184	9901	DieselExhP	0.00043	4.51E-07	70YrCancer	*	4.51E-07
1995	471598.4	3771175	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1996	471598.6	3771166	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07
1997	471598.9	3771156	9901	DieselExhP	0.00042	4.41E-07	70YrCancer	*	4.41E-07

1998	471599.1	3771147	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
1999	471599.4	3771138	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
2000	471599.6	3771129	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
2001	471599.9	3771119	9901	DieselExhP	0.00041	4.30E-07	70YrCancer	*	4.30E-07
2002	471600.1	3771110	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
2003	471600.4	3771101	9901	DieselExhP	0.0004	4.20E-07	70YrCancer	*	4.20E-07
2004	471601.1	3771073	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
2005	471601.4	3771064	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
2006	471601.6	3771054	9901	DieselExhP	0.00038	3.99E-07	70YrCancer	*	3.99E-07
2007	471601.9	3771045	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
2008	471602.1	3771036	9901	DieselExhP	0.00037	3.88E-07	70YrCancer	*	3.88E-07
2009	471602.4	3771027	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
2010	471602.6	3771017	9901	DieselExhP	0.00036	3.78E-07	70YrCancer	*	3.78E-07
2011	471602.9	3771008	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
2012	471603.1	3770999	9901	DieselExhP	0.00035	3.67E-07	70YrCancer	*	3.67E-07
2013	471603.4	3770990	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
2014	471603.7	3770980	9901	DieselExhP	0.00034	3.57E-07	70YrCancer	*	3.57E-07
2015	471513.2	3771641	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
2016	471513.4	3771631	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
2017	471513.7	3771622	9901	DieselExhP	0.00022	2.31E-07	70YrCancer	*	2.31E-07
2018	471513.9	3771613	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
2019	471514.2	3771604	9901	DieselExhP	0.00023	2.41E-07	70YrCancer	*	2.41E-07
2020	471514.4	3771594	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2021	471514.7	3771585	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2022	471514.9	3771576	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2023	471515.2	3771567	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2024	471515.4	3771557	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
2025	471515.7	3771548	9901	DieselExhP	0.0002	2.10E-07	70YrCancer	*	2.10E-07
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2032	471517.7	3771474	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07
2033	471517.9	3771465	9901	DieselExhP	0.00021	2.20E-07	70YrCancer	*	2.20E-07
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2082	471922.6	3771265	9901	DieselExhP	0.00942	9.89E-06	70YrCancer	*	9.89E-06
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2085	472028.2	3771395	9901	DieselExhP	0.00973	1.02E-05	70YrCancer	*	1.02E-05
2086	472023.1	3771386	9901	DieselExhP	0.01121	1.18E-05	70YrCancer	*	1.18E-05
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2107	471965.8	3771229	9901	DieselExhP	0.007	7.35E-06	70YrCancer	*	7.35E-06
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2111	471994.6	3771206	9901	DieselExhP	0.00449	4.71E-06	70YrCancer	*	4.71E-06
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2115	472028.7	3771203	9901	DieselExhP	0.00372	3.90E-06	70YrCancer	*	3.90E-06
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2122	472072.5	3771258	9901	DieselExhP	0.00507	5.32E-06	70YrCancer	*	5.32E-06
2123	472078.7	3771265	9901	DieselExhP	0.0051	5.35E-06	70YrCancer	*	5.35E-06
2124	472085	3771273	9901	DieselExhP	0.00507	5.32E-06	70YrCancer	*	5.32E-06
2125	472091.3	3771281	9901	DieselExhP	0.005	5.25E-06	70YrCancer	*	5.25E-06
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2127	472103.8	3771296	9901	DieselExhP	0.00472	4.95E-06	70YrCancer	*	4.95E-06
2128	472110	3771304	9901	DieselExhP	0.00453	4.75E-06	70YrCancer	*	4.75E-06
2129	472116.3	3771312	9901	DieselExhP	0.00431	4.52E-06	70YrCancer	*	4.52E-06
2130	472115.3	3771325	9901	DieselExhP	0.00458	4.81E-06	70YrCancer	*	4.81E-06
2131	472108	3771331	9901	DieselExhP	0.00513	5.38E-06	70YrCancer	*	5.38E-06
2132	472100.8	3771337	9901	DieselExhP	0.00575	6.04E-06	70YrCancer	*	6.04E-06
2133	472093.5	3771343	9901	DieselExhP	0.00642	6.74E-06	70YrCancer	*	6.74E-06
2134	472086.3	3771349	9901	DieselExhP	0.00711	7.46E-06	70YrCancer	*	7.46E-06
2135	472079	3771354	9901	DieselExhP	0.0078	8.19E-06	70YrCancer	*	8.19E-06
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2137	472064.5	3771366	9901	DieselExhP	0.00897	9.41E-06	70YrCancer	*	9.41E-06
2138	472057.2	3771372	9901	DieselExhP	0.0094	9.87E-06	70YrCancer	*	9.87E-06
2139	472049.9	3771378	9901	DieselExhP	0.00975	1.02E-05	70YrCancer	*	1.02E-05
2140	472042.7	3771384	9901	DieselExhP	0.01006	1.06E-05	70YrCancer	*	1.06E-05
2141	472035.4	3771389	9901	DieselExhP	0.01019	1.07E-05	70YrCancer	*	1.07E-05
								Avg.	2.86E-06

Population	Community Risk
1039	0.002970671

HARP2 - HRACalc (dated 16057) 11/26/2018 2:25:57 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Population
Scenario: Cancer
Calculation Method: HighEnd

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 70

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 0
16 to 70 Years Bin: 54

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home

```
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

**********
TIER 2 SETTINGS
Tier2 not used.

**********

Calculating cancer risk
Cancer risk saved to:
C:\Users\cdugan\Desktop\ICD_RAST\CommunityBurdernCancerRisk.csv
HRA ran successfully
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General Biological Resources Assessment

Inland Center Drive Storm Drain Improvement Project Site
San Bernardino, San Bernardino County, California

Prepared for:
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Olympic Real Estate Holdings, Inc.
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December 2018

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Appendices

Appendix A Special-Status Species Database Searches
Appendix B Special-Status Plant Species with Potential to Occur on the Project Site
Appendix C Special-Status Animal Species with Potential to Occur on the Project Site

List of Abbreviated Terms

AMSL	Above Mean Sea Level
APN	Assessor Parcel Number
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CWA	Clean Water Act
DBH	Diameter at Breast Height
EPA	Environmental Protection Agency
FESA	Federal Endangered Species Act
GIS	Geographic Information Systems
HCP	Habitat Conservation Plan
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Planning
NOAA	National Oceanic Atmospheric Administration
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USACE	United States Army Corps Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

This report presents the results of MIG's general biological resources assessment of the approximately 14.97-acre Inland Center Drive Storm Drain Improvement Project Site (Project Site). The purpose of this report is to verify the type, location, and extent of potential sensitive biological resources within the Project Site and vicinity. This report provides a thorough description of the biological setting of the Project Site and surrounding area, as well as a description of the vegetation communities and wildlife observed at the Project Site. This report also includes information regarding potential movement/migration corridors, potential special-status species, sensitive natural communities, and potential for jurisdictional waters and wetlands to occur at the Project Site. An assessment of the Project impacts and recommended mitigation measures to avoid, minimize, or compensate for potential adverse impacts to sensitive habitats and species is also included in the report. The evaluation of potential project impacts follows the checklist items from Appendix G of the California Environmental Quality Act (CEQA) guidelines and has been prepared in a format suitable to support CEQA review and to submit with any future regulatory application packages that might be required.

1.1 Project Location

The 14.97-acre Project Site is located on Inland Center Drive between North Glenwood Street and South I Street in the City of San Bernardino, San Bernardino County, California (Figure 1, *Regional Map*, Figure 2, *USGS Topographic Map*). The Project Site includes Assessor Parcel Numbers (APNs) 014-120-102, 014-120-105, 014-120-110, 014-120-112, 014-121-110, and 016-413-132, along with 1,500 feet of Inland Center Drive (Figure 3, *Project Site Map*). The Project Site is situated immediately east of the boundary of the City of Colton. It is located approximately 1,000 feet west of Interstate (I)-215 and 5,000 feet north of I-10. The Project Site is largely surrounded by residential land uses on all sides. A small, recently-disked open space bounds the northwestern perimeter of the Project Site, while the Prophet Elias Church bounds the southeastern perimeter.

The Project Site occurs within the United States Geological Survey (USGS) 7.5' series San Bernardino South Quadrangle. This land has been in private ownership since before California joined the U.S. and is, therefore, not part of the township and range system. The Project Site is flat with elevations ranging between 985-1,035 feet above mean sea level (AMSL) (Figure 2, *USGS Topographic Map*).

1.2 Project Description

The proposed project includes the construction of a warehouse building totaling 102,375 square feet, along with associated landscaping, streetscape and concrete parking improvements. The project site encompasses four contiguous parcels totaling 5.25 acres (APN: 0141-201-02; 0141-201-05; 0141-201-10; and 0141-201-12). The project site will be accessed via two 30-foot driveways on Inland Center Drive to provide access to both passenger vehicles and trucks. The project proposes a total of 105 parking spaces, including 8 ADA parking spaces, and a total of 14 high-dock doors. The project will include a total of 26,085 square feet of on-site landscaping. Stormwater will be captured on-site and collected in an underground infill basin before being discharged into a proposed new 24-inch storm drain that will be located within the existing Inland Center Drive roadway and right-of-way. The proposed storm drain will be made of Reinforced Concrete Pipe (RCP) and will connect to the project site and continue in southwesterly direction along Inland Center Drive for approximately 1,100 feet until it outlets to the lined Lytle Creek Channel within

the San Bernardino County Flood Control right-of-way in the City of San Bernardino. In-channel construction work below the Ordinary High Water Mark will require saw cutting a 40-inch by 40-inch opening in the concrete channel wall in order to install the RCP storm drain from a trench that will be excavated adjacent to the channel that will be excavated to an approximate width of 20 feet and 5- to 10-foot depth.

2.0 REGULATORY SETTING

The following discussion identifies federal, state, and local environmental regulations that serve to protect sensitive biological resources relevant to the proposed Project Site and CEQA review process.

2.1 Federal

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under the FESA. Both the U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) share the responsibility for administration of the FESA. The FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the USFWS and/or the NOAA Fisheries, (3) prohibitions against "taking" (meaning harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental "take". The FESA also discusses recovery plans and the designation of critical habitat for listed species. Section 7 requires Federal agencies, in consultation with, and with the assistance of the USFWS or NOAA Fisheries, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. Non-federal agencies and private entities can seek authorization for take of federally listed species under Section 10 of FESA, which requires the preparation of a Habitat Conservation Plan.

2.1.2 The Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." Previously, under MBTA it was illegal to disturb a nest that is in active use, since this could result in killing a bird, destroying a nest, or destroying an egg. In 2017, the USFWS issued a memorandum stating that the MBTA does not prohibit incidental take; therefore, the MBTA is currently limited to purposeful actions, such as hunting and poaching.

2.1.3 Clean Water Act Sections 404 and 401

The U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA) (33 USC 1344). Waters of the United States are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the United States regulated under Section 404

include fill for development, water resource projects (e.g., dams and levees), infrastructure developments (e.g., highways, rail lines, and airports) and mining projects. Section 404 of the CWA requires a federal permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities).

Section 401 of the CWA (33 U.S.C. 1341) requires an applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a water quality certification from the state in which the discharge originates. The discharge is required to comply with the applicable water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The EPA has delegated responsibility for the protection of water quality in California to State Water Resources Control Board and its nine Regional Water Quality Control Boards (RWQCBs).

2.1.4 National Pollutant Discharge Elimination System (NPDES)

The NPDES program requires permitting for activities that discharge pollutants into waters of the United States. This includes discharges from municipal, industrial, and construction sources. These are considered point-sources from a regulatory standpoint. Generally, these permits are issued and monitored under the oversight of the State Water Resources Control Board and administered by each RWQCB. Construction activities that disturb one acre or more (whether a single project or part of a larger development) are required to obtain coverage under the state's General Permit for Dischargers of Storm Water Associated with Construction Activity. All dischargers are required to obtain coverage under the Construction General Permit. The activities covered under the Construction General Permit include clearing, grading, and other disturbances. The permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) with a monitoring program. The Project will require coverage under the Construction General Permit.

2.2 State

2.2.1 California Endangered Species Act

The State of California enacted similar laws to the FESA, including the California Native Plant Protection Act (NPPA) in 1977 and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code (CFGC) (section 2.2.2). To align with the FESA, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the CESA as threatened species but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The California Department of Fish and Wildlife (CDFW) implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDB), a computerized inventory of information on the general location and status of California's rarest plants, animals, and natural communities. During the CEQA review process, the CDFW is given the opportunity to comment on the potential of the proposed Project to affect listed plants and animals.

2.2.2 Native Plant Protection Act

The NPPA of 1977 (CFGC, §§ 1900 through 1913) directed the CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by the CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take."

2.2.3 California Environmental Quality Act

CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a permit by state and local public agencies. CEQA (Public Resources Code Sections 21000 et. seq.) requires public agencies to review activities which may affect the quality of the environment so that consideration is given to preventing damage to the environment. When a lead agency issues a permit for development that could affect the environment, it must disclose the potential environmental effects of the project. This is done with an Initial Study and Negative Declaration (or Mitigated Negative Declaration) or with an Environmental Impact Report. Certain classes of projects are exempt from detailed analysis under CEQA. CEQA Guidelines Section 15380 defines endangered, threatened, and rare species for purposes of CEQA and clarifies that CEQA review extends to other species that are not formally listed under the CESA or FESA but that meet specified criteria.

2.2.4 Fully Protected Species and Species of Special Concern

The classification of "fully protected" was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The California Fish and Game Code (CFGC) sections (fish at §5515, amphibian and reptiles at §5050, birds at §3511, and mammals at §4700) dealing with "fully protected" species states that these species "…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," (CDFW Fish and Game Commission 1998) although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

2.2.5 California Fish and Wildlife Code Sections 3503 and 3513

According to Section 3503 of the California Fish and Wildlife Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 prohibits the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the CDFW.

2.2.6 Other Sensitive Plants – California Native Plant Society

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (http://www.cnps.org/cnps/rareplants/inventory/).

The Inventory assigns plants to the following categories:

1A Presumed extinct in California;
1B Rare, threatened, or endangered in California and elsewhere;
2 Rare, threatened, or endangered in California, but more common elsewhere;
3 Plants for which more information is needed – A review list; and
4 Plants of limited distribution – A watch list.

Additional endangerment codes are assigned to each taxon as follows:

1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).
2 Fairly endangered in California (20-80% occurrences threatened).
3 Not very endangered in California (<20% of occurrences threatened or no current threats known).

Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and the CDFW, as well as other state agencies (e.g., California Department of Forestry and Fire Protection). As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the CFGC. California Rare Plant Rank 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents (CNPS 2018, CDFW 2018b).

2.2.7 California Fish and Game Code Section 1600-1603

Streams, lakes, and riparian vegetation, as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the CFGC. Any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream”, which includes creeks and rivers, is defined in the California Code of Regulations (“CCR”) as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life”. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFW 1994). Riparian vegetation is defined as, “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFW 1994).

In addition to impacts to jurisdictional streambeds, removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

2.2.8 Sensitive Natural Communities

Sensitive natural communities are habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW or the USFWS. The CNDDB identifies a number of natural communities as rare, which are given the highest inventory priority (CDFW 2018a). Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

2.3 Local

2.3.1 City of San Bernardino General Plan

The City of San Bernardino General Plan (2012) contains a Natural Resources and Conservation. The Goals and Policies in this element are intended to maintain, improve, or preserve the quality and supply of the City's natural resources. The Natural Resources element strives to 1) minimize impacts to biological resources and natural features from new development, 2) utilize mineral resources efficiently; and 3) enhance quality of life by reducing harmful emissions and maintaining air quality. Specific Goals and Policies related to the protection of biological features include:

Goal 12.1 Conserve and enhance San Bernardino's biological resources.

Policies:

12.1.1 Acquire and maintain current information regarding the status and location of sensitive biological elements (species and natural communities) within the planning area

12.1.2 Site and develop land uses in a manner that is sensitive to the unique characteristics of and that minimizes the impacts upon sensitive biological resources.

12.1.3 Require that all proposed land uses in the "Biological Resource Management Area" (BRM) be subject to review by the Environmental Review Committee (ERC).

12.1.4 Require that development in the BRM:

a. Submit a report prepared by a qualified professional(s) that addresses the proposed project's impact on sensitive species and habitat, especially those that are identified in State and Federal conservation programs;

b. Identify mitigation measures necessary to eliminate significant adverse impacts to sensitive biological resources;

c. Define a program for monitoring, evaluating the effectiveness of, and ensuring the adequacy of the specified mitigation measures; and

d. Discuss restoration of significant habitats.

Goal 12.2 Protect riparian corridors to provide habitat for fish and wildlife.

Policies:

12.2.1 Prohibit development and grading within fifty (50) feet of riparian corridors, as identified by a qualified biologist, unless no feasible alternative exists.

12.2.2 Generally permit the following uses within riparian corridors:

a. Education and research, excluding buildings and other structures;

b. Passive (non-mechanized) recreation;

c. Trails and scenic overlooks on public land(s);
d. Fish and wildlife management activities;
e. Necessary water supply projects;
f. Resource consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code;
g. Flood control projects where no other methods are available to protect the public safety;
h. Bridges and pipelines when supports are not in significant conflict with corridor resources.

12.2.3 Pursue voluntary open space or conservation easements to protect sensitive species or their habitats.

12.2.4 Development adjacent to riparian corridors shall:
a. Minimize removal of vegetation;
b. Minimize erosion, sedimentation, and runoff by appropriate protection or vegetation and landscape;
c. Provide for sufficient passage of native and anadromous fish as specified by the California Department of Fish and Game;
d. Minimize wastewater discharges and entrapment;
e. Prevent groundwater depletion or substantial interference with surface and subsurface flows; and provide for natural vegetation buffers.

12.2.5 Permit modification of the boundaries of the designated riparian corridors based on field research and aerial interpretation data as part of biological surveys.

Goal 12.3 Establish open space corridors between and to protected wildlands.

Policies:

12.3.1 Identify areas and formulate recommendations for the acquisition of property, including funding, to establish a permanent corridor contiguous to the National Forest via Cable Creek and/or Devil Canyon. The City shall consult with various federal, state and local agencies and City departments prior to the adoption of any open space corridor plan.

12.3.2 Seek to acquire real property rights of open space corridor parcels identified as being suitable for acquisition.

12.3.3 Establish the following habitat types as high-priority for acquisition as funds are available:
a. Habitat of endangered species;
b. Alluvial scrub vegetation;
c. Riparian vegetation dominated by willow, alder, sycamore, or native oaks; and
d. Native walnut woodlands.

12.3.4 Preserve and enhance the natural characteristics of the Santa Ana River, City Creek, and Cajon Creek as habitat areas.

12.3.5 Prevent further loss of existing stands of Santa Ana River Wooly-star (*Eriastrum densifolium sanctorum*) and Slender-horned Centrostegia (*Centrostegia leptoceras*).

2.3.1 City of San Bernardino Municipal Code

City of San Bernardino Municipal Code 15.34, Removal or Destruction of Trees, states that is unlawful for any person, firm, corporation, partnership, or association, either as owner, agent or otherwise, to cut down, uproot, destroy, and/or remove more than five (5) trees within any 36-month period from a development site or parcel of property without first being issued a permit from the Development Services Department of the City of San Bernardino (MC 15.34.020).

3.0 METHODS

This analysis of potential biological resources located on the Project Site includes a review of available background information in and around the vicinity of the Project Site and completion of a field survey.

3.1 Literature Review

Prior to conducting field surveys, MIG biologists reviewed available background information pertaining to the biological resources on and in the vicinity of the project. Available literature and resource mapping reviewed included the occurrence records for special-status species and sensitive natural communities and numerous other information sources listed below:

- CNDDB record search for State and Federally Listed Endangered, Threatened, and Wildlife and Rare Plants of California within the San Bernardino South and surrounding eight USGS quadrangles: Devore, San Bernardino North, Harrison Mountain, Redlands, Sunnymead, Riverside East, Riverside West, Fontana (CDFW 2018a; Appendix A)
- CNPS Rare Plant Program, Inventory of Rare and Endangered Plants of California (CNPS 2018) records search within the Mt Wilson and surrounding eight USGS quadrangles
- USFWS Information for Planning and Consultation (IPaC; USFWS 2018a; Appendix A)
- Soil Survey Staff, Natural Resource Conservation Service (NRCS), United States Department of Agricultural (USDA NRCS 2018; Appendix A)
- CDFW California Natural Community List (CDFW 2018b)
- USFWS National Wetlands Inventory (USFWS 2018b)

3.2 Field Surveys

A biological field survey was conducted by MIG biologists Jonathan Campbell and John Kanlund on August 8, 2018. The field survey was conducted on foot to assess the existing conditions of the Project Site, including recording observed plant and wildlife species, characterizing and delineating the vegetation communities and associated wildlife habitats, and evaluating the potential for these habitats to support special-status species and sensitive communities.

3.2.1 Plant Communities

During the field survey, MIG biologists traversed the entire Project Site by foot and evaluated the suitability of on-site vegetation communities to support special-status species. An attempt was made to classify plant communities according to the Second Edition of the Manual of California Vegetation (Sawyer et al. 2009) classification system, as this method is preferred (but not required) by CDFW. However, for certain vegetation types, this system is too species-specific in its definitions of plant associations and alliances and does not accurately characterize the highly variable species composition of plant communities. For this Project Site, it was necessary to identify variants of plant community types for ruderal and ornamental plant assemblages and unvegetated areas that are not described in the literature. The List of California Natural and Terrestrial Communities (CDFW 2018b) was consulted to determine if any rare or sensitive plant communities are present. In addition, plant communities were evaluated to determine if they are considered sensitive under federal and/or other state regulations and local policies. Plant communities within the Project Site were mapped in the field onto a color aerial photograph and digitized into ArcView Geographic Information System (GIS) shapefiles.

3.2.2 Jurisdictional Habitats and Aquatic Features

The Project Site was inspected to determine if any wetlands and "other waters" or streambeds potentially subject to jurisdiction by the USACE, RWQCB, or CDFW were present. MIG certified wetland delineator Jon Campbell conducted a jurisdictional delineation of the 14.97-acre Project Site in August 8, 2018 (MIG 2018). The delineation was completed according to the USACE's 1987 Wetland Delineation Manual (Environmental Laboratory 1987) in conjunction with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Arid West Supplement) (USACE 2008a) and A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b). Wetland vegetation, hydric soils, and hydrology information were collected according the USACE's routine methodology to determine if wetlands were present. The Project Site was also inspected for the presence of drainages, streams, and other aquatic features, including those that support stream-dependent (i.e., riparian) plant species that may be considered jurisdictional by CDFW. Evaluation of CDFW jurisdiction followed guidance in the California Fish and Game Code and standard field practices by CDFW personnel.

3.2.3 Special-Status Species Habitat Assessment

The potential occurrence of special-status plant and animal species on the Project Site was initially evaluated by conducting a 9-quadrangle database records search[1] of CNDDB, CNPS Electronic Inventory, and the USFWS IPaC database to ensure a complete list of species was generated for the habitat assessment (see Appendices B and C). Following the records search, a refined list of special-status species was developed based on the general suitability of habitat types. The potential for occurrence of those species included on the refined list were then evaluated based on the habitat requirements of each species relative to the conditions observed during the field survey conducted by MIG biologists. Plant species that have been documented to occur well outside of the elevation and geographic range of the Project Site were eliminated from further consideration. Each species was evaluated for its potential to occur on or in the immediate vicinity of the Project Site according to the following criteria.

> **Not Expected.** There is no suitable habitat present on the Project Site (i.e., habitats on the Project Site are clearly unsuitable for the species requirements [e.g., foraging, breeding, cover, substrate, elevation, hydrology, plant community, disturbance regime]). Additionally, there are no recent known records of occurrence in the vicinity of the Project Site. The species has no potential of being found on the Project Site.
>
> **Low Potential.** Limited suitable habitat is present on the Project Site (i.e., few of the habitat components meeting the species requirements are present and/or the majority of habitat on the Project Site is unsuitable or of very low quality). Additionally, there are no or few recent known records of occurrence in the vicinity of the Project Site. The species has a low probability of being found on the Project Site.
>
> **Moderate Potential.** Suitable habitat is present on the Project Site (i.e., some of the habitat components meeting the species requirements are present and/or the majority of the habitat on the Project Site is suitable or of marginal quality). Additionally, there are few or many recent known

[1] A 9-quadrangle search is conducted using a U.S. Geological Survey 7.5-minute topographic quadrangle map. The search includes the quadrangle where the project is located and the eight surrounding quadrangles.

records of occurrences in the vicinity of the Project Site. The species has a moderate probability of being found on the Project Site.

High Potential. Highly suitable habitat is present on the Project Site (i.e., all habitat components meeting the species requirements are present and/or all of the habitat on the Project Site is highly suitable or of high quality). Additionally, there are few or many recent known records of occurrences in the vicinity of the Project Site. This species has a high probability of being found on the Project Site.

Present. Species was observed on the Project Site (i.e., species was either observed during recent surveys or has a recorded observation in the CNDDB on the Project Site).

Appendices A and B present the list of special-status plants and animals (respectively) that have the potential to occur in the vicinity of the Project Site, their habitat requirements, and a ranking of potential for occurrence on the Project Site. Nomenclature used for plant names follows the Second Edition of The Jepson Manual (Baldwin et al. 2012). Nomenclature for wildlife follows CDFW's Complete List of Amphibian, Reptile, Bird, And Mammal Species in California (CDFW 2016) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list.

4.0 EXISTING CONDITIONS

The following provides a description of the soils, vegetation communities, wildlife, and wildlife movement corridors present on the Project Site.

4.1 Physical Characteristics

The Project Site occurs within the United States Geological Survey (USGS) 7.5' series San Bernardino South Quadrangle. The Project Site is flat with elevations ranging between 985-1,035 feet AMSL (Figure 2, *USGS Topographic Map*). The concrete-lined Lytle Creek Channel flows from north to south within the western portion of the Project Site.

4.2 Soils

The Web Soil Survey reports the one soil unit within the boundary of the 14.97-acre Project Site (USDA NRCS 2018):

- Ps Psamments, Fluvents and Frequently flooded soils (2.6 ac)
- TvC Tujunga gravelly loamy sand, 0 to 9 percent slopes (6.1 ac)

The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas. Slopes range from 0 to 9 percent. These soils are about 60 inches thick, somewhat excessively drained, and found on nearly level to moderately sloping alluvial fans. Tujunga soils are slightly acidic and highly permeable so runoff on these soils is slow to very slow (USDA NRCS 2018).

Psamments, Fluvents and Frequently flooded soils (Ps) occur throughout the country. These soils are sandy in all layers and are among the most productive rangeland soils in some arid and semiarid climates. Some Psamments that are nearly bare are subject to soil blowing and drifting and provide poor support for wheeled vehicles. Psamments are used mostly as rangeland, pasture, or wildlife habitat. Fluvents are the more or less freely drained Entisols that formed in recent water-deposited sediments on flood plains, fans, and deltas along rivers and small streams. Most Fluvents are frequently flooded, unless they are protected by dams or levees. Stratification of the materials is normal (USDA NRCS 2018.

4.3 Plant Communities & Associated Wildlife Habitats

As described in Section 3 (Methods), plant communities on-site were mapped in the field onto a color aerial photograph (See Figure 4, *Vegetation Communities and Land Cover Types Map*) and were evaluated to determine if they are considered sensitive under federal, state, or local regulations or policies. Biological communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations.

The majority of the 14.97-acre Project Site is located within an urban area that is characterized by disturbed fields and ornamental plantings. On-site vegetation communities observed during the August 8, 2018 field survey are described in more detail below.

Disturbed (7.45 acres)
Portions of the Project Site receive recent and frequent disturbance from disking and/or trampling. These areas are dominated by non-native and/or invasive species including red brome *(Bromus madritensis spp. rubens),* Old han schismus *(Schismus barbatus),* Bermuda grass *(Cynodon dactylon),* Mediterranean canarygrass *(Phalaris minor),* upright veldt grass *(Ehrharta erecta),* wild oats *(Avena fatua),* tree of heaven *(Ailanthus altissima),* Russian thistle *(Salsola tragus),* Australian saltbush *(Atriplex semibaccata),* tree tobacco *(Nicotiana glauca),* tocalote *(Centaurea melitensis),* London rocket *(Sisymbrium irio),* Indian hedge mustard *(Sisymbrium orientale),* Peruvian pepper *(Schinus molle),* Mexican fan palm (*Washingtonia robusta),* prickly lettuce *(Lactuca serriola),* puncture vine *(Tribulus terrestris),* grape vine *(Vitis sp.),* castor bean *(Ricinus communis),* English ivy *(Hedera helix),* horehound *(Marrubium vulgare),* annual sunflower *(Helianthus annuus),* lamb's quarters *(Chenopodium album),* oleander *(Nerium oleander),* and summer mustard *(Hirschfeldia incana).* Native species are occasional and include disturbance-adapted species such as jimson *weed (Datura wrightii),* telegraph weed (*Heterotheca grandiflora),* horseweed *(Erigeron canadensis),* salt heliotrope *(Heliotropium curassavicum)* (refer to Figure 4, *Vegetation Communities and Land Cover Types* and Figure 5, *Current Project Site Photographs*).

Developed (5.31 acres)
The Project Site is dominated roads and sidewalks (Figure 4, *Vegetation Communities and Land Cover Types* and Figure 5, *Current Project Site Photographs*). These areas are generally devoid of vegetation, although non-native species from the disturbed vegetation community are occasional.

Ornamental (1.59 acres)
Portions of the Project Site are characterized by ornamental plantings. These areas of dominated by non-native tree and shrub species such as oleander (*Nerium oleander*), bougainvillea (*Bougainvillea spectabilis*), queen palm (*Syagrus romanzofiana*), Peruvian pepper, Japanese honeysuckle (*Lonicera japonica*), common fig (*Ficus carica*), Jerusalem thorn (*Parkinsonia aculeata*), ash (*Fraxinus* sp.), olive (*Olea europaea*), lantana (*Lantana camara*), velvet mesquite (*Prosopis velutina*), Indian hawthorn (*Rhaphiolepis indica*), and crapemyrtle (*Lagerstroemia indica*) (Figure 4, *Vegetation Communities and Land Cover Types* and Figure 6, *Current Project Site Photographs*).

Coast Live Oak (0.06 acres)
Two native coast live oak trees (*Quercus agrifolia*) occur within the Project Site boundary as roadside plantings along the southern edge of Inland Center Drive (Figure 4, *Vegetation Communities and Land Cover Types* and Figure 6, *Current Project Site Photographs*).

Concrete Storm Water Channel (0.56 acres)
The Lytle Creek Channel is located at the boundary of the Cities of Colton and San Bernardino. This concrete-lined channel is 40 feet wide and devoid of vegetation. Inland Center Drive traverses this drainage feature at the western boundary of the Project Site (Figure 4, *Vegetation Communities and Land Cover Types* and Figure 7, *Current Project Site Photographs*).

4.4 Wildlife

Wildlife species that were observed on the Project Site during the August 8, 2018 biological field survey include red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottus*), common raven (*Corvus corvax*), American crow (*Corvus brachyrhynchos*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida*

macroura), rock pigeon *(Columba livia*), black phoebe (*Sayornis nigricans*), song sparrow (*Melospiza melodia*), European starling (*Sturnus vulgaris*), western fence lizard (*Sceloporus occidentalis*), California ground squirrel (*Otospermophilus beecheyi*), domestic dog (*Canis lupus familiaris*), and domestic cat (*Felis catus*).

4.5 Sensitive Plant Communities

No sensitive plant communities were observed on the Project Site, as they did not exhibit the characteristic attributes of these communities, such as the known distribution and elevation, landscape position, plant species composition, soil and/or substrate type, water chemistry, and/or hydroperiod. In addition, no USFWS-designated critical habitat areas for any federally listed animals are present.

4.6 Special-Status Plants

Special-status plants are defined here to include: (1) plants that are federal- or state-listed as rare, threatened or endangered, (2) federal and state candidates for listing, (3) plants assigned a Rank of 1 through 4 by the CNPS Inventory, and (4) plants that qualify under the definition of "rare" in the California Environmental Quality Act, section 15380. The Project Site was initially determined to provide potentially suitable habitat for a total of 27 special-status plant species based on the proximity of the project to previously recorded occurrences in the region, vegetation types and habitat quality, topography, elevation, soil types, and other species-specific habitat requirements (CDFW 2018a). Based on results of the habitat suitability analysis and focused late season survey conducted by MIG biologists on August 8, 2018, none of the 27 species are expected to occur on the Project Site (i.e. all species' potential for occurrence is ranked as "Not Expected"). A table presenting the special-status plant species considered and evaluated for their potential occurrence on the Project Site, including plant species' habitat requirements and reported blooming periods, is provided in Appendix B.

4.7 Special-Status Wildlife

Special-status wildlife species include those species listed as endangered or threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; and species of special concern to the CDFW; and birds protected by the CDFW under CFGC Sections 3503 and 3513. It was initially determined that 44 special-status wildlife species have been recorded in the vicinity of the Project Site (CDFW 2018a). Of these animal species, 39 are not expected to occur on the Project Site (i.e., species ranked as "Not Expected"). Reasons include the absence of essential habitat requirements for the species, the distance to known occurrences and/or the species distributional range, the limited availability of foraging and nesting habitat, amount of site disturbance from past and present land uses, and/or the proximity of existing human-related disturbances. A table presenting the special-status wildlife species considered and evaluated for their potential occurrence on the Project Site, including species-specific habitat requirements, is provided in Appendix C.

Special Status Fish Species

The following three special status fish species are considered to have an extremely low potential to occur in Lytle Creek Channel based on the distance to nearest observations (3-7 miles from the Project Site) documented in the CNDDB (CDFW 2018). These species include Santa Ana sucker (*Catostomus santaanae),* arroyo chub (*Gila orcuttii), and* Santa Ana speckled dace (*Rhinichthys osculus ssp. 3*) (refer to Appendix C). The concrete lined Lytle Creek is an engineered channel with an ephemeral hydrologic regime that conveys urban runoff and direct precipitation for a short duration. The channel does not convey

sufficient flows, nor support sand-rubble-boulder, mud, or other natural streambed material; riparian vegetation for cover and refuge; or food sources that would be suitable to support Santa Ana sucker, Santa Ana speckled dace, or arroyo chub. While the Project Site is located within the Santa Ana River Watershed Recovery Unit and within the Santa Ana sucker's historic range, this species is not known to occur in the Lytle Creek Channel (USFWS 2014 and CDFW 2018). The Lytle Creek Channel connects with Warm Creek, also a concrete lined channel and eventually drains to the Santa Ana River approximately 1.5 river miles downstream from the Project Site. It is possible, but very unlikely, that individual Santa Ana sucker, arroyo chub, and Santa Ana speckled dace could be washed up into to the Project Site from suitable habitat areas along the Santa Ana River during extreme flooding events when the river tops its banks, or during infrequent periods of heavy precipitation when there is sufficient flow in Lytle Creek Channel to support fish movement. Lytle Creek Channel has an extremely low potential support any fish species, and only for a short duration during and immediately following heavy precipitation events or periods of record downstream flooding.

Nesting Birds
Nesting birds are protected under CFGC 3503, 3503.5, and 3512, which prohibits the take of active bird nests. Ruderal vegetation and ornamental trees within the Project Site provides marginally suitable nesting habitat for songbirds including California horned lark (*Eremophila alpestris actia*; State Watch List). There is potential for ground- and tree-nesting birds to establish nests on the Project Site prior to initiation of project construction.

No other special status wildlife species are expected to be impacted by project construction due to a lack of suitable habitat (refer Appendices C) and high degree of site disturbance due to existing development within and surrounding the Project Site.

4.8 Wildlife Movement Corridors

Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. The regional movement and migration of wildlife species has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development of open areas, which can result in large patches of land becoming inaccessible and forming a virtual barrier between undeveloped areas. Additional roads associated with development, although narrow, may result in barriers to smaller or less mobile wildlife species. Habitat fragmentation results in isolated islands of habitat, which affects wildlife behavior, foraging activity, reproductive patterns, immigration and emigration or dispersal capabilities, and survivability. Wildlife corridors can consist of a sequence of stepping-stones across the landscape (i.e., discontinuous areas of habitat such as isolated wetlands), continuous lineal strips of vegetation and habitat (e.g., riparian strips and ridge lines), or they may be parts of larger habitat areas selected for its known or likely importance to local wildlife. The majority of Project Site does not act as a wildlife movement corridor due to the current built environment as well as the presence of urban/suburban development surrounding the site. The Project Site is expected to be utilized by common, non-special status wildlife for foraging and possibly breeding. However, the Project Site is situated in an urbanized area and does not represent a wildlife movement corridor due to the fact that it is bound on all sides by residential and industrial land uses.

4.9 CWA Section 404/401 Jurisdictional Waters/Wetlands

A total of approximately 0.65 acres or 630 linear feet of non-wetland ephemeral other waters was mapped within the Project Site (Figure 8, *Map of CWA 404/401 Jurisdiction*). The concrete-lined Lytle Creek Channel flows from north to south within the western portion of the Project Site. The OHWM is typically interpreted by field identification of the upper limit of standing and/or flowing water (estimated during a normal rainfall year), riverine debris deposition, destruction of terrestrial vegetation, scour, well-defined drainage topography, shelving, and other physical factors. However, the other water boundaries of the Lytle Creek Channel were determined through measurement of the bankfull width of the engineered channel, which was approximately 40 feet.

This channel has an ephemeral hydrologic regime and conveys stormwater runoff and direct precipitation for a short duration, drying down to less than 1-inch depth during late summer and fall months. The Lytle Creek Channel travels 2,200 feet where it drains into the Warm Creek concrete-lined channel and continues for another 5,000 feet before draining into the Santa Ana River. The Santa Ana River is southern California's largest river that flows from the San Bernardino Mountains, through the Prado Flood Control Basin, and ultimately into the Pacific Ocean. Because it is confluent to the Santa Ana River, the Lytle Creek Channel is a potential waters of the U.S. regulated by USACE and a Waters of the State regulated by the RWQCB and CDFW.

4.10 CDFW Jurisdictional Streambeds

All ecological systems associated with drainages with bed and bank topography may be regulated by Sections 1600-1616 of the CFGC. The location and extent of features potentially subject to CDFW jurisdiction were mapped within the Project Site and are depicted on Figure 9 (*Map of CDFW Jurisdiction*). Approximately 1.41 acres or 630 linear feet of CDFW jurisdictional streambed was mapped within the project limits, measured from the top of bank of the engineered Lytle Creek Channel.

5.0 ENVIRONMENTAL IMPACTS

This section describes potential impacts to sensitive biological resources—including special-status plants and animals, and aquatic resources that may occur in the Project Site. Each impact discussion includes mitigation measures that would be implemented during the project to avoid and/or reduce the potential for and/or level of impacts to each resource. With the implementation of the recommended mitigation measures, all impacts to biological resources are anticipated to be reduced to less than significant pursuant to CEQA.

5.1 Thresholds of Significance

This section describes potential impacts to biological resources that may occur as a result of the construction of the proposed project. CEQA Guidelines provide guidance in evaluating project impacts and determining whether impacts may be significant. CEQA defines "significant effect on the environment" as "a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." In accordance with Appendix G of the CEQA Guidelines, a project could have a significant environmental impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS
- Have a substantial adverse effect on any sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS
- Have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrologic interruption, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plant (NCCP), or other approved local, regional, or state HCP

5.2 Impacts and Mitigation Measures

Consistent with the requirements of CEQA and local regulations, the significance of potential impacts is evaluated through the application of the significance criteria described above. The objective of the biological resources analysis is to identify potential adverse effects and/or significant impacts on biological resources. Avoidance is often the preferred approach for the management of biological resources; however, it is not always possible to completely avoid impacts. Mitigation measures to avoid or minimize impacts are identified, as appropriate, including procedures to be followed if significant biological resources are identified prior to the initiation of construction.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFW or USFWS;

Special Status Plants

No special-status plant species are expected to be present on the Project Site due to the extent of current development and subsequent lack of suitable habitat (refer to Appendix B); therefore, no impacts to special-status plants are anticipated as a result of Project implementation, and no further mitigation is required.

Special Status Wildlife

Impact BIO-1: Nesting Birds

Native and ornamental trees, as well as various other substrates on the Project Site, have the potential to provide nesting habitat for bird species protected by the CFGC Sections 3503 and 3513 as well as California horned lark. There is potential for ground- and tree-nesting birds to establish nests on the Project Site prior any project-related construction. Construction activities including site mobilization, tree removal, other vegetation clearing, grubbing, grading, and noise and vibration from the operation of heavy equipment have the potential to result in significant direct (i.e., death or physical harm) and/or indirect (i.e., nest abandonment) impacts to nesting birds. The loss of an active nest of common or special-status bird species and/or their eggs or young as a result of project construction would be considered a violation of the CFGC, Section 3503, 3503.5, 3513 and therefore, would be considered a potentially significant impact. Implementation of Mitigation Measure BIO-1 would be required to reduce impacts to nesting birds to a less than significant level.

Impact BIO-2: Special Status Fish

Although the Project Site does not contain any habitat features that would be suitable to support the Santa Ana sucker, arroyo chub, and Santa Ana speckled dace species and lacks consistent hydrologic connectivity to suitable habitat areas that could facilitate upstream movement, impact avoidance measures should be implemented during project construction out of an abundance of caution in the unlikely event that an individual enters the Project Site during construction.

If the Inland Drive storm connection is constructed during or shortly after storm events when sufficient water is in the Lytle Creek Channel to support fish species, construction activities would have the potential, albeit low, to adversely impact Santa Ana sucker and California Species of Concern Santa Ana specked dace and arroyo chub. This would represent a potentially significant impact according to CEQA guidelines. Implementation of Mitigation Measure BIO-2 is required to avoid potential inadvertent adverse impacts to special status fish species to a less than significant level.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS;

No sensitive natural vegetation communities defined by CDFW, USFWS, and/or local/regional plans are present on the Project Site (refer to Appendix A). No impact will occur.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

Impact BIO-3: Jurisdictional Channel

The USACE and EPA regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act. Section 404 of the CWA requires a permit before dredged or fill material may be discharged into waters of the United States. Section 401 of the CWA requires an applicant for a federal permit to obtain a certification from the RWQCB. Additionally, Section 1602 of the CFGC requires the issuance of a Lake and Streambed Alteration Agreement (LSAA) to authorize work in jurisdictional streambeds. The concrete-lined Lytle Creek Channel is a potential USACE, CDFW, and RWQCB jurisdictional resource. Construction of the Inland Drive storm drain connection in Lytle Creek Channel would result in a temporary and potentially significant impact to federally protected waters of the U.S. as defined by Section 404 of the Clean Water Act (CWA) and Waters of the State. Impacts would be mitigated to a level of less than significant by implementing Mitigation Measure BIO-3.

d) Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site;

The Project Site does not function as a wildlife movement corridor or native wildlife nursery site and only facilitates localized movements by common species that are adapted to urban environments. Therefore, there will be a less than significant impact as a result from project construction and operation.

e) Conflict with any local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

Impact BIO-4: Protected Trees

City of San Bernardino Municipal Code 15.34, Removal or Destruction of Trees, states that is unlawful for any person, firm, corporation, partnership, or association, either as owner, agent or otherwise, to cut down, uproot, destroy, and/or remove more than five (5) trees within any 36-month period from a development site or parcel of property without first being issued a permit from the Development Services Department of the City of San Bernardino (MC 15.34.020). While no tree removal is planned to occur as a result of project construction, if any construction-related activities result in the loss of five or more trees, implementation of Mitigation Measure BIO-4 would reduce impacts to protected trees to a less than significant level.

f) Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

The Project Site does not occur within an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. No impact will occur.

Mitigation Measures

BIO-1 If vegetation removal is scheduled during the nesting season (typically February 1 to September 1), then a focused survey for active nests shall be conducted by a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) no more than five (5) days prior to the beginning of project-related activities (e.g., excavation, grading and vegetation removal). Surveys shall be conducted in

proposed work areas, staging and storage areas, and soil, equipment, and material stockpile areas. For passerines and small raptors, surveys shall be conducted within a 250-foot radius surrounding the work area (in non-developed areas and where access is feasible). For larger raptors, such as those from the genus *Buteo*, the survey area shall encompass a 500-foot radius. Surveys shall be conducted during weather conditions suited to maximize the observation of possible nests and shall concentrate on areas of suitable habitat. If a lapse in project-related work of five (5) days or longer occurs, an additional nest survey shall be required before work can be reinitiated. If nests are encountered during any preconstruction survey, a qualified biologist shall determine if it may be feasible for construction to continue as planned without impacting the success of the nest, depending on conditions specific to each nest and the relative location and rate of construction activities. Any nest(s) within the Project Site shall be monitored by a qualified biologist during active construction if work is occurring directly adjacent to the pre-determined no-work buffer. If the qualified biologist determines construction activities have potential to adversely affect a nest, the biologist shall immediately inform the construction manager to halt construction activities within minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on species and location. Construction activities within the no-work buffer may proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g. young have fledged, predation, or other non-anthropogenic nest failure).

BIO-2 To avoid potential adverse impacts to Santa Ana sucker, arroyo chub, and Santa Ana speckled dace in the event that these species are washed into the Project Site during a storm or river flooding event, the timing of storm drain construction work within the Lytle Creek Channel will be restricted to the dry season when standing water is no greater than one (1) inch. No work shall be conducted when water is flowing in the channel. Prior to any work where ponded water is present, a qualified aquatic biologist shall conduct surveys for special status fish. If Santa Ana suckers occur in portions of the channel where construction activities are scheduled to occur, the applicant shall retain a biologist holding a USFWS permit for the Santa Ana sucker to monitor all construction activities in the channel thereafter. The resumes of the proposed biologists will be provided to the USFWS for concurrence. This biologist will be referred to as the permitted biologist hereafter. The permitted biologist will have the authority to stop all activities until appropriate corrective measures have been completed. The permitted biologist shall inspect the channel a minimum of three times a day from October 1 to April 30 and one time a day from May 1 through September 30 (unless otherwise approved by the CDFW and USFWS during construction to inspect for leaks, spills, or other debris that may enter the Lytle Creek Channel).

A complete Hazardous Material Spill kit capable of containing the largest potential vehicle spill of gasoline, diesel, or other hazardous materials will be kept on the project site. The kit shall be located and maintained in areas accessible to crews. Spills on the roadway will be logged and reported to the biological monitor weekly and cleaned up immediately. Any spills will be reported to CDFW and USFWS within one hour. No refueling or equipment staging shall occur within the channel.

BIO-3 Any alterations of, or discharges into, waters of the United States, including Section 404 wetlands shall be in conformance with the Sections 404 and 401 of the CWA via certification and permitting prior to any demolition, grading, or construction that may impact jurisdictional area(s), as applicable. Activities that usually involve a regulated discharge of dredged or fill materials include (but are not limited to) grading, placing of riprap for erosion control, pouring concrete, laying sod, preparing soil for planting (e.g., turning soil over, adding soil amendments), stockpiling excavated

material, mechanized removal of vegetation, and driving of piles for certain types of structures. If avoidance of federally protected wetlands is not feasible, securing 404 and 401 permits under the Clean Water Act and compliance with the federal and state "no net loss of wetlands" policy shall be required in accordance with USACE and RWQCB regulations.

Prior to the start of demolition, the applicant shall submit a jurisdictional delineation of waters of the U.S. to the USACE in order to request a formal verification of the limits of their jurisdiction and to identify potential impacts to waters of the U.S. If the USACE determines that jurisdictional waters of the U.S. will be impacted by the project, the appropriate CWA Section 404 permit shall be acquired by the applicant prior to the start of demolition of the proposed project. In addition, the Applicant shall be required to submit a Section 401 Water Quality Certification application to the Santa Ana RWQCB. If the USACE does not assert regulatory jurisdiction, then the applicant may be required to submit a Notice of Intent to the RWQCB for their General Permit R6T-2003-0004 for minor impact projects. If required, all regulatory permits shall be obtained, and all conditions shall be agreed upon to prior to demolition. The Project Applicant shall be responsible for complying with all conditions outlined in the applicable USACE, and/or RWQCB. Impact minimization measures associated with permit conditions of approval may include implementation of best management practices (i.e., erosion and sediment control measures) and seasonal work restrictions, as appropriate. Impacts to jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.

Storm water drainage plans and erosion and sediment control plans will be designed to avoid and minimize erosion and runoff to the work area within Lytle Creek Channel. To minimize indirect effects on water quality and wetland hydrology, the applicant will obtain a National Pollutant Discharge Elimination System Stormwater Permit (NPDES) and comply with drainage and storm water quality standards to avoid and minimize erosion and runoff to all wetlands that would avoided by the project. As part of the project design, the applicant will implement storm water quality treatment controls such as berms, off-stream detention basins, overflow collection areas, filtration systems, and sediment traps to control siltation and the potential discharge of pollutants to minimize impacts on water quality. The applicant will obtain a General Construction Storm Water Permit from the RWQCB, prepare a Storm Water Pollution Prevention Plan (SWPPP), and implement Best Management Practices (BMPs) to reduce water quality effects during and after construction. These BMPs include standard sediment and erosion control measures (e.g., installing orange construction fencing buffers, straw waddles, silt fencing, etc. around the perimeter of the construction zone) that will be implemented to protect jurisdictional wetlands and other waters that are being avoided during construction.

BIO-4 Prior to the removal of five or more trees, a tree removal permit will be attained from the Development Services Department of the City of San Bernardino (MC 15.34.020).

6.0 REFERENCES

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken [editors]. 2012. The Jepson Manual: Vascular Plants of California. 2nd edition, thoroughly revised and expanded. University of California Press, Berkeley, CA.

CDFW CNDDB. 2018. Sensitive Element Record Search. California Department of Fish and Wildlife. Sacramento, California. Accessed [August 2018].

CDFW. 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California, May 2016. California Wildlife Habitat Relationships Program, Sacramento. 26 pp.

CDFW. 2018a. California Natural Community List, January 24, 2018. Available online at www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp. Accessed [August 2018].

CDFW. 2018b. State and Federally Listed Endangered and Threatened Animals and Plants of California, August 6, 2018. Biogeographic Data Branch, CNDDB.

CDFW. 2018c. Protocols For Surveying And Evaluating Impacts To Special Status Native Plant Populations And Communities. March 20, 2018. Accessed online: http://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html.

CNPS. 2001. Botanical Survey Guidelines. Available online at https://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf

CNPS, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available online at http://www.rareplants.cnps.org Accessed [August 2018].

USACE. 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Eds. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-06-16, U.S. Army Engineer Research and Development Center, Vicksburg, MS. May 2008.

USACE. 2008b. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. Eds. Robert W. Lichvar and Shawn M. McColley. ERDC/EL TR-08-12, U.S. Army Engineer Research and Development Center, Vicksburg, MS. August 2008.

USDA NRCS Soil Survey Staff. 2018. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed [August 2018].

USFWS. 2018a. Federally Listed, Candidate, and Delisted Taxa in the Jurisdiction of the Carlsbad Fish and Wildlife Office. Pacific Southwest Region. Carlsbad Office. Available online at http://www.fws.gov/carlsbad/TEspecies.html. Accessed [August 2018].

USFWS. 2018b. National Wetlands Inventory. Wetlands Mapper. Available online at: http://www.fws.gov/wetlands/data/mapper.html. Accessed [August 2018].

U.S. Fish and Wildlife Service. 2014. Draft Recovery Plan for the Santa Ana sucker. U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. v + 61 pp.

FIGURES

Figure 1: Regional Map

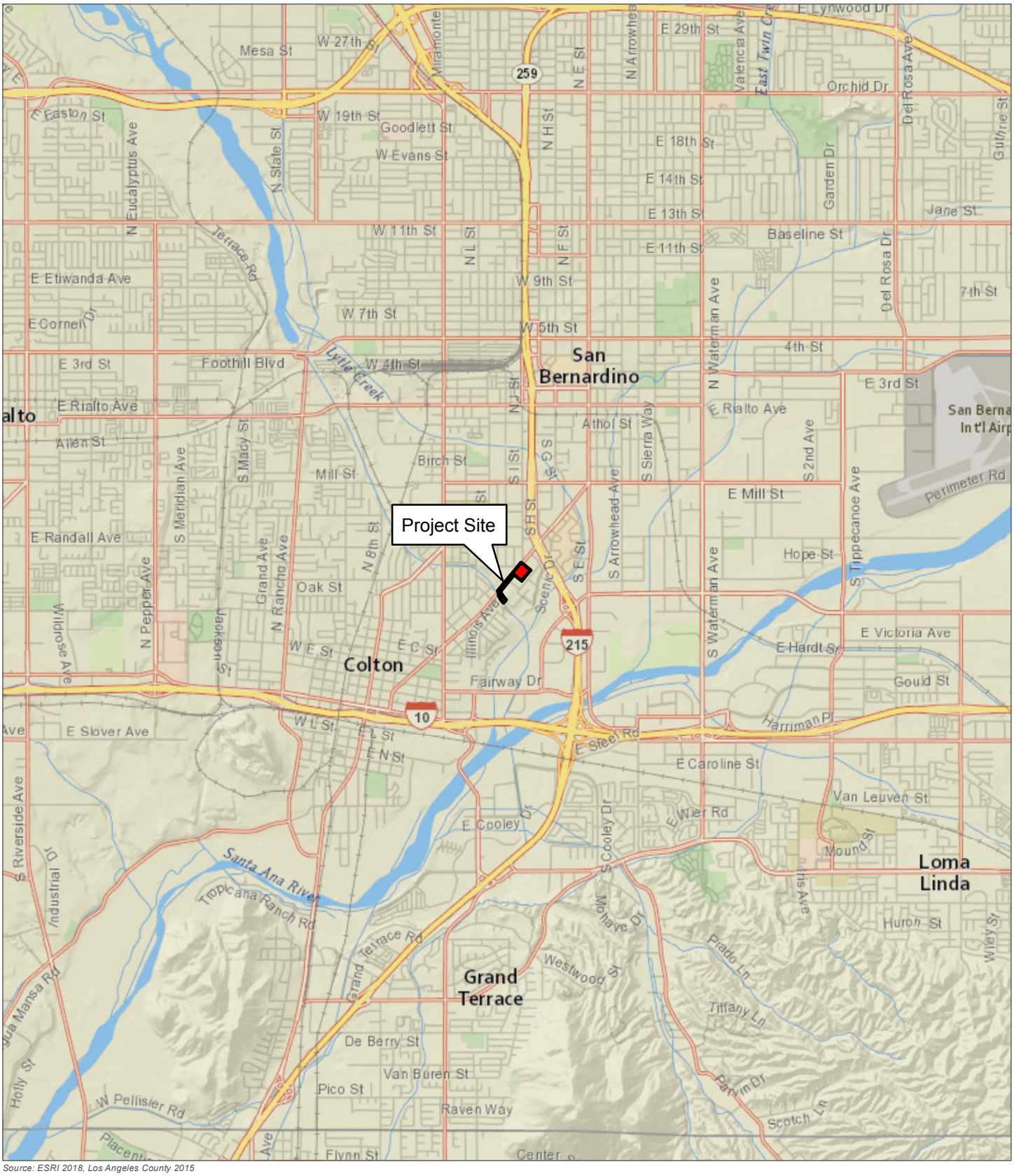
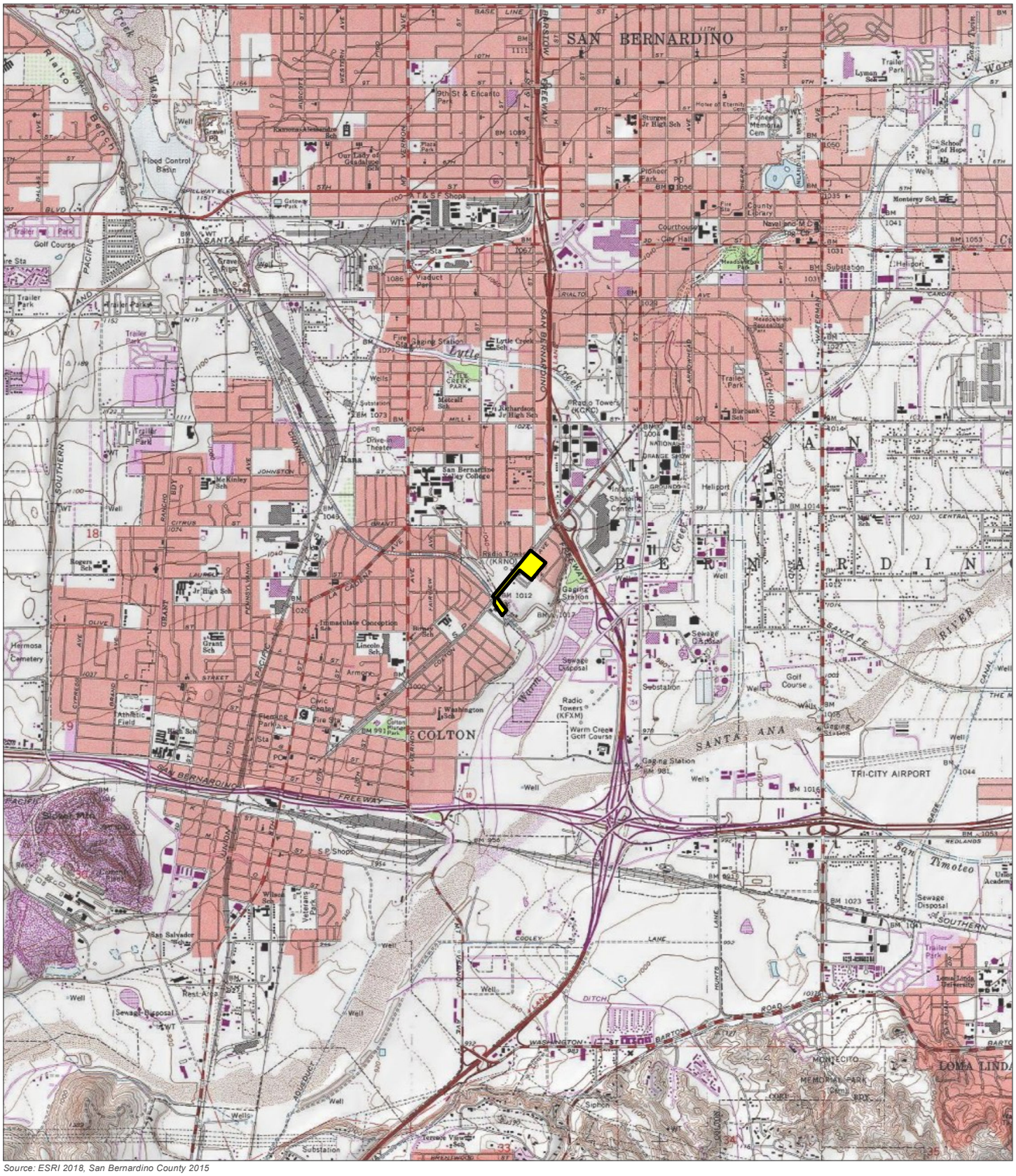


Figure 1 Regional Map

Inland Center Drive Storm Drain Improvement Project Site

MIG

Figure 2: USGS Topographic Map



Source: ESRI 2018, San Bernardino County 2015

Figure 2 USGS Topographic Map

Inland Center Drive Storm Drain Improvement Project

Figure 3: Project Site Map

Source: ESRI 2018, San Bernardino County 2015

Project Site Boundary
City Boundary
Proposed Storm Drain

0 100 200 400 Feet

N

Figure 3 Project Site Map

Inland Center Drive Storm Drain Improvement Project Site

MIG

Figure 4: Vegetation Communities and Land Cover Types

Source: ESRI 2018, San Bernardino County 2015

Project Site Boundary
City Boundary

Vegetation Community
Disturbed 7.45 ac
Developed 5.31 ac
Ornamental 1.59 ac
Concrete Channel 0.56 ac
Coast Live Oak Tree 0.06 ac

0 100 200 400 Feet

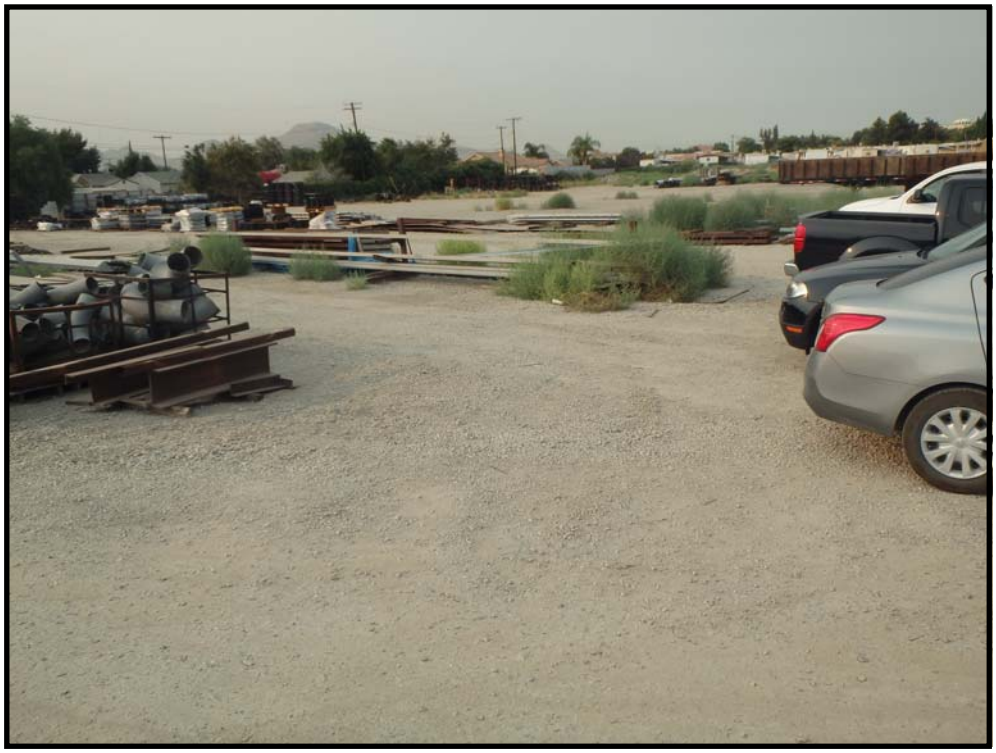
N

Figure 4 Vegetation Communities and Land Cover Types

Inland Center Drive Storm Drain Improvement Project Site

MIG

Figure 5: Current Project Site Photographs



PHOTOGRAPH 1- Non-native grasses and herbs are present throughout the disturbed portions of the Project Site, looking west.

PHOTOGRAPH 2 - Inland Center Drive, where the stormdrain improvement will occur, looking northeast.

Figure 5 Current Project Site Photographs

Figure 6: Current Project Site Photographs

PHOTOGRAPH 3- Ornamental plantings are present along the Inland Center Drive, as well as associated sidewalks and bike paths, looking northeast.

PHOTOGRAPH 4 - Two coast live oak trees are present within the Project Site boundary along the south side of Inland Center Drive, looking south.

Figure 6 Current Project Site Photographs

Figure 7: Current Project Site Photographs

PHOTOGRAPH 5- The Lytle Creek Channel runs north to south along the western edge of the Project Site boundary, looking south.

Figure 7 Current Project Site Photographs

Figure 8: Map of CWA 404/401 Jurisdiction

Source: NAIP 2016, San Bernardino County 2015

Study Area Boundary (14.97 ac)
City Boundary
Ephemeral Other Waters below OWHM (Lytle Creek Channel; 0.65 ac and 630 linear feet)
Upland Sample Point

0 100 200 400 Feet

Figure 8 Map of CWA 404&401Jurisdiction

Inland Center Drive Storm Drain Improvement Project Site

MIG

Figure 8: Map of CDFW Jurisdiction

Figure 9 Map of CDFW Jurisdiction

Inland Center Drive Stormdrain Improvement Project Site

MIG

APPENDICES

Appendix A
Special Status Species Database Search Results

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Devore (3411724) OR San Bernardino North (3411723) OR Harrison Mtn. (3411722) OR San Bernardino South (3411713) OR Fontana (3411714) OR Redlands (3411712) OR Riverside West (3311784) OR Riverside East (3311783) OR Sunnymead (3311782))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Allium howellii var. clokeyi Mt. Pinos onion	PMLIL02161	None	None	G4T2	S2	1B.3
Ambrosia monogyra singlewhorl burrobrush	PDAST50010	None	None	G5	S2	2B.2
Ambrosia pumila San Diego ambrosia	PDAST0C0M0	Endangered	None	G1	S1	1B.1
Anniella stebbinsi southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Artemisiospiza belli belli Bell's sage sparrow	ABPBX97021	None	None	G5T2T3	S3	WL
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus hornii var. hornii Horn's milk-vetch	PDFAB0F421	None	None	G4G5T1T2	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Baeolophus inornatus oak titmouse	ABPAW01100	None	None	G4	S4	
Batrachoseps gabrieli San Gabriel slender salamander	AAAAD02110	None	None	G2G3	S2S3	
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
Bombus morrisoni Morrison bumble bee	IIHYM24460	None	None	G4G5	S1S2	
Brodiaea filifolia thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Calochortus palmeri var. palmeri Palmer's mariposa-lily	PMLIL0D122	None	None	G3T2	S2	1B.2
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Carex comosa bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Carolella busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
Castilleja lasiorhyncha San Bernardino Mountains owl's-clover	PDSCR0D410	None	None	G2?	S2?	1B.2
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Ceratochrysis longimala Desert cuckoo wasp	IIHYM71040	None	None	G1	S1	
Chaetodipus fallax fallax northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	SSC
Chaetodipus fallax pallidus pallid San Diego pocket mouse	AMAFD05032	None	None	G5T34	S3S4	SSC
Charina umbratica southern rubber boa	ARADA01011	None	Threatened	G2G3	S2S3	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Chorizanthe parryi var. parryi Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
Chorizanthe xanti var. leucotheca white-bracted spineflower	PDPGN040Z1	None	None	G4T3	S3	1B.2
Cicindela tranquebarica viridissima greenest tiger beetle	IICOL02201	None	None	G5T1	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Coleonyx variegatus abbotti San Diego banded gecko	ARACD01031	None	None	G5T3T4	S1S2	SSC
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Crotalus ruber red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4T5	SH	2B.2
Diadophis punctatus modestus San Bernardino ringneck snake	ARADB10015	None	None	G5T2T3	S2?	
Dipodomys merriami parvus San Bernardino kangaroo rat	AMAFD03143	Endangered	None	G5T1	S1	SSC
Dipodomys stephensi Stephens' kangaroo rat	AMAFD03100	Endangered	Threatened	G2	S2	
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Euchloe hyantis andrewsi Andrew's marble butterfly	IILEPA5032	None	None	G3G4T1	S1	
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Fimbristylis thermalis hot springs fimbristylis	PMCYP0B0N0	None	None	G4	S1S2	2B.2
Galium californicum ssp. primum Alvin Meadow bedstraw	PDRUB0N0E6	None	None	G5T2	S2	1B.2
Gila orcuttii arroyo chub	AFCJB13120	None	None	G2	S2	SSC
Glaucomys oregonensis californicus San Bernardino flying squirrel	AMAFB09021	None	None	G5T1T2	S1S2	SSC
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TH	SH	1A

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Heuchera parishii Parish's alumroot	PDSAX0E0S0	None	None	G3	S3	1B.3
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Imperata brevifolia California satintail	PMPOA3D020	None	None	G4	S3	2B.1
Ivesia argyrocoma var. argyrocoma silver-haired ivesia	PDROS0X021	None	None	G2T2	S2	1B.2
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Lepus californicus bennettii San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	SSC
Lilium parryi lemon lily	PMLIL1A0J0	None	None	G3	S3	1B.2
Lycium parishii Parish's desert-thorn	PDSOL0G0D0	None	None	G3?	S1	2B.3
Malacothamnus parishii Parish's bush-mallow	PDMAL0Q0C0	None	None	GXQ	SX	1A
Monardella macrantha ssp. hallii Hall's monardella	PDLAM180E1	None	None	G5T3	S3	1B.3
Monardella pringlei Pringle's monardella	PDLAM180J0	None	None	GX	SX	1A
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	None	G5T1Q	S1	
Onychomys torridus ramona southern grasshopper mouse	AMAFF06022	None	None	G5T3	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Opuntia basilaris var. brachyclada short-joint beavertail	PDCAC0D053	None	None	G5T3	S3	1B.2
Perideridia parishii ssp. parishii Parish's yampah	PDAPI1N0C2	None	None	G4T3T4	S2	2B.2
Perognathus alticolus alticolus white-eared pocket mouse	AMAFD01081	None	None	G1G2TH	SH	SSC
Perognathus longimembris brevinasus Los Angeles pocket mouse	AMAFD01041	None	None	G5T1T2	S1S2	SSC
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Rana muscosa southern mountain yellow-legged frog	AAABH01330	Endangered	Endangered	G1	S1	WL
Rhaphiomidas terminatus abdominalis Delhi Sands flower-loving fly	IIDIP05021	Endangered	None	G1T1	S1	
Rhinichthys osculus ssp. 3 Santa Ana speckled dace	AFCJB3705K	None	None	G5T1	S1	SSC
Ribes divaricatum var. parishii Parish's gooseberry	PDGRO020F3	None	None	G5TX	SX	1A
Riversidian Alluvial Fan Sage Scrub Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
Salvadora hexalepis virgultea coast patch-nosed snake	ARADB30033	None	None	G5T4	S2S3	SSC
Schoenus nigricans black bog-rush	PMCYP0P010	None	None	G4	S2	2B.2
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
Sidalcea malviflora ssp. dolosa Bear Valley checkerbloom	PDMAL110FH	None	None	G5T2	S2	1B.2
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Southern California Arroyo Chub/Santa Ana Sucker Stream Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Cottonwood Willow Riparian Forest						
Southern Mixed Riparian Forest	CTT61340CA	None	None	G2	S2.1	
Southern Mixed Riparian Forest						
Southern Riparian Forest	CTT61300CA	None	None	G4	S4	
Southern Riparian Forest						
Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	
Southern Riparian Scrub						
Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Sycamore Alder Riparian Woodland						
Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
Southern Willow Scrub						
Spea hammondii	AAABF02020	None	None	G3	S3	SSC
western spadefoot						
Sphenopholis obtusata	PMPOA5T030	None	None	G5	S2	2B.2
prairie wedge grass						
Spinus lawrencei	ABPBY06100	None	None	G3G4	S3S4	
Lawrence's goldfinch						
Streptanthus bernardinus	PDBRA2G060	None	None	G3G4	S3S4	4.3
Laguna Mountains jewelflower						
Streptanthus campestris	PDBRA2G0B0	None	None	G3	S3	1B.3
southern jewelflower						
Streptocephalus woottoni	ICBRA07010	Endangered	None	G1G2	S1S2	
Riverside fairy shrimp						
Symphyotrichum defoliatum	PDASTE80C0	None	None	G2	S2	1B.2
San Bernardino aster						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Thamnophis hammondii	ARADB36160	None	None	G4	S3S4	SSC
two-striped gartersnake						
Thelypteris puberula var. sonorensis	PPTHE05192	None	None	G5T3	S2	2B.2
Sonoran maiden fern						
Vireo bellii pusillus	ABPBW01114	Endangered	Endangered	G5T2	S2	
least Bell's vireo						

Record Count: 119

CNPS California Native Plant Society

Plant List

Inventory of Rare and Endangered Plants

44 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3411724, 3411723, 3411722, 3411714, 3411713, 3411712, 3311784, 3311783 and 3311782; Elevation is above 300 or below 315 meters

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Abronia villosa var. aurita	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	1B.1	S2	G5T2T3
Ambrosia monogyra	singlewhorl burrobrush	Asteraceae	perennial shrub	Aug-Nov	2B.2	S2	G5
Ambrosia pumila	San Diego ambrosia	Asteraceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
Artemisia palmeri	San Diego sagewort	Asteraceae	perennial deciduous shrub	(Feb)May-Sep	4.2	S3?	G3?
Asplenium vespertinum	western spleenwort	Aspleniaceae	perennial rhizomatous herb	Feb-Jun	4.2	S4	G4
Astragalus hornii var. hornii	Horn's milk-vetch	Fabaceae	annual herb	May-Oct	1B.1	S1	G4G5T1T2
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	1B.1	S1	G1
Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	Mar-Jun	1B.1	S2	G2
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar-Jun	4.2	S3S4	G3G4
Calochortus plummerae	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	4.2	S4	G4
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	2B.1	S2	G5
Caulanthus simulans	Payson's jewelflower	Brassicaceae	annual herb	(Feb)Mar-May(Jun)	4.2	S4	G4
Centromadia pungens ssp. laevis	smooth tarplant	Asteraceae	annual herb	Apr-Sep	1B.1	S2	G3G4T2
Chorizanthe leptotheca	Peninsular spineflower	Polygonaceae	annual herb	May-Aug	4.2	S3	G3
Chorizanthe parryi var. parryi	Parry's spineflower	Polygonaceae	annual herb	Apr-Jun	1B.1	S2	G3T2
Chorizanthe xanti var. leucotheca	white-bracted spineflower	Polygonaceae	annual herb	Apr-Jun	1B.2	S3	G4T3
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	4.2	S4	G4

Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	4.2	S4	G4
Dodecahema leptoceras	slender-horned spineflower	Polygonaceae	annual herb	Apr-Jun	1B.1	S1	G1
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Polemoniaceae	perennial herb	Apr-Sep	1B.1	S1	G4T1
Fimbristylis thermalis	hot springs fimbristylis	Cyperaceae	perennial rhizomatous herb	Jul-Sep	2B.2	S1S2	G4
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	Aug-Oct	1A	SH	G5TH
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	1B.1	S1	G4T1
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	2B.1	S3	G4
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	4.2	S3	G3
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	4.3	S3	G5T3
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	Mar-Jul(Aug)	4.2	S4?	G4T4?
Lycium parishii	Parish's desert-thorn	Solanaceae	perennial shrub	Mar-Apr	2B.3	S1	G3?
Malacothamnus parishii	Parish's bush-mallow	Malvaceae	perennial deciduous shrub	Jun-Jul	1A	SX	GXQ
Monardella pringlei	Pringle's monardella	Lamiaceae	annual herb	May-Jun	1A	SX	GX
Muhlenbergia californica	California muhly	Poaceae	perennial rhizomatous herb	Jun-Sep	4.3	S4	G4
Myosurus minimus ssp. apus	little mousetail	Ranunculaceae	annual herb	Mar-Jun	3.1	S2	G5T2Q
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	1B.1	S1	G1
Pickeringia montana var. tomentosa	woolly chaparral-pea	Fabaceae	evergreen shrub	May-Aug	4.3	S3S4	G5T3T4
Ribes divaricatum var. parishii	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	Feb-Apr	1A	SX	G5TX
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	Mar-Jul(Aug)	4.2	S4	G4
Schoenus nigricans	black bog-rush	Cyperaceae	perennial herb	Aug-Sep	2B.2	S2	G4
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	2B.2	S2	G4
Sphenopholis obtusata	prairie wedge grass	Poaceae	perennial herb	Apr-Jul	2B.2	S2	G5
	San Bernardino aster	Asteraceae	perennial	Jul-Nov	1B.2	S2	G2

Symphyotrichum defoliatum			rhizomatous herb				
Thelypteris puberula var. sonorensis	Sonoran maiden fern	Thelypteridaceae	perennial rhizomatous herb	Jan-Sep	2B.2	S2	G5T3

Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 16 August 2018].

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The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
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IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Bernardino County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat Dipodomys merriami parvus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat Dipodomys stephensi (incl. D. cascus) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS

NOT FOR CONSULTATION

Coastal California Gnatcatcher Polioptila californica californica — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8178

Least Bell's Vireo Vireo bellii pusillus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/5945

Southwestern Willow Flycatcher Empidonax traillii extimus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6749

Fishes

NAME	STATUS

Santa Ana Sucker Catostomus santaanae — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/3785

Insects

NAME	STATUS

Delhi Sands Flower-loving Fly Rhaphiomidas terminatus abdominalis — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/1540

Flowering Plants

NAME	STATUS

Gambel's Watercress Rorippa gambellii — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4201

San Diego Ambrosia Ambrosia pumila — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8287

Santa Ana River Woolly-star Eriastrum densifolium ssp. sanctorum — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6575

Slender-horned Spineflower Dodecahema leptoceras — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4007

Critical habitats

NOT FOR CONSULTATION

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

NOT FOR CONSULTATION

Allen's Hummingbird Selasphorus sasin — Breeds Feb 1 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9637

Burrowing Owl Athene cunicularia — Breeds Mar 15 to Aug 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9737

Clark's Grebe Aechmophorus clarkii — Breeds Jan 1 to Dec 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Costa's Hummingbird Calypte costae — Breeds Jan 15 to Jun 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9470

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Probability of Presence Summary

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The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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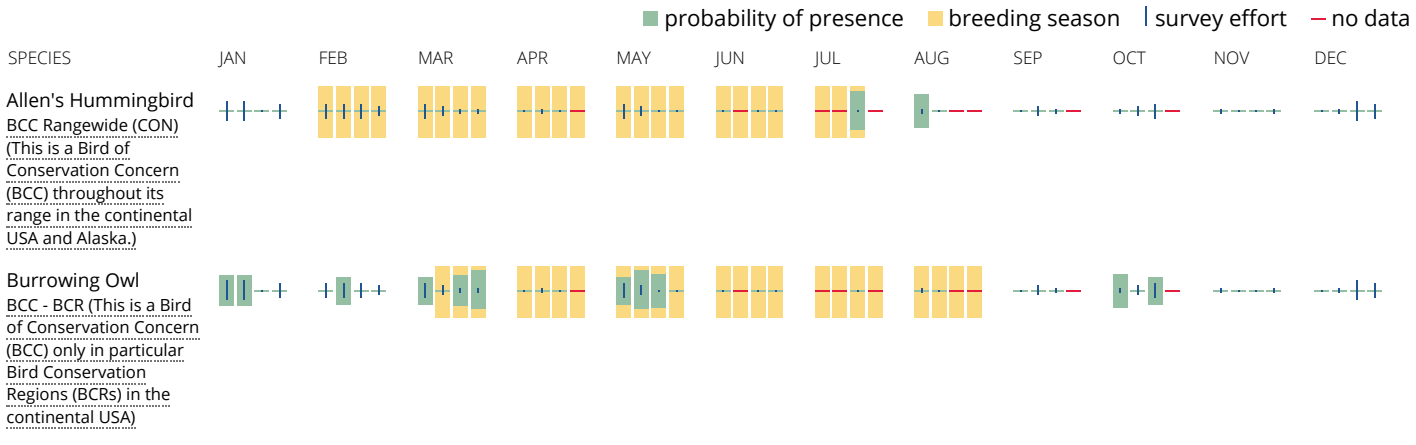

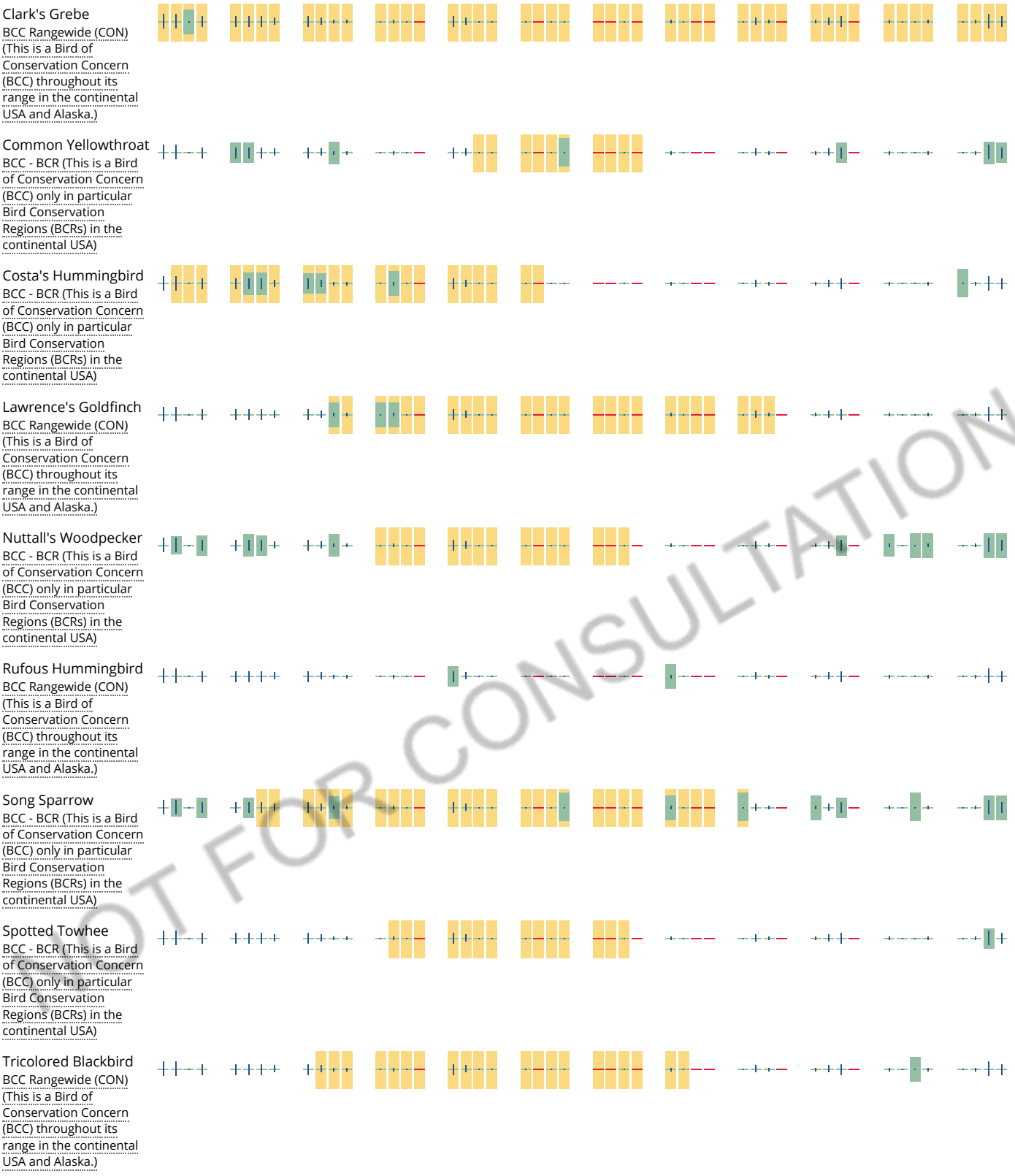

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Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

NOT FOR CONSULTATION

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R5UBF

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

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Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Appendix B
Special-Status Plant Species With Potential to Occur on the Project Site

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Site[1]
	Federal	State	CNPS CRPR			
DICOTS						
Singlewhorl burrobush *Ambrosia monogyra*	--	--	2B.2	Inhabits sandy soils associated with chaparral and Sonoran Desert scrub	10-500 m; Perennial shrub; Blooms August to November	**Not Expected.** The nearest recorded observation of this species is 7.0 miles to the northwest of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Marsh sandwort *Arenaria paludicola*	FE	SE	1B.1	Occurs in freshwater marsh, marsh, swamp, and wetland. Found growing up through dense mats of *Typha, Juncus,* and *Scirpus* in freshwater marsh habitat.	10-170 m; Perennial herb; Blooms from May to August	**Not Expected.** Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Horn's milk-vetch *Astragalus hornii var. hornii*	--	--	1B.1	Found in meadows, seeps, playas, lake margins, and alkaline sites.	90-890 m; Annual herb; Blooms May to October	**Not Expected.** The nearest recorded observation of this species is 0.9 mile to the north of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Nevin's barberry *Berberis nevinii*	FE	SE	1B.1	Occurs in chaparral, cismontane woodland, coastal scrub, riparian scrub and on steep, north-facing slopes or in low grade sandy washes.	290-1,575 m; Shrub; Blooms March to June	**Not Expected.** The nearest recorded observation of this species is 5.0 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.

[1] The potential for occurrence is based on occurrences recorded in the CNDDB (2018) and CNPS (2018), knowledge of species requirements, and site inspections during 2018 field survey

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Site[1]
	Federal	State	CNPS CRPR			
Smooth tarplant *Centromadia pungens* ssp. *laevis*	--	--	1B.1	Found in valley and foothill grassland, chenopod scrub, meadows, playas, riparian woodland. Occurs in alkali meadows, alkali scrub, and also in disturbed places.	0-640 m; Annual herb; Blooms April to September	**Not Expected.** The nearest recorded observation of this species is 1.7 miles to the southeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Salt marsh bird's beak *Chloropyron maritimum* ssp. *maritimum*	FE	SE	1B.2	Inhabits salt marshes, swamps, and coastal dunes.	0-30 m; Annual herb; Blooms from May to Nov.	**Not Expected.** Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	--	--	1B.1	Occurs in coastal scrub, chaparral, cismontane woodland, valley, and foothill grassland. Found in dry slopes and flats; sometimes at interface of two vegetation types, such as chaparral and oak woodland; dry, sandy soils.	225-1,220 m; Annual herb; Blooms April to June	**Not Expected.** The nearest recorded observation of this species is located within the general vicinity of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Peruvian dodder *Cuscuta obtusiflora* var. *glandulosa*	--	--	2B.2	Marshes and swamps (freshwater).	15-280 m; Annual herb/vine; Blooms July to October	**Not Expected.** The nearest recorded observation of this species is 0.1 mile to the southeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Slender-horned spineflower *Dodecahema leptoceras*	FE	SE	1B.1	Occurs in chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Found in flood deposited terraces and washes; associates include *Encelia, Dalea*, and *Lepidospartum*. Sandy soils.	200-760 m; Annual herb; Blooms April to June	**Not Expected.** The nearest recorded observation of this species is located within the general vicinity of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Site[1]
	Federal	State	CNPS CRPR			
Santa Ana River woollystar *Eriastrum densifolium* ssp. *sanctorum*	FE	SE	1B.1	Occurs in coastal scrub and chaparral. Found in sandy soils on river floodplains or terraced fluvial deposits.	90-610 m; Perennial herb; Blooms May to September	**Not Expected.** The nearest recorded observation of this species is located within the general vicinity of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	--	--	1A	Found in marshes and swamps (coastal salt and freshwater).	40-910 m; Perennial herb (rhizomatous); Blooms August to October	**Not Expected.** The nearest recorded observation of this species is located within the general vicinity of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Mesa horkelia *Horkelia cuneata* var. *puberula*	--	--	1B.1	Occurs in chaparral, cismontane woodland, coastal scrub. Found on sandy or gravelly sites.	70-810 m; Perennial herb; Blooms February to July	**Not Expected.** The nearest recorded observation of this species is 1.8 miles to the west of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Robinson's pepper-grass *Lepidium virginicum* var. *robinsonii*	--	--	4.3	Occurs in chaparral, coastal scrub. Found on dry soils and shrubland.	1-885 m; Annual herb; Blooms January to July	**Not Expected.** The nearest recorded observation of this species is 0.9 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Site[1]
	Federal	State	CNPS CRPR			
Parish's desert-thorn *Lycium parishii*	--	--	2B.3	Occurs in coastal scrub and Sonoran Desert scrub communities.	160-1,030 m; Shrub; Blooms March to April	**Not Expected.** The nearest recorded observation of this species is 2.1 miles to the north of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Parish's bush-mallow *Malacothamnus parishii*	--	--	1A	Chaparral, Coastal scrub.	305-455 m; Perennial deciduous shrub; Blooms June to July	**Not Expected.** The nearest recorded observation of this species is located within the general vicinity of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Pringle's monardella *Monardella pringlei*	--	--	1A	Occurs in coastal scrub communities and on sandy hills.	280-350 m; Annual herb; Blooms May to June	**Not Expected.** The nearest recorded observation of this species is 1.8 miles to the west of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Gambel's water cress N*asturtium gambelii*	FE	ST	1B.1	Found in marshes and swamps. Occurs in freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level.	5-780 m; Perennial herb; Blooms April to October	**Not Expected.** The nearest recorded observation of this species is located within the general vicinity of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Site[1]
	Federal	State	CNPS CRPR			
Brand's star phacelia *Phacelia stellaris*	--	--	1B.1	Coastal dunes, Coastal scrub.	1-400 m; Annual herb; Blooms March to June	**Not Expected.** The nearest recorded observation of this species is 8.8 miles to the southwest of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Parish's gooseberry *Ribes divaricatum* var. *parishii*	--	--	1A	Found in riparian woodlands. Occurs in *Salix* swales in riparian habitats.	290-310 m; Shrub; Blooms February to April	**Not Expected.** The nearest recorded observation of this species is 2.7 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Chaparral ragwort *Senecio aphanactis*	--	--	2B.2	Chaparral, cismontane woodland, coastal scrub/sometimes alkaline.	15-800 m; Annual herb; Blooms January to April (May)	**Not Expected.** The nearest recorded observation of this species is 2.3 miles to the south of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Salt Spring checkerbloom *Sidalcea neomexicana*	--	--	2B.2	Occurs on playas, chaparral, coastal scrub, lower montane coniferous forest, and Mojavean desert scrub. Found in alkali springs and marshes.	0-1,390; Perennial herb; Blooms March to June	**Not Expected.** The nearest recorded observation of this species is 0.9 mile to the north of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Site[1]
	Federal	State	CNPS CRPR			
San Bernardino aster *Symphyotrichum defoliatum*	--	--	1B.2	Occurs in meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, and grassland. Found in vernally mesic grassland or near ditches, streams and springs; disturbed areas.	2-2,040 m; Perennial herb; Blooms July to November	**Not Expected.** The nearest recorded observation of this species is 1.2 miles to the north of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
MONOCOTS						
Thread-leaved brodiaea *Brodiaea filifolia*	FT	SE	1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils.	25-1,120 m; Perennial herb; Blooms March to June	**Not Expected.** The nearest recorded observation of this species is 7.0 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Plummer's mariposa lily *Calochortus plummerae*	--	--	4.2	Chaparral, foothill woodland, yellow pine forest, coastal sage scrub, valley grassland.	710-2390 m; Perennial bulbiferous herb; Blooms May to July	**Not Expected.** The nearest recorded observation of this species is 4.5 miles to the north of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Bristly sedge *Carex comosa*	--	--	2B.2	Occurs in coastal prairie, marsh, swamp, and valley and foothill grassland habitats.	0-625 m; Perennial rhizomatous herb; Blooms May to September	**Not Expected.** The nearest recorded observation of this species is located within the general vicinity of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Site[1]
	Federal	State	CNPS CRPR			
Prairie wedge grass *Sphenopholis obtusata*	--	--	2B.2	Occurs in cismontane woodland, meadows, and seeps. Found in open moist sites, along rivers and springs, alkaline desert seeps.	240 to 2,870 m; Perennial grass; Blooms August to July	**Not Expected.** The nearest recorded observation of this species is 1.0 mile to the southeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
FERNS						
Sonoran maiden fern *Thelypteris puberula* var. *sonorensis*	--	--	2B.2	Meadows and seeps (seeps and streams).	50-610 m; Perennial rhizomatous herb; Blooms January to September	**Not Expected.** The nearest recorded observation of this species is 7.2 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Plant Communities						
Riversidean Alluvial Fan Sage Scrub						This plant community is not present on the Project Site.
Southern California Arroyo Chub/Santa Ana Sucker Stream						This community is not present on the Project Site.
Southern Coast Live Oak Riparian Forest						This plant community is not present on the Project Site.
Southern Cottonwood Willow Riparian Forest						This plant community is not present on the Project Site.
Southern Mixed Riparian Forest						This plant community is not present on the Project Site.
Southern Riparian Forest						This plant community is not present on the Project Site.
Southern Riparian Scrub						This plant community is not present on the Project Site.
Southern Sycamore Alder Riparian Woodland						This plant community is not present on the Project Site.
Southern Willow Scrub						This plant community is not present on the Project Site.

Appendix B: Special Status Plant Species with Potential to Occur on the Project Site.

Species	Status			Habitat Requirements	Elevation Range; Life Form; Blooming Period	Potential Occurrence in the Project Site[1]
	Federal	State	CNPS CRPR			
STATUS KEY: Federal FE: Federally-listed Endangered FT: Federally-listed Threatened State SE: California-listed Endangered ST: California-listed Threatened California Native Plant Society (CNPS): CNPS has developed five categories of rarity known as the California Rare Plant Ranking (CRPR). CRPR designations are defined as follows: 1A: Presumed extinct in California 1B: Plants listed as rare, threatened, or endangered in California and elsewhere 2B: Plants rare, threatened, or endangered in California, but more common elsewhere 3: Plants about which we need more information 4: Species of limited distribution in California, but whose existence does not appear to be susceptible to threat CNPS also adds a decimal threat rank to the List rank to parallel that used by the CNDDB. CNPS rank designations therefore appear as: 1B.1, 1B.2, etc. Threat code extensions are defined as follows: .1 – Seriously endangered in California (over 80% of occurrences threatened / high degree of immediacy of threat) .2 – Fairly endangered in California (20-80% occurrences threatened) .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)						

Appendix C
Special-Status Wildlife Species With Potential to Occur on the Project Site

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
INVERTEBRATES				
Crotch bumble bee *Bombus crotchii*	--	--	Found along coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.*	**Not Expected.** The nearest recorded observation of this species is 2.3 miles to the southeast of the Project Site. Suitable habitat is not present on the Project Site. The species is not expected to occur on the Project Site.
Delhi Sands flower-loving fly *Rhaphiomidas terminatus abdominalis*	FE	--	Found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation.	**Not Expected.** The nearest recorded observation of this species is 2.3 miles to the southeast of the Project Site. Suitable habitat is not present on the Project Site. The species is not expected to occur on the Project Site.
FISHES				
Santa Ana sucker *Catostomus santaanae*	FT	--	The Santa Ana sucker is native to the Los Angeles and Santa Ana basins in southern California. Today it is restricted to three geographically separate populations in three different stream systems: the lower and middle Santa Ana River; east, west, and north forks of the San Gabriel River; and the lower Big Tujunga Creek. A population also occurs in the Santa Clara River. Within the Santa Ana River watershed, this species is also known to occupy tributaries including Rialto Channel, Tequesquite Arroyo, Sunnyslope Creek, and Anza Park drain. This species prefers permanent streams with pools and riffles, sand-rubble-boulder bottoms, cool, clear well-oxygenated water, algae, and riparian vegetation that provides cover and refuge from floods. Santa Ana suckers are primarily found in small to medium sized streams that flow year-round and may vary in depth from several inches to over several feet deep. Spawning occurs in gravelly riffles from mid-March until early June.	**Low.** While the Project Site is located within the Santa Ana River Watershed Recovery Unit and within the Santa Ana sucker's historic range, this species is not known to occur in the Lytle Creek Channel. The nearest recorded observation of this species is within the Santa Ana River 2.7 miles to the southwest of the Project Site. The concrete lined Lytle Creek Channel does not provide support sand-rubble-boulder streambed material, riparian vegetation for cover and refuge, or food sources that would be suitable to support Santa Ana sucker. However, due to its occasional hydrologic connectivity to the Santa Ana River (approximately 1.5 river miles) it is possible, but very unlikely, that this species may be washed up into to the Project Site from suitable habitat areas along the Santa Ana River during extreme flooding events when the river tops its bank or during infrequent periods of short duration when there is sufficient flow in Lytle Creek Channel and downstream concrete lined Warm Creek. The species has an extremely low potential to occur on the Project Site for a short duration only during high flow/record flooding events.
Arroyo chub *Gila orcuttii*	--	CSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in	**Low.** The nearest recorded observation of this species is 2.7 miles to the southwest of the

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
			Santa Clara, Ventura, Santa Ynez, Mohave and San Diego river basins. Inhabits slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Project Site in the Santa Ana River. The concrete lined Lytle Creek Channel does not provide support mud or sand substrate or food sources that would be suitable to support arroyo chub. However, due to its occasional hydrologic connectivity to the Santa Ana River (approximately 1.4 river miles) it is possible, but very unlikely, that this species may be washed up into to the Project Site from suitable habitat areas along the Santa Ana River during extreme flooding events when the river tops its bank or during infrequent periods of short duration when there is sufficient flow in Lytle Creek Channel and Warm Creek for individuals to swim upstream from Sant Ana River, or within Cajon Wash and Lytle Creek for upstream populations in Cajon Wash to reach the Project Site. The species has and extremely low potential to occur in the Project Site during high flow/record flooding events only.
Santa Ana speckled dace *Rhinichthys osculus* ssp. *3*	--	CSC	Found in the headwaters of the Santa Ana River and San Gabriel Rivers. Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	**Low.** The nearest recorded observation of this species is 7.6 miles to the northeast of the Project Site. The concrete lined Lytle Creek Channel does not provide support shallow cobble or gravel riffles that would be suitable to support Santa Ana speckled dace. However, due to its occasional hydrologic connectivity to the Santa Ana River (approximately 1.4 river miles) it is possible, but very unlikely, that this species may be washed up into to the Project Site from suitable habitat areas along the Santa Ana River during extreme flooding events when the river tops its bank or during infrequent periods of short duration when there is sufficient flow in Lytle Creek Channel and downstream concrete lined Warm Creek. The species has an extremely low potential to occur within the Project Site for a short duration only during high flow/record flooding events.

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
AMPHIBIANS				
Arroyo toad *Anaxyrus californicus*	FE	CSC	Found in semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, and desert washes. Inhabits rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	**Not Expected.** The nearest recorded observation of this species is 12.9 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Southern mountain yellow-legged frog *Rana muscosa*	FE	SE	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	**Not Expected.** The nearest recorded observation of this species is 6.8 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Western spadefoot *Spea hammondii*	--	CSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mohave and San Diego river basins. Inhabits slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	**Not Expected.** The nearest recorded observation of this species is 7.4 miles to the north of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
REPTILES				
Southern California legless lizard *Anniella stebbinsi*	--	CSC	Inhabits broadleaved uplands, chaparral, coastal scrub, and coastal dunes. Generally, occurs in moist, loose soil.	**Not Expected.** The nearest recorded observation of this species is 5.7 miles to the northwest of the Project Site. The Project Site does not support vegetation communities that would provide suitable habitat for this species. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
California glossy snake *Arizona elegans occidentalis*	--	CSC	Habitat generalist that prefers scrub and grassland habitats, often found in areas with loose or sandy soils.	**Not Expected.** The nearest recorded observation of this species is 1.5 miles to the north of the Project Site. Suitable habitat is not present on the Project Site due to the lack of loose or sandy soils onsite. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
Orangethroat whiptail *Aspidoscelis hyperythra*	--	WL	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food (i.e, termites).	**Not Expected.** The nearest recorded observation of this species is 2.8 miles to the south of the Project Site. The Project Site does not support vegetation communities or landforms that would provide suitable habitat for this species. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	--	CSC	Found in deserts and semiarid areas with sparse chaparral vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	**Not Expected.** The nearest recorded observation of this species is 2.5 miles to the west of the Project Site. Suitable habitat is not present on the Project Site due to the lack of chaparral, woodland or riparian areas. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Southern rubber boa *Charina umbratica*	--	ST	Habitat includes coniferous and deciduous semi-open forests and woodlands (Jeffrey pine, yellow pine, sugar pine, white fir, black oak), forest clearings, patchy chaparral/shrubland, meadows, and grassy savannas, commonly in riparian zones or around rock outcrops.	**Not Expected.** The nearest recorded observation of this species is 2.9 miles to the north of the Project Site. The Project Site does not support forested vegetation communities that would provide suitable habitat for this species. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
San Diego banded gecko *Coleonyx variegatus abbotti*	--	--	Found in coastal and cismontane southern California. Inhabits granite or rocky outcrops in coastal scrub and chaparral habitats.	**Not Expected.** The nearest recorded observation of this species is 4.1 miles to the southwest of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Red-diamond rattlesnake *Crotalus ruber*	--	CSC	Inhabits chaparral, Mojavean Desert scrub, and Sonoran Desert scrub from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	**Not Expected.** The nearest recorded observation of this species is 4.8 miles to the south of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Coast horned lizard *Phrynosoma blainvillii*	--	CSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Requires open areas for	**Not Expected.** The nearest recorded observation of this species is 3.6 miles to the southeast of the Project Site. The Project Site

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
			sunning, bushes for cover, patches of loose soil for refuge, and abundant supply of insects.	does not support typical habitats or suitable substrate for this species. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Two-striped gartersnake *Thamnophis hammondii*	--	CSC	Found in marshes and swamps, riparian scrub, riparian woodlands, and wetlands. Occurs near permanent fresh water along streams with rocky beds and riparian growth.	**Not Expected.** The nearest recorded observation of this species is 5.9 miles to the north of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
BIRDS				
Tricolored blackbird *Agelaius tricolor*	--	CSC	Inhabits freshwater marsh, marsh and swamp, swamp, and wetland habitats. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	**Not Expected.** The nearest recorded observation of this species is 1.7 miles to the southeast of the Project Site, however, this record is considered extirpated. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	--	WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	**Not Expected.** The nearest recorded observation of this species is 2.4 miles to the south of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Bell's sage sparrow *Artemisiospiza belli belli*	--	WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	**Not Expected.** The nearest recorded observation of this species is 4.0 miles to the southwest of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Burrowing owl *Athene cunicularia*	--	CSC	Inhabits open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the	**Not Expected.** The nearest recorded observation of this species is 2.6 miles to the west of the Project Site. Suitable open ruderal vegetation is present for foraging on the Project Site, however suitable burrows for this species were not observed onsite. Species not

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
			California ground squirrel (*Otospermophilius beecheyi*).	observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Swainson's hawk *Buteo swainsoni*	--	ST	Occurs in Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland habitats. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Not Expected.** The nearest recorded observation of this species is 0.9 mile to the north of the Project Site, however, this record is considered possibly extirpated. Suitable habitat is not present on the Project Site. The species is not expected to occur on the Project Site.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT	SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow (*Salix* spp.) often mixed with cottonwoods (*Populus* sp.), with lower story of blackberry (*Rubus* spp.), nettles (*Urtica* spp.), or wild grape (*Vitis girdiana*).	**Not Expected.** The nearest recorded observation of this species is 0.1 mile to the northeast of the Project Site, however, this record is considered extirpated. Riparian habitat that would be suitable to support this species is not present along the engineered concrete Lytle Creek Channel within the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Southwestern willow flycatcher *Empidonax traillii extimus*	FE	SE	Inhabits riparian and wetland thickets, generally of willow (*Salix* spp.), tamarisk (*Tamarix* spp.), or both, sometimes boxelder (*Acer negundo*) or Russian olive (*Elaeagnus angustifolia*).	**Not Expected.** The nearest recorded observation of this species is 6.5 miles to the southeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
California horned lark *Eremophila alpestris actia*	--	WL	Inhabits open areas, including short-grass prairies, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	**Low.** The nearest recorded observation of this species is 3.3 miles to the east of the Project Site. Disturbed habitats provide limited suitability for nesting. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Merlin *Falco columbarius*	--	WL	Open conifer woodland, prairie groves; in migration, also foothills, marshes, open country. Generally, breeds in semi-open terrain having trees for nest sites and open areas for	**Not Expected.** The nearest recorded observation of this species is 0.9 mile to the southeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
			hunting. May winter in more open areas, such as grasslands, coastal marshes.	surveys. The species is not expected to occur on the Project Site.
Yellow-breasted chat *Icteria virens*	--	CSC	This summer resident is found riparian forest, riparian scrub, and riparian woodlands. Nests in thickets of willows and other brushy tangles near watercourses	**Not Expected.** The nearest recorded observation of this species is 8.6 miles to the southeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Loggerhead shrike *Lanius ludovicianus*	--	CSC	Found in a variety of habitats including broadleaf upland forest, desert wash, Joshua tree woodland, Mojavean Desert scrub, pinon and juniper woodland, riparian woodland, and Sonoran Desert scrub. Prefers open country for hunting, with perches for scanning. Nests in dense shrubs and brush.	**Not Expected.** The nearest recorded observation of this species is 8.6 miles to the southeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
California black rail *Laterallus jamaicensis coturniculus*	--	ST	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	**Not Expected.** The nearest recorded observation of this species is 0.8 mile to the north of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Coastal California gnatcatcher *Polioptila californica californica*	FT	CSC	Obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California. Inhabits low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	**Not Expected.** The nearest recorded observation of this species is 2.1 miles to the southwest of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Yellow warbler *Setophaga petechia*	--	CSC	Occurs in riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**Not Expected.** The nearest recorded observation of this species is 7.6 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Least Bell's vireo *Vireo bellii pusillus*	FE	SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into	**Not Expected.** The nearest recorded observation of this species is 0.5 mile to the southeast of the Project Site. Suitable habitat is not present on the Project Site. The Lytle

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
			pathways (usually *Salix* spp., *Baccharis* spp., and *Prosopis* spp.).	Creek Channel is concrete lined and does not contain any riparian vegetation. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
MAMMALS				
Pallid bat *Antrozous pallidus*	--	CSC	Occurs in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Not Expected.** The nearest recorded observation of this species is 6.1 miles to the east of the Project Site. Suitable habitat is not present on the Project Site; furthermore, surrounding development and site disturbance would preclude this species from roosting on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	--	CSC	Inhabits chaparral, coastal scrub, grasslands, and sagebrush habitats. Found in sandy, herbaceous areas, usually in association with rocks or coarse gravel.	**Not Expected.** The nearest recorded observation of this species is 3.3 miles to the northeast of the Project Site. Suitable habitat is not present on the Project Site. Habitats on the Project Site were further evaluated for their potential to support this species by wildlife biologist Steve Montgomery who holds a federal Section 10(a)(1)(A) Recovery Permit for San Bernardino kangaroo rat. He determined that the undeveloped portions of the Project Site do not support typical vegetation associations for this species, coarse rocky soils that would be conducive for burrow excavation, are situated in a heavily urbanized area surrounded by development, and therefore have no potential to support this species. The species is not expected to occur on the Project Site.
San Bernardino kangaroo rat *Dipodomys merriami parvus*	FE	CSC	Inhabits alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	**Not Expected.** The nearest recorded observation of this species is 1.9 miles to the east of the Project Site. The Project Site does not support alluvial scrub on floodplain landforms that would provide suitable habitat for this species. Undeveloped portions of the Project Site were evaluated on September 13, 2018 for their potential to support SBKR by

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
				wildlife biologist Steve Montgomery who holds a federal Section 10(a)(1)(A) Recovery Permit for this species. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Stephens' kangaroo rat *Dipodomys stephensi*	FE	ST	Inhabits primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat (*Eriogonum sp.*), chamise (*Adenostoma fasciculatum*), brome grass (*Bromus sp.*) and filaree (*Erodium sp.*). Will burrow into firm soil.	**Not Expected.** The nearest recorded observation of this species is 4.1 miles to the southeast of the Project Site. The Project Site does not support the vegetation types or plant species that Stephen's kangaroo rat (SKR) is typically associated with. Undeveloped portions of the Project Site were evaluated on September 13, 2018 for their potential to support SKR by wildlife biologist Steve Montgomery who holds a federal Section 10(a)(1)(A) Recovery Permit for this species. He determined that the disturbed habitats on the Project Site do not support typical vegetation associations where this species occurs and are situated in a heavily urbanized area surrounded by development, and therefore have no potential to support this species. The species is not expected to occur on the Project Site.
Western mastiff bat *Eumops perotis californicus*	--	CSC	Inhabits many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, valley and foothill grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	**Not Expected.** The nearest recorded observation of this species is 0.5 mile to the southwest of the Project Site. Onsite trees do not provide suitable roost habitat and are adjacent to frequently traveled Inland Center Drive and subject to regular human disturbance. These factors are expected to preclude the use of these trees for roost habitat. No signs of bat use (e.g., guano) were observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Western yellow bat *Lasiurus xanthinus*	--	CSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	**Not Expected.** The nearest recorded observation of this species is 0.9 mile to the southeast of the Project Site. Onsite trees do not provide suitable roost habitat and are adjacent to frequently traveled Inland Center

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
				Drive and subject to regular human disturbance. These factors are expected to preclude the use of these trees for roost habitat. No signs of bat use was observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	--	CSC	Found in intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges. Inhabits coastal sage scrub habitats in Southern California.	**Not Expected.** The nearest recorded observation of this species is 2.5 miles to the west of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
San Diego desert woodrat *Neotoma lepida intermedia*	--	CSC	Inhabits coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops and rocky cliffs and slopes.	**Not Expected.** The nearest recorded observation of this species is 5.2 miles to the northwest of the Project Site. Suitable habitat is not present on the Project Site. No San Diego desert woodrat or their houses were observed during the 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	--	CSC	Inhabits a variety of arid areas in Southern California, including pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian. Prefers rocky areas with high cliffs.	**Not Expected.** The nearest recorded observation of this species is located within the general vicinity of the Project Site. Suitable habitat is not present on the Project Site. No signs of bat use (e.g., guano) were observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Southern grasshopper mouse *Onychomys torridus ramona*	--	CSC	Inhabits desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	**Not Expected.** The nearest recorded observation of this species is 2.5 miles to the south of the Project Site. Suitable habitat is not present on the Project Site. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	--	CSC	Inhabits lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Found in open ground with fine	**Not Expected.** The nearest recorded observation of this species is 1.9 miles to the west of the Project Site. Suitable habitat is not present on the Project Site. Habitats on the

Appendix C: Special-Status Animal Species with Potential to Occur on the Study Area**.**

Species	Status		Habitat Requirements[1]	Potential for Occurrence[2]
	Federal	State		
			sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	Project Site were further evaluated for their potential to support this species by wildlife biologist Steve Montgomery. He determined that the disturbed habitats on the Project Site do not support sandy soils for burrow excavation, are surrounded by development, and therefore have no potential to support this species. Not observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.
American badger *Taxidea taxus*	--	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not Expected.** The nearest recorded observation of this species is 0.9 mile to the north of the Project Site. Suitable habitat is not present on the Project Site. No suitable den sites were observed during 2018 general biological field surveys. The species is not expected to occur on the Project Site.

STATUS KEY:

Federal

FE: Federally-listed Endangered
FT: Federally-listed Threatened
FD: Federally-delisted

State

SE: State-listed Endangered
ST: State-listed Threatened
CSC: California Species of Special Concern
WL: State Watch List

SOURCES:

1 CNDDB (August 2018), BIOS 5 Data Viewer, and NatureServe.org Explorer were used to identify preferred habitat for each species.
2 CNDDB (August 2018) GIS data (polygon) was used to determine the distance of each species to the Project Site
3 USFWS Draft Recovery Plan for the Santa Ana Sucker (*Catostomus santaanae*)

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August 12, 2019

Ms. Chantal Power, Development Services Technician
City of San Bernardino – Community Development Department
201 North E Street, 3rd Floor
San Bernardino, California 92401

Regarding: **Cultural Resources Assessment for the Proposed Inland Center Drive Warehouse and Storm Drain Improvement Project: City of San Bernardino, San Bernardino County, CA**

Ms. Storey:

MIG conducted a cultural resources assessment for the above-referenced project. This letter report presents our methods, results, and recommendations from the assessment.

1.0 PROJECT UNDERSTANDING AND SCOPE OF WORK

The proposed project is for an Initial Study/Mitigated Negative Declaration for the Olympic Holdings Inland Center Warehouse Project in the City of San Bernardino. The 5.25-acre project site is made up of four contiguous parcels, used at one time for light industrial storage. The site is vacant and not currently used for light industrial storage. The project includes the construction of a warehouse building intended for light industrial uses, as well as associated parking and landscaping improvements. The proposed building will be a total of 101,464 square feet in size, approximately 6,000 square feet of which will be designated for office use. The project site is located on the southeast side of Inland Center Drive between Riverwalk Drive and South 1st Street, San Bernardino, California 92410. Assessor's Parcel Numbers 0141-201-02-0000, 0141-201-05-0000, 0141-201-10-0000 and 0141-201-12-0000. The project also includes a proposed 24-inch storm drain made from a Reinforced Concrete Pipe (RCP) that would connect to a newly constructed warehouse (proposed) and continue in southwesterly direction along Inland Center Drive for approximately 1,100 Feet until it outlets to the lined channel Lytle Cajon Channel within the San Bernardino County Flood Control right-of-way in the City of San Bernardino.

Olympic Real Estate Holdings, Inc. (Applicant) is applying for a Department of the Army permit from the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act for the connection to the channel. The USACE has determined that the project is not an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA), 16 USC 470(f), and its implementing regulations under 36 CFR Part 800 (Section 106).

Construction activities for the warehouse would involve minor grading, site preparation, building construction, landscaping, parking, and architectural coatings. Construction activities for the drain outlet would involve trenching, shoring, backfilling, compacting, and surface restoration within existing public rights-of-way (primarily Inland Center Drive-roadway), as well as short section through the Lytle Cajon Channel within the San Bernardino County Flood Control right-of-way in the City of San Bernardino.

MIG conducted a cultural resource assessment at the request of the USACE to determine the potential impacts to historic properties and/or cultural resources associated with implementation of the proposed undertaking to demonstrate compliance with Section 106. The scope of work for this assessment included conducting a cultural records search at the California Historical Resources Information System's (CHRIS) South Central Coastal Information Center (SCCIC) at the California State University, Fullerton and a pedestrian survey of the Area of Potential Effect (APE).

2.0 PROJECT LOCATION

The Area of Potential Effect (APE) is located on the southeast side of Inland Center Drive between Riverwalk Drive on the north and South 1st Street on the south, in the City of San Bernardino, San Bernardino County, California (APN: 0141-201-02, 0141-201-05, 0141-201-10 and 0141-201-12) (See Figure 1, Area of Potential Effect Map, below). The APE includes the construction of a warehouse building on the site and installation of a 24-inch storm drain that will be located within the existing Inland Center Drive roadway and right-of-way. The proposed storm drain will be a Reinforced Concrete Pipe (RCP) that will connect to the newly constructed warehouse building (proposed) and continue in southwesterly direction along Inland Center Drive for approximately 1,100 Feet until it outlets to the lined channel Lytle Cajon Channel within the San Bernardino County Flood Control right-of-way in the City of San Bernardino. Construction of the warehouse will require grading and site preparation activities at a depth of one to three feet. Construction of the proposed storm drain will require excavation of an approximately 20-foot wide and 5- to 10-foot deep trench next to the Creek Channel in order to install the RCP storm drain. The area of disturbance within the San Bernardino County Flood Control right-of-way will be less than one acre and the duration of the construction of the storm drain is estimated to take approximately 30 days.

The APE is situated among residential housing, a religious center, radio station, open space, and light industrial manufacturing and distribution facility. It is located in San Bernardino County, California and is illustrated on the United States Geological Survey (USGS) 7.5-minute series, South Bernardino California, topographic quadrangle in Unsectioned Township 1 South, Range 4 West. The elevation of the APE ranges from 1000 feet above mean sea level (MSL) to 1040 feet above MSL.

3.0 METHODS

3.1 Cultural Resources Records Search

On July 30, 2018, MIG Cultural Resources Director/Senior Archaeologist (Mr. Chris Purtell, M.A., RPA) conducted a cultural resources records search at the CHRIS-SCCIC at the California State University, Fullerton. This records search included a review of all previously recorded historic properties and cultural resources (i.e., prehistoric and historic archaeological and built environment resources) located within a one-mile radius of the APE. The records search included a review of cultural resource reports and historic topographic maps on file. In addition, MIG reviewed the California Points of Historical Interest, the California Historical Landmarks, the California Register of Historical Resources, the National Register of Historic Places (NRHP), and the California State Historic Resources Inventory listings. The purpose of the records search was to determine whether or not there are previously recorded historic properties and/or cultural resources located within the APE and surrounding vicinity that require evaluation and treatment. The results also provide a basis for assessing the sensitivity of the APE for additional buried historic properties and/or cultural resources.

3.2 Pedestrian Survey

On August 10, 2018, MIG's Senior Archaeologist (Mr. Chris Purtell), conducted a pedestrian survey of the APE. Where open access and ground surface visibility permitted, the ground surfaces in these areas were examined for the presence of historic properties and/or cultural resources. Re-surveying ("Ground Truthing") of the previously recorded archaeological site P-36-0252325 (Politana Site) was included in this effort. The goal of the pedestrian survey was to identify any cultural resources within the APE. A Garmin handheld global positioning system (GPS) unit was used to locate the APE boundaries and to record the location of identified historic properties and/or cultural resources. The APE was surveyed using parallel pedestrian transects spaced not more than 10 meters (m) apart. Detailed notes were made, and digital photographs were taken of the APE and surrounding vicinity.

Figure 1: Area of Potential Effect Map

Source: ESRI 2018; San Bernardino County 2015.

Project Site Boundary / Area of Potential Effect
Parcel Boundary
City Boundary

0 100 200 400 Feet

Figure 1 Area of Potential Effect Map

Olympic Holdings Inland Center Warehouse Project
San Bernardino, California

4.0 RESULTS

4.1 Cultural Resources Records Search

Results of the records search indicate that there has been one cultural resource study (SB-02009) that encompasses the APE and nine studies that were conducted within a one-mile radius of the APE (see Table 1, below). These studies were performed between 1972 and 2011 for two pipeline projects, one community center construction project, one USACE flood control project, one cell tower construction project, one city redevelopment project, one railroad right-of-way and construction project, one adaptive reuse railroac project, and one housing development construction project. A brief description of the one cultural resources study (SB-02009) located within the APE is provided below Table 1.

Table 1
Previously Conducted Cultural Reports within the Study Area

Report #	Year	Report Title	Study	Authors
SB-00122	1972	Archaeological Survey of The Lytle and Warm Creek Areas.	USACE: flood control project	Smith, Gerald, A.
SB-00336	1976	Environmental Impact Report: Archaeological – Historical Resources Prepared for the City of Colton Planning Department	New construction of 2 community centers	San Bernardino County Museum Association
SB-02009*	1990	Cultural Assessment Survey and Assessment of Tentative Tract 14706, City of San Bernardino, California	New construction of a single-family residential development	De, Barros, Philip
SB-02156	1990	Report Addendum: A Phase I Archaeological Survey of the Proposed Santa Ana Watershed Project Authority (SAWPA) Pipeline Right-of-Way, San Bernardino to Colton, San Bernardino, California	Pipeline right-of-way project	McKenna, Jeanette, A.
SB-02752	1992	The Santa Ana Regional Interceptor Project SAWPA-SARI Reaches IV D &E A Cultural Resource Survey of A 18-Mile Right-Of-Way From Mira Loma to Colton, Riverside and San Bernardino Counties, CA	New construction of a waste-water pipeline	Seymore, Gregory, R., and Doak, David, P.
SB-06444	2000	Historic Property Survey Report for the San Bernardino Santa Fe Station Rehabilitation and Adaptive Reuse Project (Phase I) San Bernardino, San Bernardino County, California	Adaptive reuse study for the Santa Fe Railway Passenger and Freight Depot	Miller, Gail, F.
SB-06745	2010	Preliminary Historical/Archaeological Resources Study: Short Way Subdivision Positive Train Control (PTC) Project Southern California Regional Rail Authority, Cities of San Bernardino and Colton, San Bernardino County, California	Railroad right-of-way project	Tang, Bai, "Tom"
SB-06994	2011	Cultural Resources Assessment: San Bernardino Redevelopment Project Area Merger – Area B Project, City of San Bernardino County, California	Redevelopment project	Sanka, Jennifer
SB-07256	2011	Holden, 299 W. Orange Show Road, San Bernardino, California 92408	Construction of cell tower and support facilities	Puckett, Heather, R.
Note: * Within the APE				

SB-02009: This study was conducted in 1990 on behalf of PAI Investment, Inc. and documents the results of the Cultural Assessment Survey and Assessment of Tentative Tract 14706 in support of a proposed 16.2-arce residential housing development, in the City of San Bernardino, California. The cultural resources assessment included a cultural resources records search, archival research, a pedestrian field survey, and a limited Phase II backhoe investigation. The cultural resource assessment concluded that the proposed Project Area contained a small historic trash scatter, containing a number of unidentified 19th or early 20th century artifacts that were determined to be non-significant and unimportant. The assessment concluded that the proposed project contained no prehistoric sites or other cultural resources and recommended that a qualified archaeologist be on call in case any prehistoric or historic resources were encountered during construction.[1] The results of the record search also revealed that there is one previously recorded cultural resource (P-36-025232: Politana Site) located within the APE that could be impacted (directly or indirectly) by the proposed undertaking. Additionally, there is one previously recorded cultural resource (P-33-002623: Lithic scatter and milling site) located within a one-mile radius of the APE. These two historic properties are described in Table 2, below. This resource will not be directly or indirectly impacted by the proposed project.

Table 2
Previously Recorded Cultural Resources within the APE and within an One-Mile Radius

Resource #	Resource Type	Description	NRHR Eligibility	CRHR Eligibility	Distance from the Project Site
P-33-002623	Prehistoric	Lithic Scatter and Milling Site	Not Evaluated	Not Evaluated	0.80-miles southeast of APE
P-33-025232	Prehistoric/Historic	Politana Site	Not Evaluated	Not Evaluated	Within the APE
KEY: NRHR = National Register of Historic Places CRHP = California Register of Historic Resources					

P-33-002623: This prehistoric site was first recorded by Smith in 1939 and was rechecked by Reynolds in 1971. The archaeological site is a lithic scatter and possible milling site, containing an unidentified number of milling tools, metates, manos, and mortars. The site may have covered as much 20-acres and was located approximately 1,200 feet southeast of Washington High School at D Street on the bluffs above the Santa Ana River. Reynolds suggests that resource may be associated with the Politana site (P-33-025232) that is located approximately 0.80-miles northeast of this resource. MIG's attempt to relocate the resource was unsuccessful. The resource has likely been displaced or destroyed by human activities, since Reynolds recheck in 1971.[2]

However, Smith's typewritten notes that were attached to the Resource's San Bernardino County Museum's: Archaeological Survey Record (1939) states that burials were reportedly found during the 1939 construction of San Bernardino Valley College's auditorium. San Bernardino Valley College is located approximately one-half mile north of the APE. Smith suggests that the burials could be part of the Politana Cemetery or a non-Christian (native Indian) cemetery and concluded that an Indian community lays close to the area around Lugo Ranch and Bunker Hill.[3] It was likely that this resource was destroyed during construction of the auditorium, which was a common practice at the time. The SCCIC archives did not have a cultural resources site record for these burials. The site record (if prepared) may have been misplaced or lost when the CHRIS Information Center at the San Bernardino County Museum was closed, and the site records transferred to SCCIC.

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1 Philip de Barros and Mark T. Swanson. 20 February 1990.Cultural Resources Survey and Assessment of Tentative Tract 14706, City of San Bernardino, California. Report prepared for PAI Investment, Inc., Orange, California 92668: prepared by Philip de Barros, Stanton, California 90680. Report on file at the South Central Coastal Information Center, California State University, Fullerton.

2 San Bernardo County Museum. 1937 and 1971. Archaeological Site Survey Record for P-33-002523. Site form on file at the South-Central Coastal Information Center, California State University, Fullerton

3 San Bernardo County Museum. 1937 and 1971. Archaeological Site Survey Record for P-33-002523. Site form on file at the South-Central Coastal Information Center, California State University, Fullerton

P-33-025232: This prehistoric and historic archaeological site, known as the "Politana Site", was recorded by Wilson and Atchely in 2010. The Politana Village site is associated with the San Gabriel Mission's entry into San Bernardino. According to Caballeria (Caballeria1902:38)[4], Politana was a spot above the Santa Ana River where New Mexican traders would rendezvous and rest on land (settled by an Indian known as Hipolito Espinosa) which Antonio Lugo was given as part of his Rancho property. The settlement, or rancheria of Mission Indians, taking its name from Hipolito became known as Politana. It was near the place now known as Bunker Hill between Urbita Springs (Inland Center Mall) and Colton.[5] The authors reported that the site had extended along the entire ridgetop, which includes portions of the APE along Inland Center Drive (see Politana Site Map, below; P-33-025232's site boundaries are designated in red). Additionally, a memorial monument commemorating the Politana Site was constructed by George Beattie in 1910, in which only the concrete base remains. MIG's field survey conducted on August 10, 2018 was able to locate the concrete base as noted by the authors. The concrete monument base will not be impacted by the proposed project. No other cultural resources or artifacts were discovered or recorded within or adjacent to this resource (archaeological site) during the filed survey. Portions of the archaeological site previously mapped within the APE have likely been displaced or destroyed by subsequent modern activities to include the construction, maintenance, and repair of underground sewer, water, and unity lines, streets, sidewalks, street lights, landscaping, and other right-of-way improvements.[6]

Politana Site Map

[4] Rev. Father Caballeria. 1902. History of San Bernardino Valley: From the Padres to the Pioneers (1810-1851). Published by Time Index Press, San Bernardino, California.

[5] California Department of Parks and Recreation. 2010. Primary Record for P-33-025232. Site form on file at the South-Central Coastal Information Center, California State University, Fullerton.

[6] California Department of Parks and Recreation. 2010. Photo Record for P-33-025232. Site form on file at the South-Central Coastal Information Center, California State University, Fullerton.

4.2 Pedestrian Survey

No cultural resources were identified within the APE or in the immediate vicinity during the pedestrian survey. The APE can be characterized as an industrial and residential area of the City, with an asphalt-covered two lane city street, and associated curbs, street lights, sidewalks, telephone/power poles, and modern landscaping. Ground visibility was good to excellent during the pedestrian survey. Vegetation consisted of modern manicured landscaping and sparse low-lying wild grasses and weeds (3-6 cm in height). Sparse quantities of modern man-made trash including various types of plastics, paper wrappers, aluminum cans, and broken glass bottle fragments were also observed within the APE (see *Photograph 1*, below).

Photograph 1: APE (Inland Center Drive), view towards the south

4.3 Other APE Conditions

Properties surrounding the APE are categorized as north and south of the APE. North of the APE consists of a triangular shaped area bound by South Frist Street to the North, Inland Center Drive on the south, South Hillcrest Avenue on the east, and Lytle Cajon Channel on the west. The area consists of a two-lane concrete bike pathway, a radio station, and vacant land that has been associated with the Politana Site. The bike path is located approximately 50-feet north of the south bound lane along Inland Center Drive and runs the entire length of the APE (See *Photograph 2*, below). The bike path is landscaped on either side with manicured non-native bushes and trees. The bike path ends at South First Street, where a monument for the Mission San Bernardino de Sienna is located (see *Photographs 3*, below).

Photograph 2: Bike path, view towards the West

Photograph 3: Mission San Bernardino de Sienna monument, view towards the east

The radio station property measures approximately 444-feet north/south by 390-feet east/west. Much of the property is undeveloped land, consisting of the radio station, an asphalt covered parking lot, three outbuildings, a single radio antenna with guy-wires, surrounded by a 6-foot-tall chain link fence (see *Photograph 4*, below). Only an examination around the fenced perimeter of the radio station was allowed, with good visibility. The survey showed a moderately distributed area that had been plowed/disked in north/south direction that exhibited low-lying (3-4-inch-tall) vegetation consisting of weeds and wild grasses that were dried and brown in color. Sparse quantities of modern man-made trash (i.e. plastic and paper wrappers) were observed scatter throughout the area. No visible artifacts were observed or recorded.

Photograph 4: A radio station, view towards, the east

The vacant land associated with the Politana Site measures approximately 920-feet north/south by 491-feet east/west and is characterized as being highly disturbed, showing plowing/disking throughout the area in a north/south direction. The area exhibits four, two-track dirt roads that intersect the area in a north/south and east/west direction. There are several modern trash dumps located in the northwest portion of the area, above Lytle Cajon Channel, while there is moderate to large quantities of modern man-made trash to include plastic and paper wrappers, aluminum cans, construction materials, and glass bottle fragments that are scattered throughout the entire area. Vegetation consisted of low-lying (3-4-inch-tall) weeds and wild grasses that were dried and brown in color. Ground visibility throughout the area was good to excellent. During the field survey, the archaeologist was able to relocate Beattie's 1910 concrete monument base marking the Politana Site. However, the archaeologist was unable to relocate the stone scrapper recorded by Wilson and Atchely in 2010 and no other cultural (prehistoric, historic or built environments) resources were discovered or encountered during the survey (see *Photograph 5* and *Photograph 6*, below).

Photograph 5: Beattie's monument base, view towards the southeast

Photograph 6: Politana Site, view towards the south

South of the APE consists of a rectangular shaped area bound by the Politana Site to the north, a laydown and storage yard (proposed warehouse site), mobile home park, residential housing track, sidewalks, curbs, streetlights, a religious structure, with associated vacant land, and a building under construction to the south, South Frist Street to the east and the Lytle Cajon Channel to the west. The area has been highly distributed by modern construction and related activities (see *Photograph 7*, below).

Photograph 7: South of the APE, view towards the west down Inland Center Drive

The only open and accessible area that could be surveyed south of the APE was the proposed warehouse site located at South First Street and Inland Center Drive. The warehouse site measured approximately 400-feet north/south by 600-feet east/west. The site is currently being used as a laydown and storage yard for the South Bay Foundry Inc. located to the east and adjacent to the site. The site exhibits a hard-packed sedimentary soil that is relatively flat except along its western boundaries where there is a ditch that runs in north/south direction. Vegetation within the site consists of native and non-native weeds and low-lying wild grasses that range from approximately 2-36 inches in height. Visibility was fair to poor, due to the low-lying ground cover and large weed communities that obstructed approximately 40 percent of the entire area, especially along the northern and western portions of the site (see *Photograph 8* and *Photograph 9*, below). No cultural (prehistoric, historic, and built environments) resources were encountered or recorded during this portion of the survey.

Photograph 8: Warehouse Site, view towards the west

Photograph 9: Warehouse Site, view towards the east.

5.0 – SUMMARY OF FINDING AND CONCLUSIONS

There is one previously recorded cultural resource (P-36-025232: Politana Site) located within the APE, in which a portion of the site could be impacted (directly or indirectly) by the proposed project. Additionally, there is one previously recorded cultural resource (P-33-002623: Lithic scatter and milling site) located within a one-mile radius of the APE. Further, archival research indicates there was a number of unidentified human burials that were discovered and removed during construction at San Bernardino Valley College, which is located approximately one-half mile north of the APE.

The pedestrian field survey was able to relocate Beattie's 1910 monument base marking the Politana Site. However, the field survey was unable to locate the prehistoric lithic scrapper recorded adjacent to the monument base by Wilson and Atchley in 2010 and no other cultural (prehistoric, historic, or built environments) resources associated with either the Politana Site or Native American activities were discovered during the field survey.

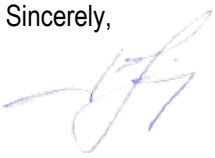
The APE is located within a highly disturbed context within a mixed use residential and light industrial area, with associated infrastructure whereby cultural resources that may have existed have likely since been displaced or deeply buried into the sediment by past human and ecological events. Further, ground disturbing activities are anticipated to be limited to the APE and are within previously disturbed and developed industrial uses, roadways, and infrastructure. Therefore, it is unlikely that unknown historic properties or cultural resources would be discovered during the implementation of the proposed project.

Nevertheless, it is possible to encounter buried archaeological resources given the proven prehistoric and historic occupation of the APE and surrounding area, the identification of the Politana Site, multiple known archaeological resources existing within the vicinity of the APE, and the favorable natural conditions along the Santa Ana River that would have attracted prehistoric and historic inhabitants to the area. Therefore, despite the heavy disturbances of the APE that may have displaced archaeological resources on the surface, it is possible that intact archaeological resources exist at depth. As a result, full-time archaeological and Native American monitoring is recommended to reduce potentially significant impacts to previously undiscovered historic properties or archaeological resources that may be accidentally encountered during project implementation to a less than significant level.

In the event that historic properties or archaeological resources are unearthed during ground-disturbing activities, ground-disturbing activities should be halted and should not be allowed to continue until a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards, has examined the newly discovered artifact(s) and has evaluated the area of the find. Such actions will reduce impacts to previously undiscovered historic and cultural resources to a less than significant level.

Please contact MIG if you have questions regarding this finding or documentation presented in this report.

Sincerely,



Chris Purtell, M.A., RPA
Cultural Resources Director/Senior Archaeologist
MIG

City of San Bernardino

Community & Economic Development Department | Planning Division

June 12, 2019

Mr. Andrew Salas, Chairman
Gabrieleño Band of Mission Indians - Kizh Nation
P.O. Box 393
Covina, CA 91723

Re: AB 52 Consultation

Dear Mr. Salas:

The City of San Bernardino (City) received the Kizh Nation's request for formal notification of proposed projects within the Tribe's geographic area of traditional and cultural affiliation in accordance with AB 52. The City has received an application from Olympic Real Estate Holdings, Inc. to construct a 101,464 square foot speculative warehouse and office building located at 915 S. Inland Center Drive (APNs: 0141-201-02, 05, 10, & 12). The proposed improvements include 11 truck docks, 85 standard automobile spaces, three (3) of which are dedicated for electric vehicle charging, and three (3) are dedicated for clean air vanpool/carpool parking, four (4) handicap spaces, two (2) of which are dedicated for ADA electric vehicle parking, underground infiltration chambers, and paving and installation of new landscaping on the approximate 5.25-acre site. A detailed project description with supporting graphics is included as an attachment to this letter for your review.

In accordance with Section 21080.3.1 (d), please consider this the City's formal notification that it intends to consider implementation the referenced project. It is our understanding that the Kizh Nation has 30 days to request consultation regarding this project. The City point of contact is Ms. Chantal Power. She can be contacted by phone at (909) 384-7272, ext. 3328 or by e-mail at Power_Ch@sbcity.org. To assist with our administrative record the City would appreciate formal notification of a request for consultation by letter or e-mail, which should be sent to the City addresses provided in this letter. If we do not receive notification within the 30-day period, we will assume that the Kizh Nation has no tribal cultural resource concerns for the Olympic Real Estate Holdings, Inc. Project and we will proceed with the public review of a Mitigated Negative Declaration in accordance with California Environmental Quality Act procedures.

Should you have any questions, please do not hesitate to contact me.

Respectfully,

Chantal Power
Associate Planner

Attachment

City of San Bernardino

Community & Economic Development Department | Planning Division

June 12, 2019

San Manuel Band of Mission Indians
Attn: Lee Clauss
26569 Community Center Drive
Highland, CA 92346

Re: AB 52 Consultation

Dear Ms. Lee Clauss:

The City of San Bernardino (City) received the San Manuel Band of Mission Indians' request for formal notification of proposed projects within the Tribe's geographic area of traditional and cultural affiliation in accordance with AB 52. The City has received an application from Olympic Real Estate Holdings, Inc. to construct a 101,464 square foot speculative warehouse and office building located at 915 S. Inland Center Drive (APNs: 0141-201-02, 05, 10, & 12). The proposed improvements include 11 truck docks, 85 standard automobile spaces, three (3) of which are dedicated for electric vehicle charging, and three (3) are dedicated for clean air vanpool/carpool parking, four (4) handicap spaces, two (2) of which are dedicated for ADA electric vehicle parking, underground infiltration chambers, and paving and installation of new landscaping on the approximate 5.25-acre site. A detailed project description with supporting graphics is included as an attachment to this letter for your review.

In accordance with Section 21080.3.1 (d), please consider this the City's formal notification that it intends to consider implementation the referenced project. It is our understanding that the San Manuel Band has 30 days to request consultation regarding this project. The City point of contact is Ms. Chantal Power. She can be contacted by phone at (909) 384-7272, ext. 3328 or by e-mail at Power_Ch@sbcity.org. To assist with our administrative record the City would appreciate formal notification of a request for consultation by letter or e-mail, which should be sent to the City addresses provided in this letter. If we do not receive notification within the 30-day period, we will assume that the San Manuel Band has no tribal cultural resource concerns for the Olympic Real Estate Holdings, Inc. Project and we will proceed with the public review of a Mitigated Negative Declaration in accordance with California Environmental Quality Act procedures.

Should you have any questions, please do not hesitate to contact me.

Respectfully,

Chantal Power
Associate Planner

Attachment

City of San Bernardino

Community & Economic Development Department | Planning Division

June 12, 2019

Soboba Band of Luiseño Indians
Attn. Joseph Ontiveros
P.O. Box 487
San Jacinto, CA 92581

Re: AB 52 Consultation

Dear Mr. Ontiveros:

The City of San Bernardino (City) received the Soboba Band of Luiseño Indians' request for formal notification of proposed projects within the Tribe's geographic area of traditional and cultural affiliation in accordance with AB 52. The City has received an application from Olympic Real Estate Holdings, Inc. to construct a 101,464 square foot speculative warehouse and office building located at 915 S. Inland Center Drive (APNs: 0141-201-02, 05, 10, & 12). The proposed improvements include 11 truck docks, 85 standard automobile spaces, three (3) of which are dedicated for electric vehicle charging, and three (3) are dedicated for clean air vanpool/carpool parking, four (4) handicap spaces, two (2) of which are dedicated for ADA electric vehicle parking, underground infiltration chambers, and paving and installation of new landscaping on the approximate 5.25-acre site. A detailed project description with supporting graphics is included as an attachment to this letter for your review.

In accordance with Section 21080.3.1 (d), please consider this the City's formal notification that it intends to consider implementation the referenced project. It is our understanding that the Soboba Band has 30 days to request consultation regarding this project. The City point of contact is Ms. Chantal Power. She can be contacted by phone at (909) 384-7272, ext. 3328 or by e-mail at Power_Ch@sbcity.org. To assist with our administrative record the City would appreciate formal notification of a request for consultation by letter or e-mail, which should be sent to the City addresses provided in this letter. If we do not receive notification within the 30-day period, we will assume that the Soboba Band has no tribal cultural resource concerns for the Olympic Real Estate Holdings, Inc. Project and we will proceed with the public review of a Mitigated Negative Declaration in accordance with California Environmental Quality Act procedures.

Should you have any questions, please do not hesitate to contact me.

Respectfully,

Chantal Power
Associate Planner

Attachment

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Project Name: Olympic Holding Inland Center Warehouse Project located at 915 S. Inland Center Drive

Dear Chantel Power,

Thank you for your letter dated June 12, 2019 regarding AB52 consultation. The above proposed project location is within our Ancestral Tribal Territory; therefore, our Tribal Government requests to schedule a consultation with you as the lead agency, to discuss the project and the surrounding location in further detail.

Please contact us at your earliest convenience. ***Please Note:AB 52, "consultation" shall have the same meaning as provided in SB 18 (Govt. Code Section 65352.4).***

Thank you for your time,

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians – Kizh Nation
1(844)390-0787

Andrew Salas, Chairman | Nadine Salas, Vice-Chairman | Dr. Christina Swindall Martinez, secretary
Albert Perez, treasurer I | Martha Gonzalez Lemos, treasurer II | Richard Gradias, Chairman of the council of Elders

From: Administration Gabrieleno [mailto:admin@gabrielenoindians.org]
Sent: Friday, September 20, 2019 3:21 PM
To: Chantal Power
Cc: gabrielenoindians@yahoo.com; Matthew Teutimez; Andy Salas
Subject: AB52 Consultation - 915 S Inland Center in the City of San Bernardino

Thank you for your time during the AB52 consultation for the project at 915 S Inland Center in the City of San Bernardino.

As stated in the Public Resource Code section 21080.3.1. (a) The Legislature finds and declares that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources and an area that has cultural value. According to section 21074. (a) "Tribal cultural resources" can be sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe.

Therefore, to explain our concerns for impacts to tribal cultural resources (TCR's) and how this project location may impact TCR's due to the location and the proposed ground disturbing activities, attached are screenshots and some explanatory text that was also verbally explained in the phone consultation for your project location.

The 915 S Inland Center Dr_1938 map indicates the project location within the Village of Homhoangna. All of our mainland villages (sans our island villages) overlapped each other to help facilitate the movement of tribal cultural resources throughout the landscape and also to our sister tribes outside of our traditional ancestral territory. Village use areas were usually shared between village areas and were commonly used by two or more adjoining villages depending on the type, quantity, quality, and availability of natural resources in the area. Therefore, human activity can be pronounced within the shared use areas due to the combined use by multiple villages and TCR's may be present in the soil layers from the thousands of years of human activity within that landscape.

The 915 S Inland Center Dr_1938 map shows the many trade routes around the project area. Trade routes were heavily used by our Tribe for movement of trade items, visiting of family, going to ceremony, accessing recreation areas, and accessing foraging areas. Within and around these routes contained seasonal or permanent ramadas or trade depots, seasonal and permanent habitation areas, and often still contain isolated burials and cremations from folks who died along the trail. These isolated burials are not associated with a village community burial site or ceremonial burial site, rather the location is simply where the person died and was buried where they died. Therefore, isolated burials are more concentrated and likely to occur in proximity to our trade routes, especially the major trade routes. Trade routes are considered "cultural landscapes", as stated in section 21074. (a) because the landscapes will house the objects, therefore, both cultural landscapes and cultural objects are protected under AB52 as a tribal cultural resource.

The 915 S Inland Center Dr_1901 map and 915 S Inland Center Dr_1938 topo map indicates the hydrography or waterways (e.g. Warm Creek) that existed around the project area. All water sources were used by our Tribe for life sustenance. Along these watercourses and water bodies occurred seasonal or permanent hamlets, seasonal or permanent trade depots, ceremonial and religious prayer sites, and burials and cremation sites of our ancestors. These activities occurred around water, both inland and coastal, because these water areas create unique habitats and riparian corridors that provide an abundance of food and medicine resources along with aesthetically peaceful areas with running water, shade trees, and shelter. Larger water bodies were high attractants for human activity and the banks and shores of these water bodies have a higher than average potential for encountering Tribal

Cultural Resources of artifacts and human remains during ground disturbing activities. Waterways are a “cultural landscape”, as stated in section 21074. (a) and are protected under AB52 as a tribal cultural resource.

Due to the project site being located within and around a sacred village (Homhoangna), adjacent to sacred water courses, a major traditional trade route, there is a high potential to impact Tribal Cultural Resources still present within the soil from the thousands of years of prehistoric activities that occurred within and around these Tribal Cultural landscapes. Therefore, to avoid impacting or destroying Tribal Cultural Resources that may be inadvertently unearthed during the project's ground disturbing activities, attached is the mitigation language approved by our Tribal Government for use with this project.

Admin Specialist
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
Office: 844-390-0787
website: www.gabrielenoindians.org

CUL-1

Archaeological Monitoring

Due to the heightened cultural sensitivity of the proposed project area, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of archaeological monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

TCR-1

Tribal Monitoring

Due to the heightened cultural sensitivity of the proposed project area, Tribal monitors representing the San Manuel Band of Mission Indians shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls, seat walls, fountains, etc.], and archaeological work). A sufficient number of Tribal monitors shall be present each work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. Monitoring may cease if the archaeologist and Tribal monitor agree that continued efforts are unneeded, and if the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) agrees with the assessment. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist, as detailed within CUL-1, and submitted to the Lead Agency for dissemination to SMBMI. Once all parties review and agree to the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

TCR-2

Treatment of Cultural Resources

If a pre-contact cultural resource is discovered during project implementation, ground disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the Archaeological Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the Monitoring and Treatment Plan. A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all finds are subject, if feasible, to avoidance/preservation in place as treatment.

Should any resource(s) not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by SMBMI. All plans for analysis shall be reviewed and approved by the applicant and SMBMI prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of SMBMI that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by SMBMI, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and SMBMI. All reburials are subject to a reburial agreement that shall be developed between the landowner and SMBMI outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.).

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with SMBMI to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.

All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and SMBMI for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and SMBMI.

TCR-3

Inadvertent Discoveries of Human Remains/Funerary Objects

In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately who shall notify SMBMI, the applicant/developer, and the Lead Agency. The Lead Agency and the applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties.

It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

Gabrieleno Band of Mission Indians – Kizh Nation

Protection of Tribal Cultural Resources (TCRs)

Most Important Things for Agencies to Know About AB52:

- An EIR, MND, or ND can not be certified until AB-52 tribal consultation has concluded.
- Agreed mitigation measures with the tribe, MUST be recommended for inclusion in the environmental document.
- Signature confirming acceptance of these mitigation measures recommended by our Tribal Government is required within 14 days of receipt to conclude AB52 consultation.

Tribal Cultural Resources Mitigation Measures within Kizh Nation Tribal Territory:

Note: To avoid compliance issues with the following laws, all Native American Monitoring shall be conducted by a documented lineal descendant from the ancestral Tribe of the project area (NAGPRA Law 10.14)

- The Native American Graves Protection and Repatriation Act (NAGPRA), Public Law-101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048.
- CEQA Guidelines Section15064.5, PRC 5097.98 (d)(1).
- The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).

If you are receiving these measures, The Gabrieleño Band of Mission Indians Kizh -Nation are the direct lineal descendants of your project area. The Kizh Nation ONLY responds and consults on projects within their ANCESTRAL tribal territory. Therefore, to remain in compliance with above referenced laws and to enable our Tribe with the ability to protect and preserve our last remaining and irreplaceable Tribal Cultural Resources, it is recommended that the project applicant retain a qualified professional tribal monitor/consultant from the Gabrieleño Band of Mission Indians Kizh -Nation. The Kizh Nation possesses Tribal archives including documented historical information as well as multiple members who possess unique knowledge derived from oral tradition passed down through generations of the Tribe in order to provide the expertise needed to identify whether a project is located within a culturally sensitive area given its proximity to village areas, commerce areas, recreation areas, ceremonial areas, and burial locations.

Native American Heritage Commission (NAHC) Guidelines for Native American Monitors/Consultants (approved 9/13/05): By acting as a liaison between Native American, archaeologist, developers, contactors and public agency, a Native American monitor/consultant can ensure that cultural features are treated appropriately from the Native American point of view. This can help others involved in a project to coordinate mitigation measures. These guidelines are intended to provide prospective monitors/consultants, and people who hire monitors/consultants, with an understanding of the scope and extant of knowledge that should be expected.

Mitigation Guidelines for Tribal Cultural Resources (TCRs): CEQA now defines TCRs as an independent element separate from archaeological resources. Environmental documents shall address a separate Tribal Cultural Resources section that includes a thorough analysis of the impacts to only TCRs and includes separate and independent mitigation measures created with tribal input under AB-52 consultations. Therefore, all agreements, mitigation, and conditions of approval regarding TCRs shall be handled solely with the Tribal Government and conversely all agreements, mitigation, and conditions of approval regarding Archaeological Resources shall be handled by an Archaeological resource company.

MITIGATION MEASURES

Retain a Native American Monitor/Consultant: The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

Unanticipated Discovery of Tribal Cultural and Archaeological Resources: Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and

Public Resources Code Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

Unanticipated Discovery of Human Remains and Associated Funerary Objects:
Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

Resource Assessment & Continuation of Work Protocol:

Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

Kizh-Gabrieleno Procedures for burials and funerary remains:

If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

Treatment Measures:

Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

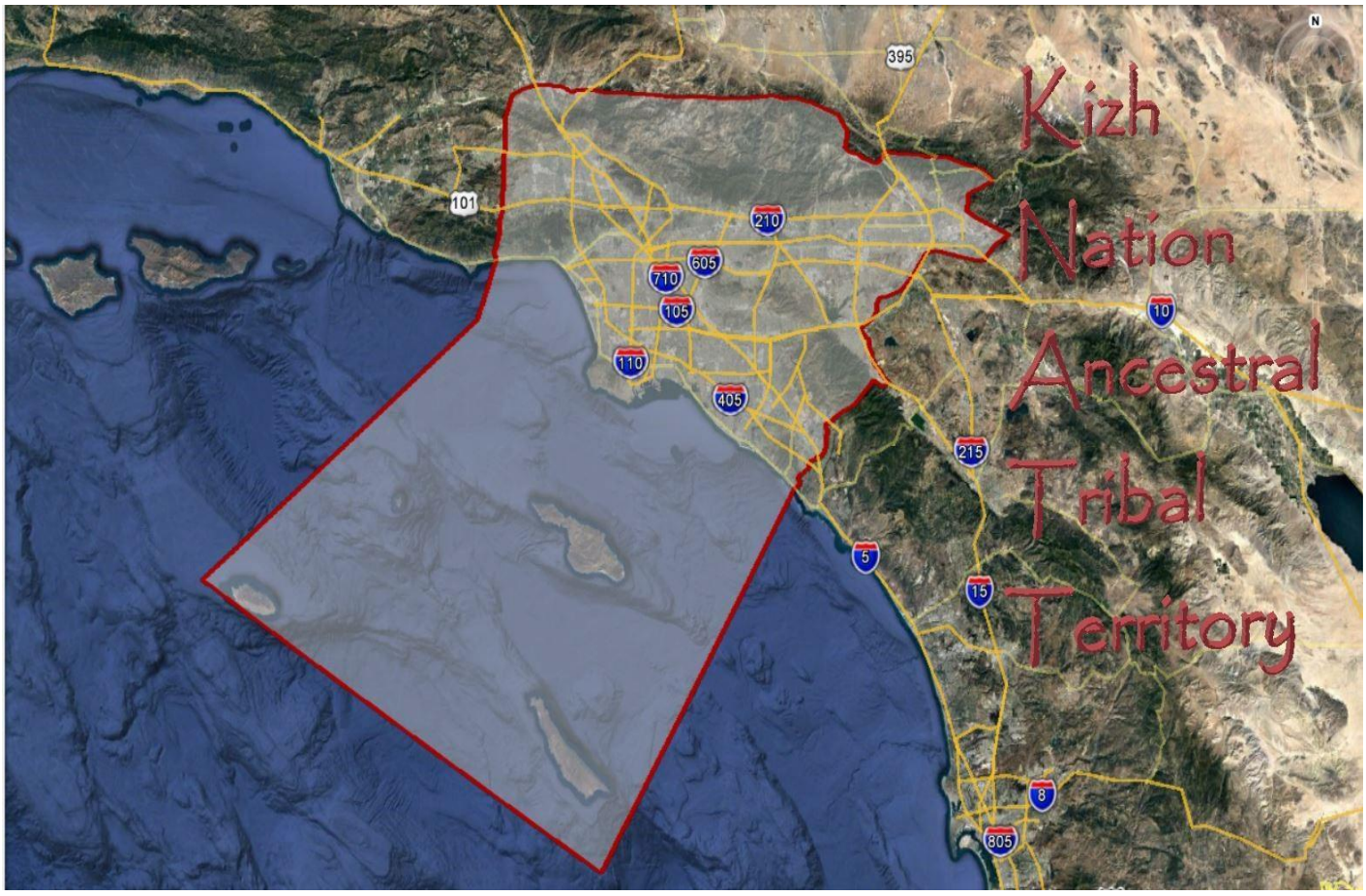
Acceptance of Tribal Government Recommended Mitigation Measures:

By _____ Date: _____
Lead Agency Representative Signature

Revised: August 2018

Attachment A

Kizh Nation Ancestral Tribal Territory extended along the coast from Malibu Creek in Los Angeles County down to Aliso Creek in Orange County and encompassed the Channel Islands of Catalina (Pimugna), San Nicolas (Haraasnga), and San Clemente (Kiinkenga). Our inland border was the San Gabriel Mountains (Hidakupa) and eastwardly our territory extended to parts of San Bernardino (Waatsngna), Orange, and Riverside counties.



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Inland Center Drive Warehouse Project
San Bernardino, CA
Ambient Noise Monitor Setup File (Short Version)
Prepared by MIG, November 2018

Summary	
Filename	LxT_Data.018
Serial Number	5065
Model	SoundTrack LxT®
Firmware Version	2.301
User	jkanlund
Location	ST-1
Job Description	Inland Center Drive
Note	ST-1 Located on Inland Center Drive.
Measurement Description	r 2 - LT2 - Inland CTR Noise Monitoring
Start	2018/11/05 10:30:02
Stop	2018/11/05 11:30:02
Duration	1:00:00.8
Run Time	1:00:00.8
Pause	0:00:00.0

Overall Settings	
RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	Other
Microphone Correction	Off
Integration Method	Exponential
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	A Weighting

Statistics	
LAS1.60	72.1 dB
LAS8.00	69.4 dB
LAS25.00	65.8 dB
LAS50.00	59.9 dB
LAS90.00	47.7 dB

Inland Center Drive Warehouse Project
San Bernardino, CA
Ambient Noise Monitoring Data
Prepared by MIG, November 2018

Summary of Short-Term Noise Monitoring Data

Site ST-1

Date	Time Start	Duration	Leq	Lmin	Lmax	(L1.6)	L(08)	L(25)	L(50)	L(90)
11/5/2018	9:30 AM	1-hour	64.4	43.9	76.8	72.1	69.4	65.8	59.9	48.0

Inland Center Drive Warehouse Project
San Bernardino, CA
Ambient Noise Monitor Setup File (Short Version)
Prepared by MIG, November 2018

Summary	
Filename	LxT_Data.019
Serial Number	5065
Model	SoundTrack LxT®
Firmware Version	2.301
User	jkanlund
Location	ST-2
Job Description	Located on south fence line in yard
Note	Located in the fenced yard south wall.
Measurement Description	Noise meter 2 - LT2 - Inland CTR Noise Monitoring
Start	2018/11/05 11:40:00
Stop	2018/11/05 12:41:33
Duration	1:01:33.1
Run Time	1:01:33.1
Pause	0:00:00.0
Overall Settings	
RMS Weight	A Weighting
Peak Weight	A Weighting
Detector	Slow
Preamp	Other
Statistics	
LAS1.60	66.1 dB
LAS8.00	56.4 dB
LAS25.00	50.0 dB
LAS50.00	46.9 dB
LAS90.00	43.4 dB

Inland Center Drive Warehouse Project
San Bernardino, CA
Ambient Noise Monitoring Data
Prepared by MIG, November 2018

Summary of Short-Term Noise Monitoring Data

Site ST-2

Date	Time Start	Duration	Leq	Lmin	Lmax	(L1.6)	L(08)	L(25)	L(50)	L(90)
11/5/2018	10:30 AM	1-hour	55.6	40.6	78.7	66.5	58.2	51.1	47.6	43.9

Inland Center Drive Warehouse Project - San Bernardino, CA
On-Site Project Noise Level Estimates
MIG - November 2018

On-Site Noise Source	Reference Noise Data		Property Line (Single Source)		Property Line (Multiple Sources)	
	Distance	Hourly Leq dBA	Distance	Hourly Leq dBA	No. Sources	Hourly Leq dBA
Auto Trip	3	67.2	40	44.7	10	54.7
Truck Trip	3	83.9	215	46.8	15	58.6
Truck Travel (Low Speed)	3	72.2	40	49.7	--	--
Truck Maneuvering	3	82.2	160	47.7	--	--
HVAC	3	83.2	75	55.2	--	--

Property Line	Existing Ambient Noise Level (Hourly Leq dBA)	Project Noise Level (Hourly Leq dBA)	Combined Noise Level	Difference
North	64.4	57.2	65.2	0.8
South	64.4	57.2	65.2	0.8
East	55.6	46.0	56.1	0.5

Inland Center Drive Warehouse Project - San Bernardino, CA
Reference Noise Levels
MIG - November 2018

Noise Source	Reference dBA @ 3 Feet	Duration (Seconds)	Estimated Hourly Leq @ 3 Feet
On-site Automobile Trip			
Low speed travel (15 mph)/parking	*55*	*60*	*37.2*
Door closing	*95*	*1*	*59.4*
Engine start/rev	*95*	*5*	*66.4*
Total Combined Noise Level			*67.2*
HVAC Unit			
Operation (5 Ton) (without parapet)	*88*	*1,188*	*83.2*
On-Site Truck Trip			
Low speed travel (15 mph)	*90*	*60*	*72.2*
Dock maneuvering(with backup alarm)	*100*	*60*	*82.2*
Air brake release	*100*	*3*	*69.2*
Main engine idling	*80*	*900*	*74.0*
Door closing	*95*	*1*	*59.4*
Engine start/rev	*100*	*10*	*74.4*
Total Combined Noise Level			*83.9*

Reference noise levels obtained from Soundplan V.8.4 data library

MIG
Cameron Hile

12 November 2018
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Olympic Real Estate
RUN: Existing Nort of I
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver 1	3	1	0.0	60.0	66	60.0	10	—	60.0	0.0	8	-8.0
Receiver 2	4	1	0.0	57.1	66	57.1	10	—	57.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

MIG
Cameron Hile

12 November 2018
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Olympic Real Estate Holdings
RUN: Future North of I
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver 1	3	1	0.0	60.5	66	60.5	10	—	60.5	0.0	8	-8.0
Receiver 2	4	1	0.0	57.5	66	57.5	10	—	57.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

MIG
Cameron Hile

12 November 2018
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Olympic Real Estate
RUN: Existing South of I
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver 1	3	1	0.0	58.1	66	58.1	10	—	58.1	0.0	8	-8.0
Receiver 2	4	1	0.0	55.1	66	55.1	10	—	55.1	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

MIG
Cameron Hile

12 November 2018
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: Olympic Real Estate
RUN: Future South of I
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Receiver 1	3	1	0.0	58.6	66	58.6	10	—	58.6	0.0	8	-8.0
Receiver 2	4	1	0.0	55.6	66	55.6	10	—	55.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	2	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

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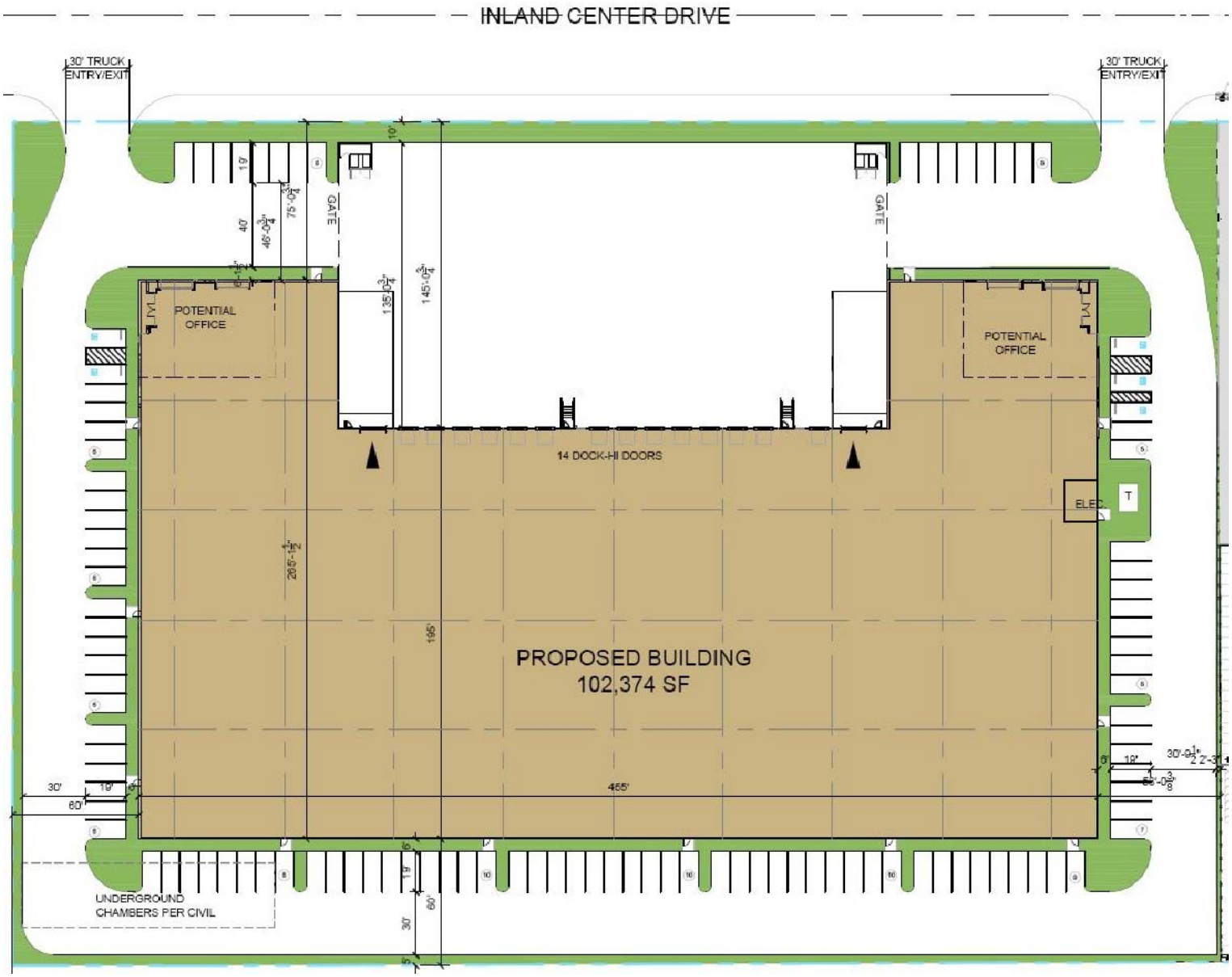
OLYMPIC REAL ESTATE HOLDINGS
LIGHT INDUSTRIAL PROJECT
TRAFFIC IMPACT STUDY
City of San Bernardino, California



PROPOSED OLYMPIC REAL ESTATE HOLDINGS LIGHT INDUSTRIAL PROJECT TRAFFIC IMPACT STUDY
City of San Bernardino, California

Prepared for:

OLYMPIC REAL ESTATE HOLDINGS, INC.
9444 Abraham Way
Santee, CA 92071-2853

Prepared by:

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Alex Tabrizi, P.E., T.E.
Jethro Narciso, E.I.T

October 8, 2018

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1.0 Introduction

1.1 Purpose of Report & Study Objectives

The purpose of this traffic study is to assess the impacts of the proposed Olympic Real Estate Holdings Light Industrial development from a traffic and circulation stand point.

The project site is located at the southwest corner of the intersection of Inland Center Drive and I street, in the City of San Bernardino. RK Engineering Group, INC. (RK) has previously prepared the *Olympic Real Estate Holdings Light Industrial Complex Traffic Impact Study (RK Engineering Group, Inc., April 3, 2015)*.

The proposed project is planned to consist of a single general light industrial building with a gross area of 102,374 square feet.

The project will be evaluated in a single phase and is planned to open in 2020.

Access for the proposed project is planned to be provided via two unsignalized driveways on Inland Center Drive.

This traffic study has been prepared in accordance with the traffic study guidelines, requirements and thresholds of significance for the City of San Bernardino and the County of San Bernardino Congestion Management Program (CMP).

This analysis evaluates the potential traffic impacts associated with the proposed project in accordance with the City of San Bernardino and County of San Bernardino CMP requirements and thresholds of significance.

This study is prepared in accordance with the scope of work approved by the City of San Bernardino staff. A copy of the approved scope of work is contained in Appendix A.

1.2 Site Location & Project Description

The project site is located at the southwest corner of the intersection of Inland Center Drive and I street, in the City of San Bernardino.

The proposed project is planned to consist of a single general light industrial building with a gross area of 102,374 square feet.

The project will be evaluated in a single phase and is planned to open in 2020.

Access for the proposed project is planned to be provided via two unsignalized driveways on Inland Center Drive.

Exhibit 1-1 shows the location of the proposed project. Exhibit 1-2 shows the proposed site plan.

1.3 Traffic Study Area & Analysis Scenarios

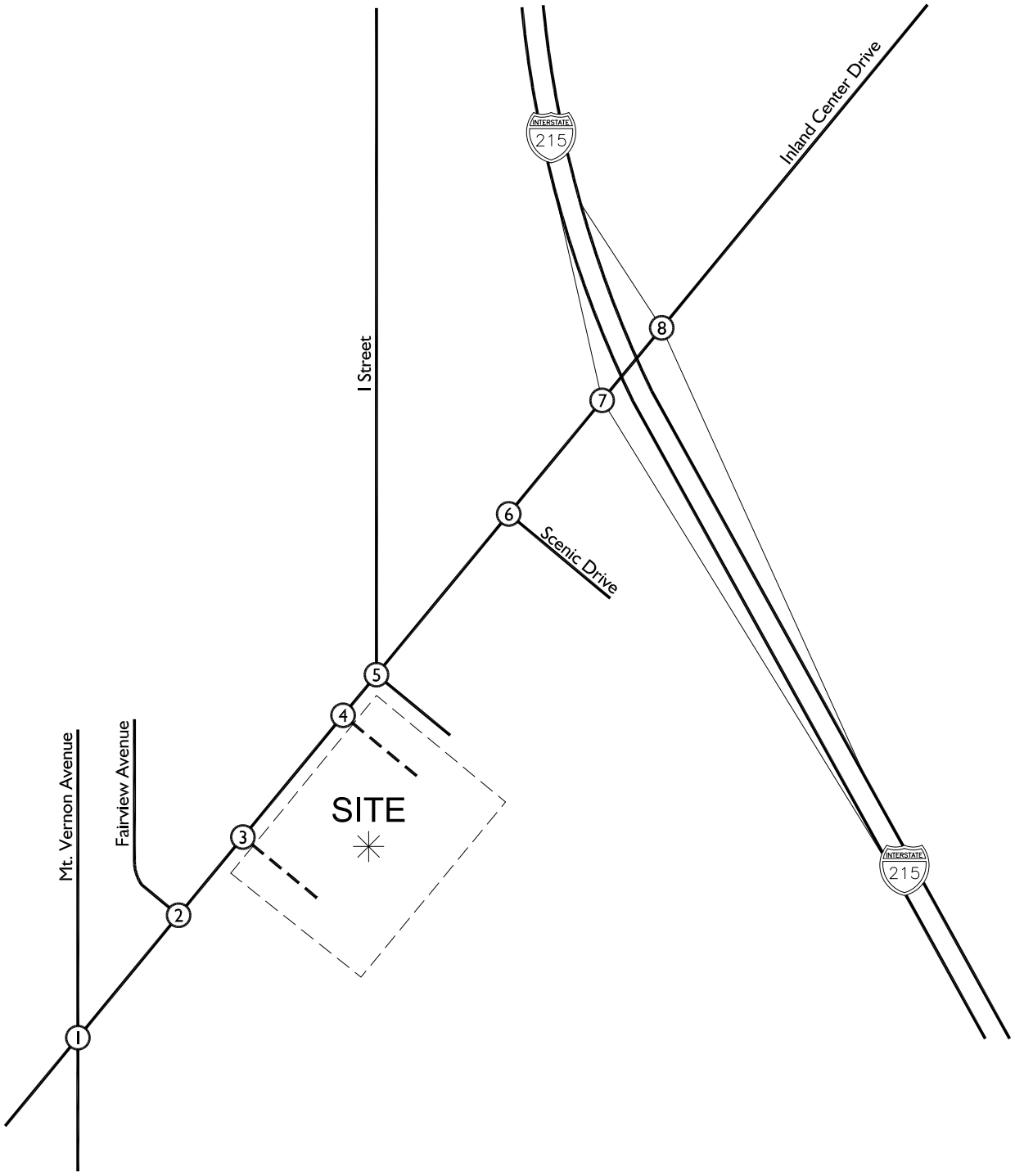
Exhibit 1-1 illustrates the site location map and traffic analysis study area. The study area consists of the following intersections:

North-South Street	East-West Street
1. Mt. Vernon Avenue	Colton Avenue
2. Fairview Avenue	Colton Avenue – Inland Center Drive
3. Project Driveway 1	Inland Center Drive
4. Project Driveway 2	Inland Center Drive
5. 'I' Street	Inland Center Drive
6. Scenic Drive	Inland Center Drive
7. I-215 Freeway Southbound Ramps	Inland Center Drive
8. I-215 Freeway Northbound Ramps	Inland Center Drive

The analysis evaluates traffic conditions of the study intersections for the following scenarios in accordance with the City of San Bernardino and County of San Bernardino and the approved scope of work contained in Appendix A:

- Existing Conditions (2018);
- Project Opening Year (2020) Without Related Projects Without Project Conditions;
- Project Opening Year (2020) Without Related Projects With Project Conditions
- Project Opening Year (2020) With Related Projects Without Project Conditions;
- Project Opening Year (2020) With Related Projects With Project Conditions;
- Long Range Year (2040) Without Project Conditions; and
- Long Range Year (2040) With Project Conditions.

Exhibit 1-1
Location Map



Legend:

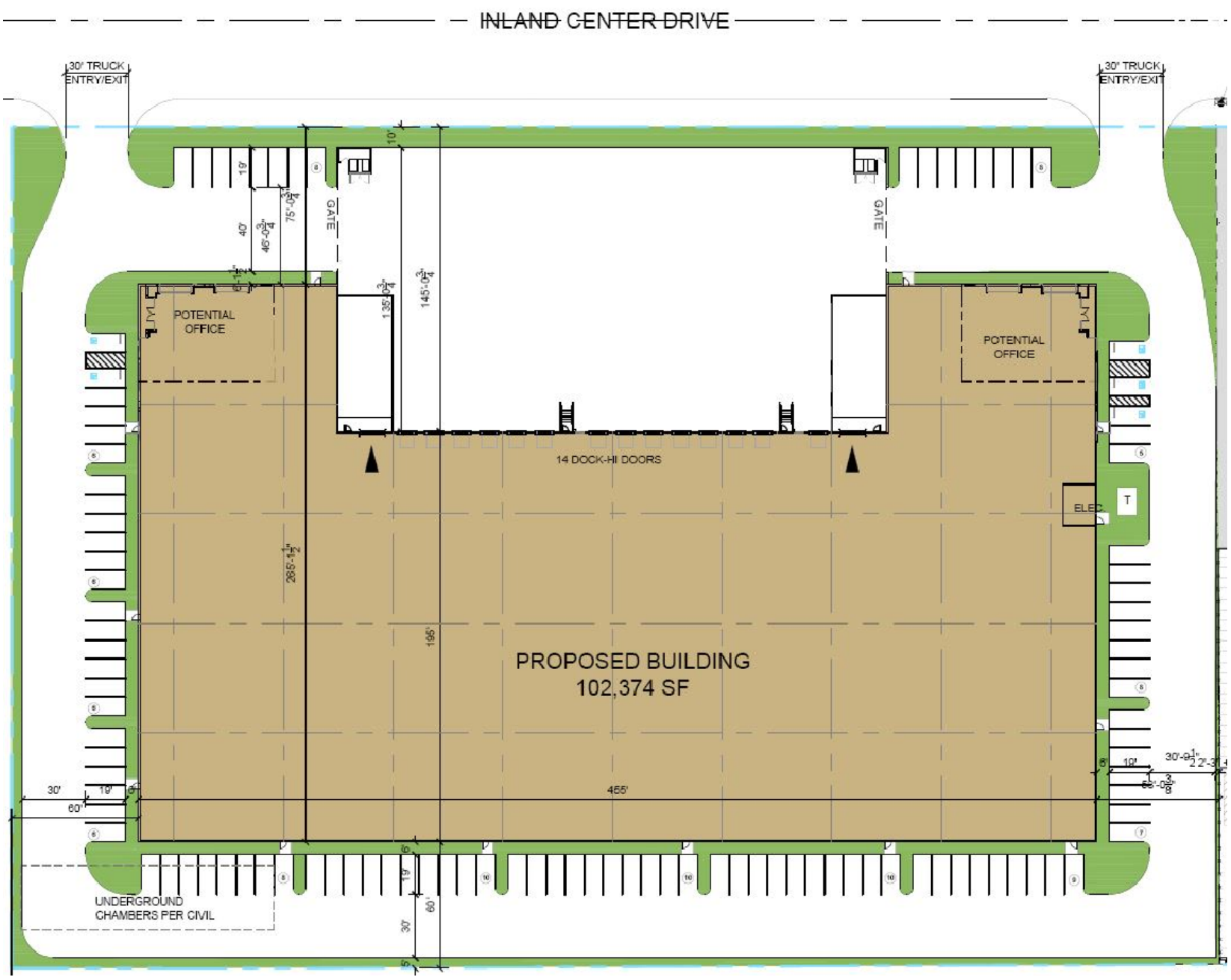
① = Study Area Intersection

– – = Proposed Project Access

N

Exhibit 1-2

Site Plan



2.0 Analysis Methodologies, Performance Criteria, & Thresholds of Significance

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report in accordance with the City of San Bernardino and County of San Bernardino requirements.

This section also discusses the agency-established applicable performance criteria and thresholds of significance for the study facilities.

2.1 Intersection Peak Hour Level of Service Analysis Methodology

The current technical guide to the evaluation of traffic operations is the Highway Capacity Manual (HCM2010). The HCM defines level of service as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS (Level of Service) conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- LOS A represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.

- LOS B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.

- LOS C is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.

- LOS D represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.

- LOS E represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.

- LOS F is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations.

The level of service is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The levels of service determined in this study are calculated using the HCM methodology.

For signalized intersections, average control delay per vehicle is used to determine the level of service. Levels of service at signalized study intersections have been evaluated using the HCM intersection analysis program.

Study area intersections, which are stop sign controlled with stop control on the minor street only, have been analyzed using the unsignalized intersection methodology of the HCM. For these intersections, the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected, describing the intersection configuration and traffic volumes at these locations, the level of service has been calculated. The level of service is determined based on the worst individual movement or movements sharing a single lane. The relationship between level of service and delay is different than for signalized intersections.

The levels of service are defined for the various analysis methodologies as follows:

LOS	Intersection LOS Criteria	
	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)
A	0.00 - 10.00	0.00 - 10.00
B	10.01 - 20.00	10.01 - 15.00
C	20.01 - 35.00	15.01 - 25.00
D	35.01 - 55.00	25.01 - 35.00
E	55.01 - 80.00	35.01 - 50.00
F	>80.01	>50.01

For this study, the HCM level of service grades will be determined utilizing the HCM 2010 Methodology and the Synchro analysis software.

The V/C ratio for evaluation of V/C differentials and potential impacts will be based on HCM 2000 Methodology and the Traffix analysis software.

All analysis parameters utilized in this analysis are in accordance with the City of San Bernardino and County of San Bernardino Traffic Study Guidelines.

Saturation flow rates of 1,800 vehicles per hour of green (vphg) for through and right turn lanes, 1,700 vehicles for single left turn lanes, and 1,600 vehicles per lane for dual left turn lanes have been assumed for Existing and Opening Year (2020) scenarios.

Saturation flow rates of 1,900 vehicles per hour of green (vphg) for through and right turn lanes, 1,800 vehicles for single left turn lanes, and 1,700 vehicles per lane for dual left turn lanes have been assumed for Buildout Year (2040) scenarios.

Existing conditions peak hour factors have been calculated based upon the traffic counts collected at the study area intersections. Existing peak hour factors have been used for Project Opening Year (2020).

For Buildout Year (2040) conditions, peak hour factors have been adjusted to 0.95 to account for the more consistent flow of traffic expected as congestion increases.

2.2 Level of Service Performance Criteria & Thresholds of Significance

The acceptable Level of Service (LOS) for intersections within the City of San Bernardino is LOS D or better.

Any intersection operating at a LOS E or LOS F will be considered deficient and will be considered impacted when any of the following changes in the volume to capacity (V/C) ratios occur between the "without Project" and the "with Project" conditions as shown on the following page:

LOS Without Project	**V/C Difference**
C	>0.0400
D	>0.0200
E,F	>0.0100

The City of San Bernardino Traffic Impact Study Guidelines do not contain any significant impact criteria for unsignalized intersections. Consistent with other recent traffic analyses prepared in the City of San Bernardino, the analysis utilized the following criteria to determine if a project results in significant traffic impact at unsignalized intersections:

- For unsignalized intersections, the impact is considered significant if the project related increase degrades the intersection operations to LOS E or worse and the project adds traffic such that the intersection satisfies the Peak Hour Signal Warrant.

3.0 Existing Traffic Volumes & Circulation System

This section provides a discussion of existing study area conditions and traffic volumes.

3.1 Existing Traffic Controls & Intersection Geometrics

Exhibit 3-1 identifies the existing roadway conditions for the study area roadways. The number of through traffic lanes for existing roadways and the existing intersection controls are identified.

3.2 Existing Conditions Traffic Volumes

Existing conditions intersection level of service calculations are based upon manual AM and PM peak hour turning movement counts taken in August 2018. The AM peak hour traffic volumes were determined by counting the two-hour period between 7:00 AM and 9:00 AM. Similarly, the PM peak hour traffic volumes were identified by counting the two-hour period between 4:00 PM and 6:00 PM. The traffic count worksheets are included in Appendix B.

Due to the high level of truck traffic in the area, truck axle classification factors were applied to the base existing traffic counts to account for the heavy trucks. Large trucks generally occupy more space on the roadway than a typical passenger vehicle. In order to show the equivalent impacts of the trucks at the study area intersections, an adjustment factor was used to convert truck traffic into passenger car equivalents (PCE). The PCE factors used for this project are based on City of San Bernardino standards and are as follows:

Vehicle Type	PCE Factor
Passenger Car	1.0
2 Axle Trucks	2.0
3 Axle Trucks	2.5
4+ Axle Trucks	3.0

Existing traffic volumes for the study area intersections are shown on Exhibit 3-2.

3.3 City of San Bernardino General Plan Circulation Element

Exhibit 3-3 shows the City of San Bernardino General Plan Roadway Network and Circulation System.

Exhibit 3-4 shows the City of San Bernardino General Plan Roadway Cross Sections.

Exhibit 3-5 shows the City of San Bernardino General Master Plan of Trails system in the project site vicinity.

Exhibit 3-1

Existing Lane Geometry and Traffic Controls

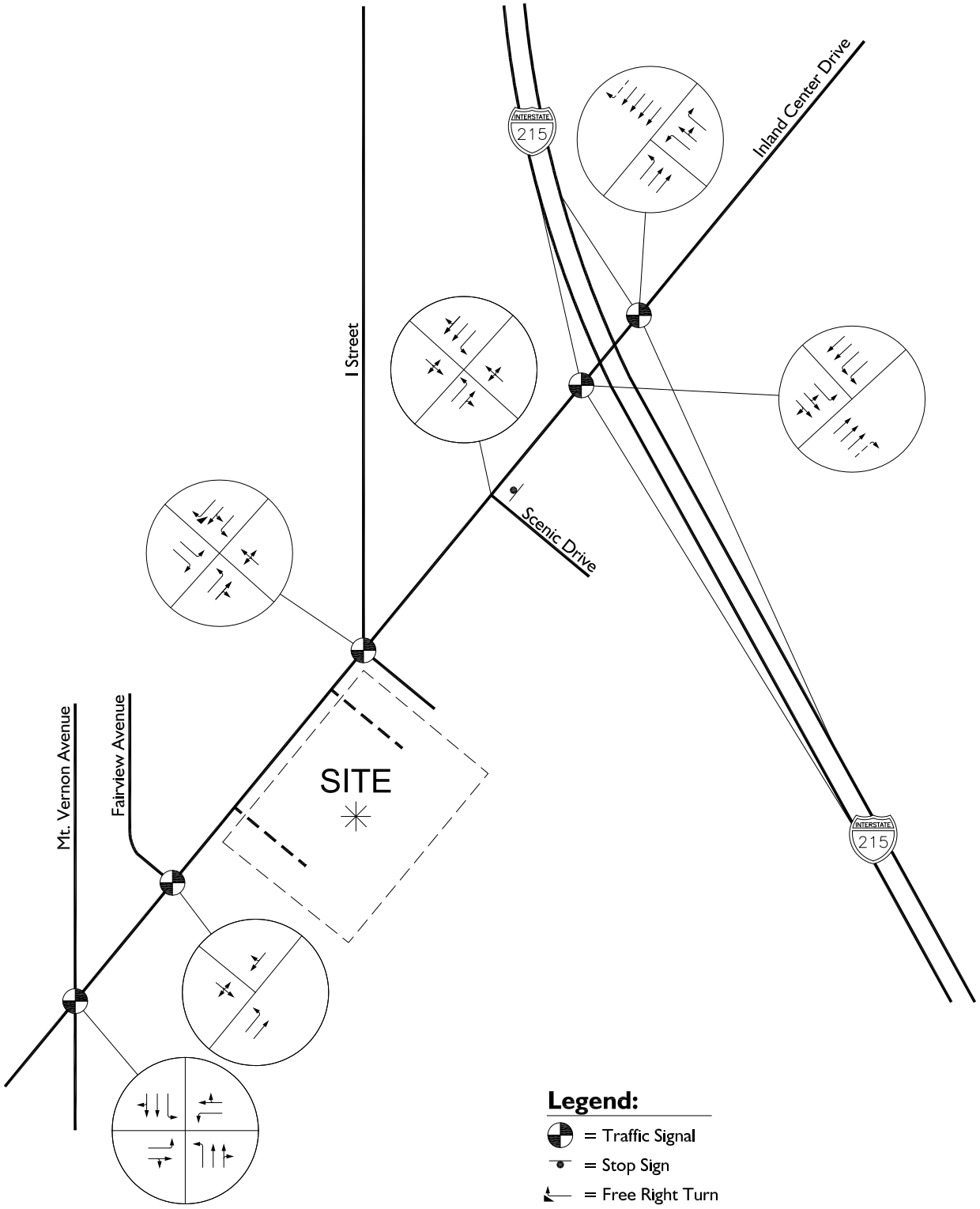
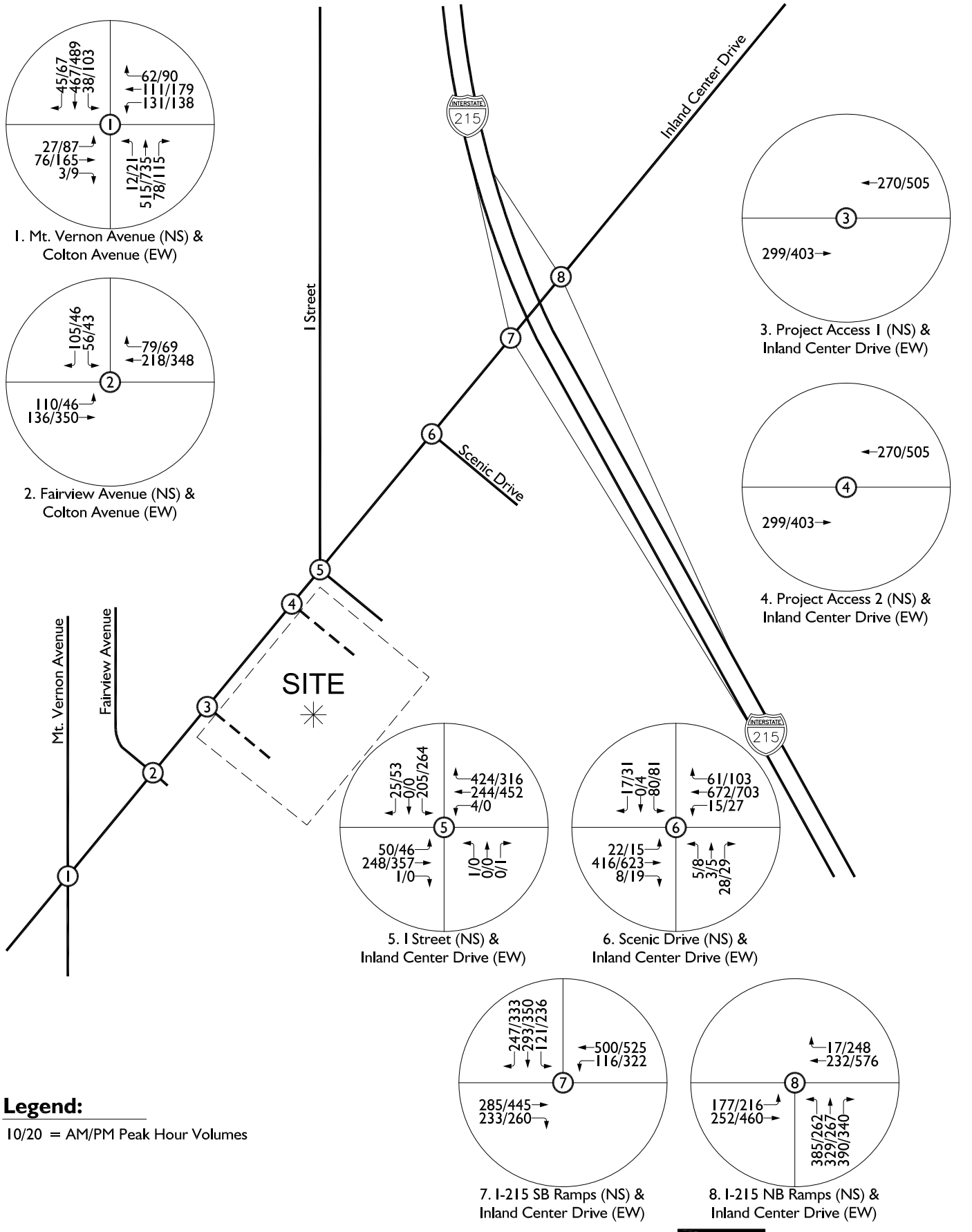


Exhibit 3-2

Existing Traffic Volumes



Legend:

10/20 = AM/PM Peak Hour Volumes

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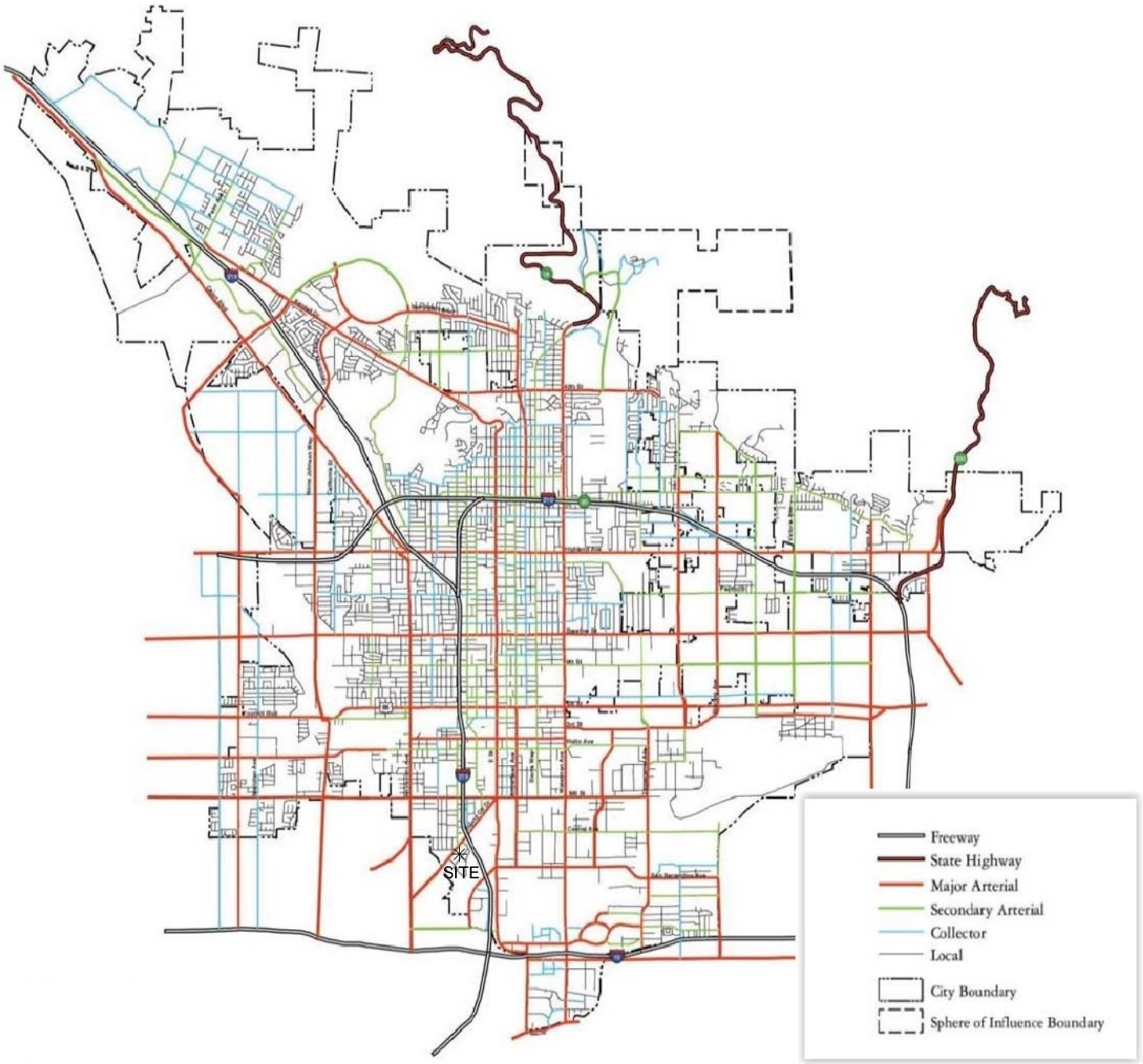
Exhibit 3-3

City of San Bernardino Circulation Element



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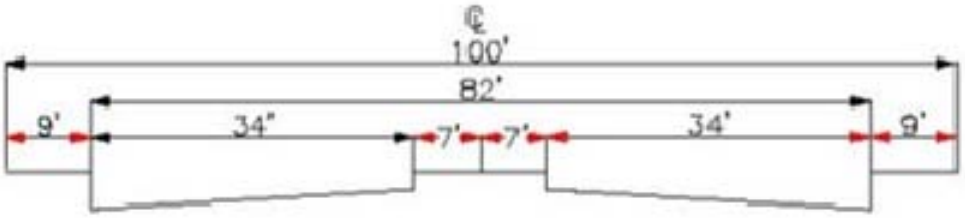
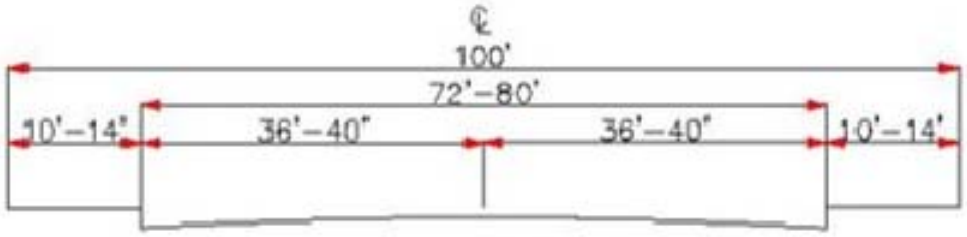
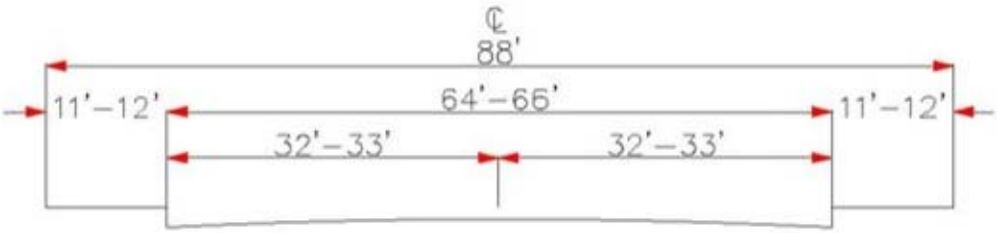
City of San Bernardino Roadway Cross-Sections



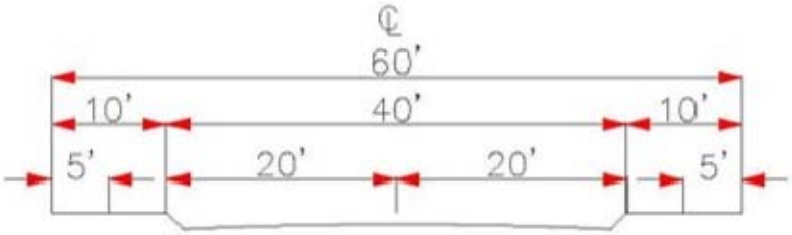
MAJOR DIVIDED HIGHWAYS



MAJOR HIGHWAY



SECONDARY HIGHWAY

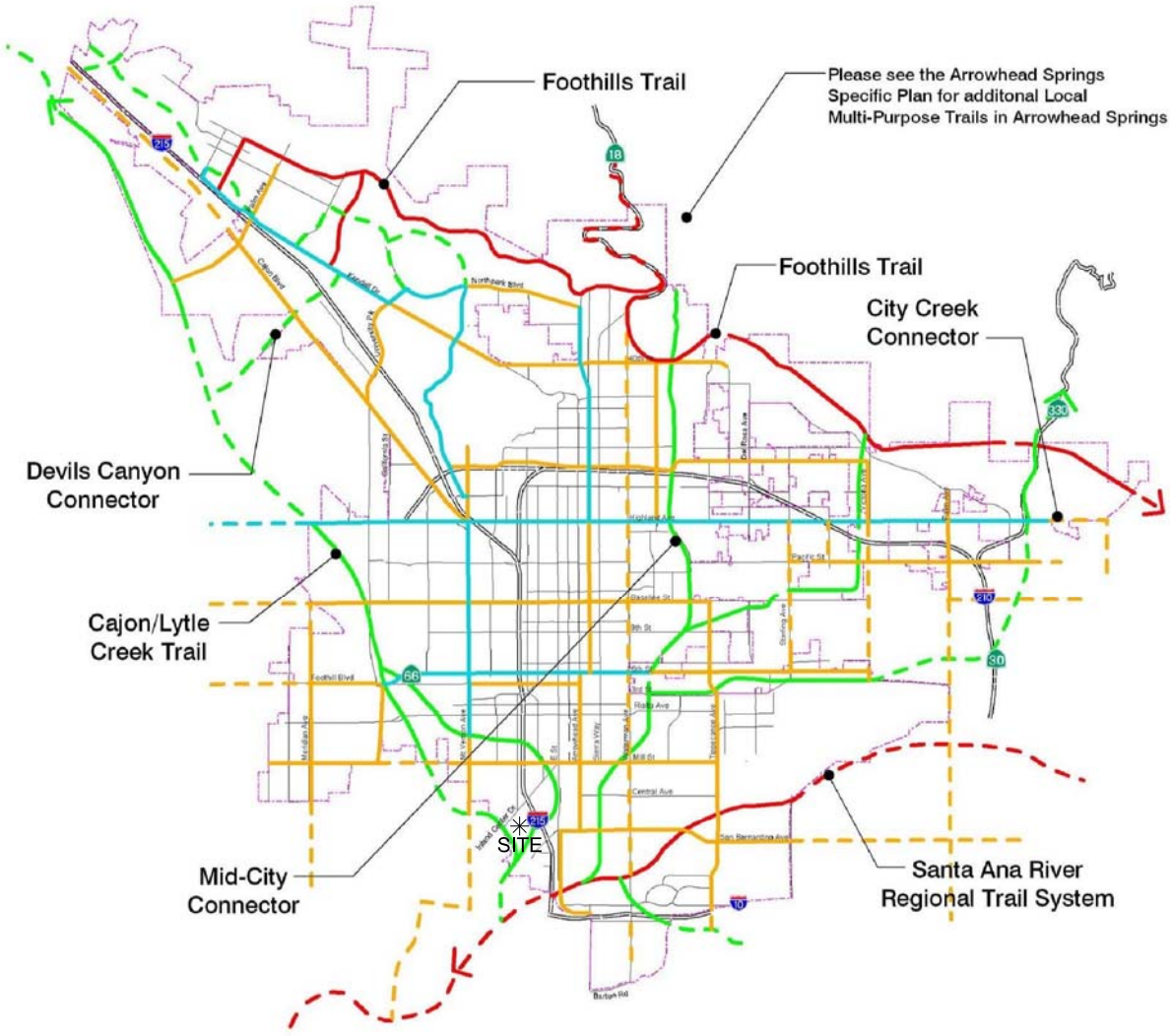


COLLECTOR STREET

FOR USE IN QUARTER MILE STREETS,
SCHOOL AND INDUSTRIAL AREAS.

Exhibit 3-5

City of San Bernardino Trail System



N

4.0 Projected & Future Traffic Volumes

This section provides a discussion on methodologies utilized to derive future traffic volumes for the study area.

4.1. Project Traffic Conditions

4.1.1 Trip Generation

Trip generation represents the amount of traffic that is attracted and produced by a development.

Trip generation for the proposed project is determined based on ITE 10th Edition trip generation rates for the proposed land uses as shown in Table 4-1.

This project is expected to attract a significant amount of heavy vehicle traffic due to the specific operational characteristics of the site. This would be mainly the hauling of freight by large multi-axle trucks. Large trucks generally occupy more space on the roadway; therefore, in order to show the equivalent impacts of the trucks at this site, the project trip generation has been converted to passenger car equivalents (PCE). The *City of Fontana Truck Trip Generation Study for Light Industrial Uses, August 2003* was used to estimate the heavy vehicle mix for this project. The PCE factors used for this project are based on City of San Bernardino standards and are as follows:

Vehicle Type	PCE Factor	Vehicle Mix
Passenger Car	1.0	0.7860
2 Axle Trucks	2.0	0.0800
3 Axle Trucks	2.5	0.0390
4+ Axle Trucks	3.0	0.0950

The PCE-adjusted trip generation rates are shown on Table 4-2. PCE-adjusted peak hour and daily project trip generation are shown in Table 4-2.

As shown in Table 4-2, the project is projected to generate a total of 675 PCE-adjusted trip-ends per day, with 95 PCE-adjusted vehicles per hour during the AM peak hour and 85 PCE-adjusted vehicles per hour during the PM peak hour.

4.1.2 Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project. Trip distribution is heavily influenced by the geographical location of the site, the location of retail, employment, recreational opportunities, and the proximity to the regional freeway system. The directional orientation of traffic was determined by evaluating existing and proposed land uses and highways within the community.

Forecast trip distribution for the proposed project has been developed through discussions with the City during the scoping process.

Exhibit 4-1 shows the *passenger vehicles outbound* trip distribution for the proposed project. Exhibit 4-2 shows the *passenger vehicles inbound* trip distribution for the proposed project.

Exhibit 4-3 shows the *truck outbound* trip distribution for the proposed project. Exhibit 4-4 shows the *truck inbound* trip distribution for the proposed project.

4.1.3 Modal Split

Modal split denotes the proportion of traffic generated by a project that would use any of the transportation modes, namely buses, cars, bicycles, motorcycles, trains, carpools, etc. The traffic reducing potential of public transit and other modes is significant. However, the traffic projections in this study are conservative in that public transit and alternative transportation may be able to reduce the traffic volumes, but, no modal split reduction is applied to the projections. With the implementation of transit service and provision of alternative transportation ideas and incentives, the automobile traffic demand can be reduced significantly.

4.1.4 Project Peak Hour Traffic Volumes/Assignment

The assignment of traffic from the project site to the adjoining roadway system has been based upon the project's trip generation, trip distribution, and proposed arterial highway and local street systems that this traffic study assumes would be in place by the time of occupancy of the site.

Project traffic volumes are shown on Exhibit 4-5.

4.2 Background Traffic

4.2.1 Method of Projection

To assess future conditions, project traffic is combined with existing traffic, area-wide growth, and cumulative projects' traffic.

For opening year (2020) conditions, to account for area wide/ambient growth in the study area, an annual growth rate of three percent (3%) has been applied to existing traffic volumes over a two-year period, as directed by City Staff.

For long-range (2040) conditions, the background traffic growth and volumes are based on long-range projections of the San Bernardino County Transportation Analysis Model (SBTAM) as provided by the County of San Bernardino Planning Department.

A copy of the SBTAM model plots are contained in Appendix C.

4.2.2 Cumulative Projects Traffic

Information on future projects in the vicinity of study area has been obtained from the City of San Bernardino staff for inclusion in this analysis and shown in Table 4-3.

"Probable future projects" include projects that have been filed with the City but are not yet approved or projects that the City reasonably anticipates will be submitted in the foreseeable future.

Table 4-3 shows the proposed land uses for the nearby cumulative projects provided by the City staff.

Exhibit 4-6 shows the location of the cumulative projects.

Table 4-3 also shows the peak hour and daily trip generation for the cumulative projects.

Cumulative Projects traffic volumes are shown on Exhibit 4-7.

In reality, some of the cumulative projects may be downsized or may not be developed by project opening year (2020). In addition, many of the related projects have been or will be subject to a variety of mitigation measures that will reduce the potential environmental impacts associated with those projects. However, those mitigation measures have not been taken into account in projecting the environmental impact of the related projects.

Therefore, the cumulative analyses set forth below are conservative and could result in greater impacts than actually anticipated. Additionally, the analysis utilizes a growth rate of three (3) percent per year for project opening year (2020) conditions, which would already capture and account for most projects in the area. The growth rate methodology is considered conservative since it is applied to all movements of the study intersections.

Long-range (2040) conditions is based on SBTAM projections and assume buildout of all the cumulative projects.

4.3 Opening Year (2020) Without Related Projects Without Project Conditions Traffic Volumes

Opening Year (2020) Without Related Projects Without Project Conditions traffic volumes consist of existing traffic volumes and a 6% growth rate (to account for two years of annual growth at 3%).

Opening Year (2020) Without Related Projects Without Project Conditions traffic volumes do not include cumulative projects or proposed project traffic.

Opening Year (2020) Without Related Projects Without Project Conditions traffic volumes are shown on Exhibit 4-8.

4.4 Opening Year (2020) Without Related Projects With Project Conditions Traffic Volumes

Opening Year (2020) Without Related Projects With Project Conditions traffic volumes consist of existing traffic volumes and a 6% growth rate (to account for two years of annual growth at 3%) and also the PCE-adjusted traffic associated with the proposed project.

Opening Year (2020) Without Related Projects With Project Conditions traffic volumes do not include cumulative projects traffic.

Opening Year (2020) Without Related Projects With Project Conditions traffic volumes are shown on Exhibit 4-9.

4.5 Opening Year (2020) With Related Project Without Project Conditions Traffic Volumes

Opening Year (2020) With Related Project Without Project Conditions traffic volumes consist of existing traffic volumes and a 6% growth rate (to account for two years of annual growth at 3%) and also the traffic associated with cumulative projects in year 2020 as discussed in Section 4.2.2.

Opening Year (2020) With Related Projects Without Project Conditions traffic volumes do not include proposed project traffic.

Opening Year (2020) With Related Project Without Project Conditions traffic volumes are shown on Exhibit 4-10.

4.6 Opening Year (2020) With Related Projects With Proposed Project Conditions Traffic Volumes

Opening Year (2020) With Related Projects With Proposed Conditions traffic volumes consist of existing traffic volumes and a 6% growth rate (to account for two years of annual growth at 3%), the traffic associated with cumulative projects in year 2020 as

discussed in Section 4.2.2, and also the PCE-adjusted traffic generated by the proposed project.

Opening Year (2020) With Related Projects With Proposed Project Conditions traffic volumes are shown on Exhibit 4-11.

4.7 Long-Range (2040) Without Project Conditions Traffic Volumes

Long-range (2040) Without Project Conditions traffic volumes are based on long-range projections of the San Bernardino County Transportation Analysis Model (SBTAM) as provided by the County of San Bernardino Planning Department.

Long-range (2040) Without Project Conditions traffic volumes also include and assume the full magnitude of traffic generated by the cumulative projects provided by City staff.

Long-range (2040) Without Project Conditions traffic volumes are shown on Exhibit 4-12.

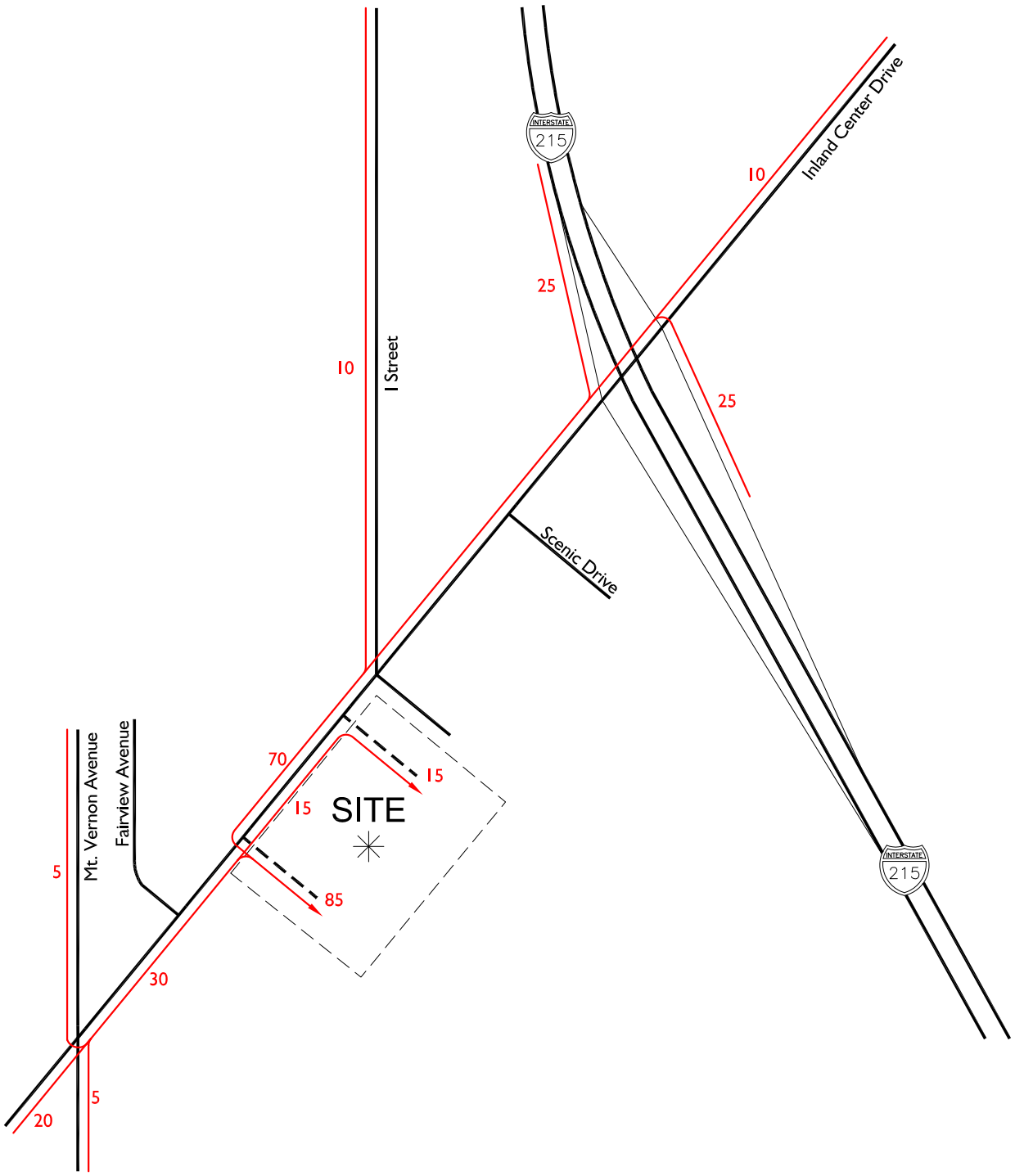
4.8 Long-Range (2040) With Project Conditions Traffic Volumes

Long-range (2040) With Project Conditions traffic volumes are derived by adding the project-generated PCE trips to Long-range (2040) Without Project Conditions traffic volumes.

Long-range (2040) With Project Conditions traffic volumes are shown on Exhibit 4-13.

Exhibit 4-1

Passenger Vehicle Inbound Project Trip Distribution



Legend:

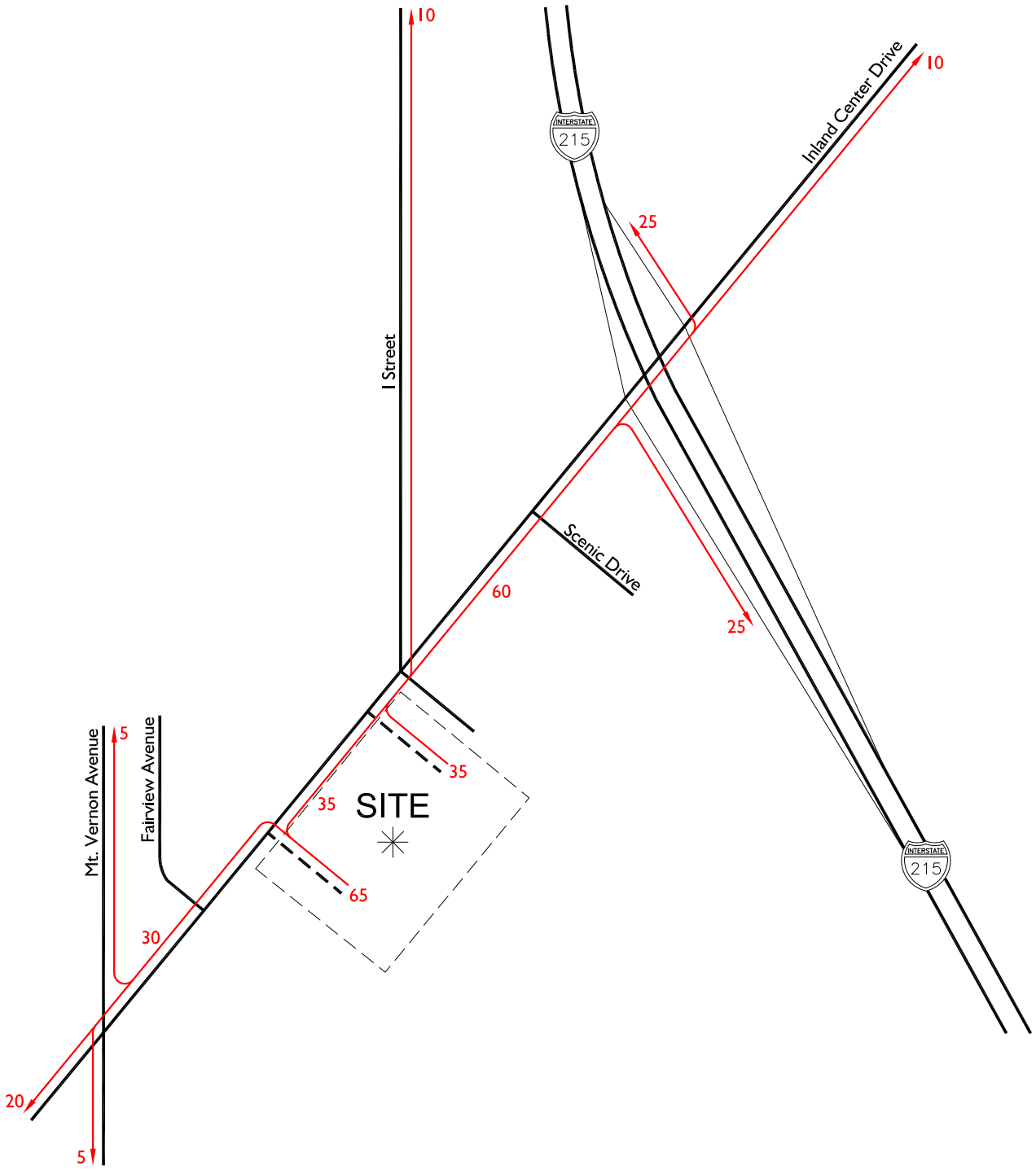
10 = Percent To Project

– – = Proposed Project Access

N

Exhibit 4-2

Passenger Vehicle Outbound Project Trip Distribution



Legend:

10 = Percent From Project

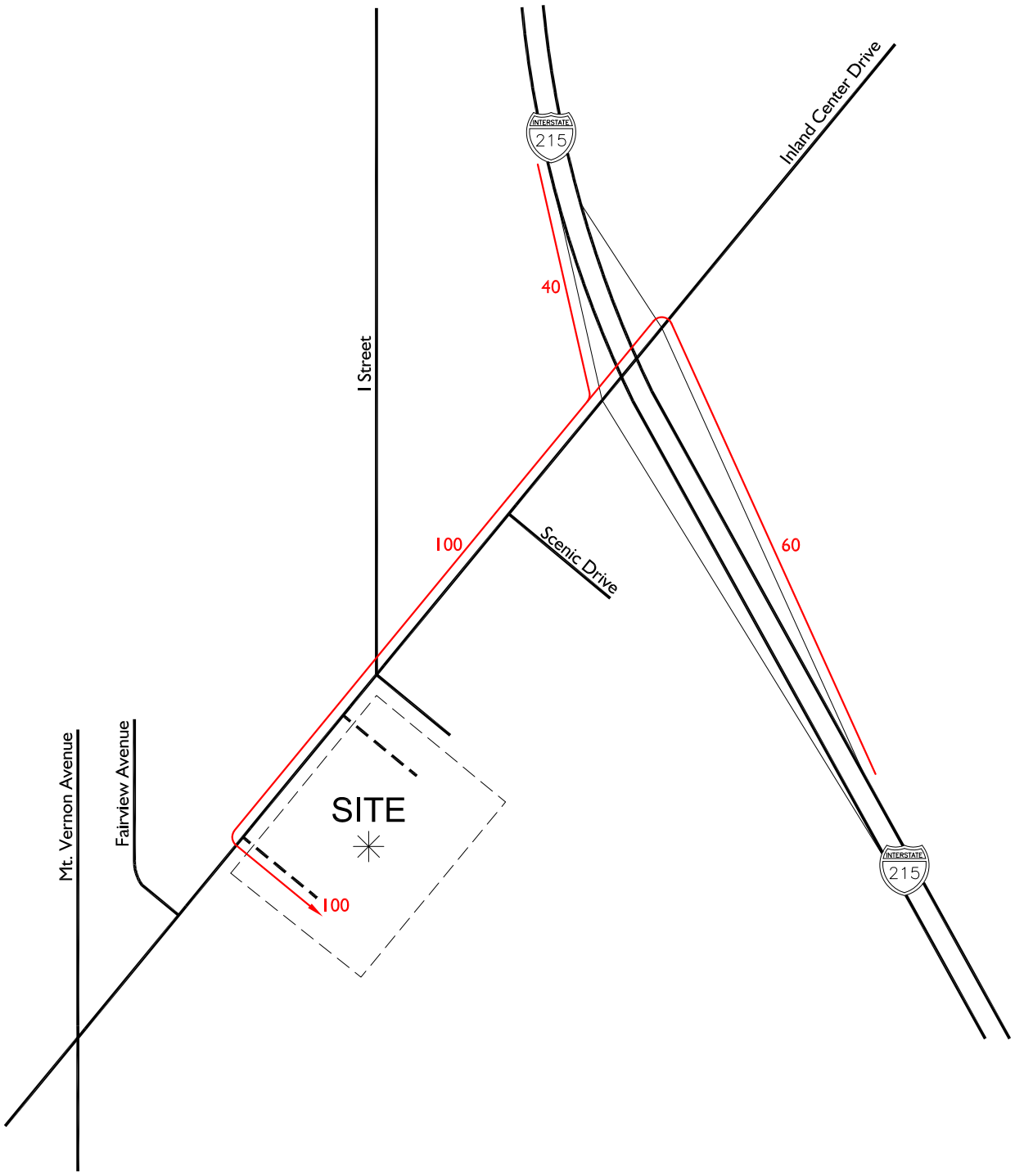
– – = Proposed Project Access

N

RK engineering group, inc.

Exhibit 4-3

Truck Inbound Project Trip Distribution



Legend:

10 = Percent To Project

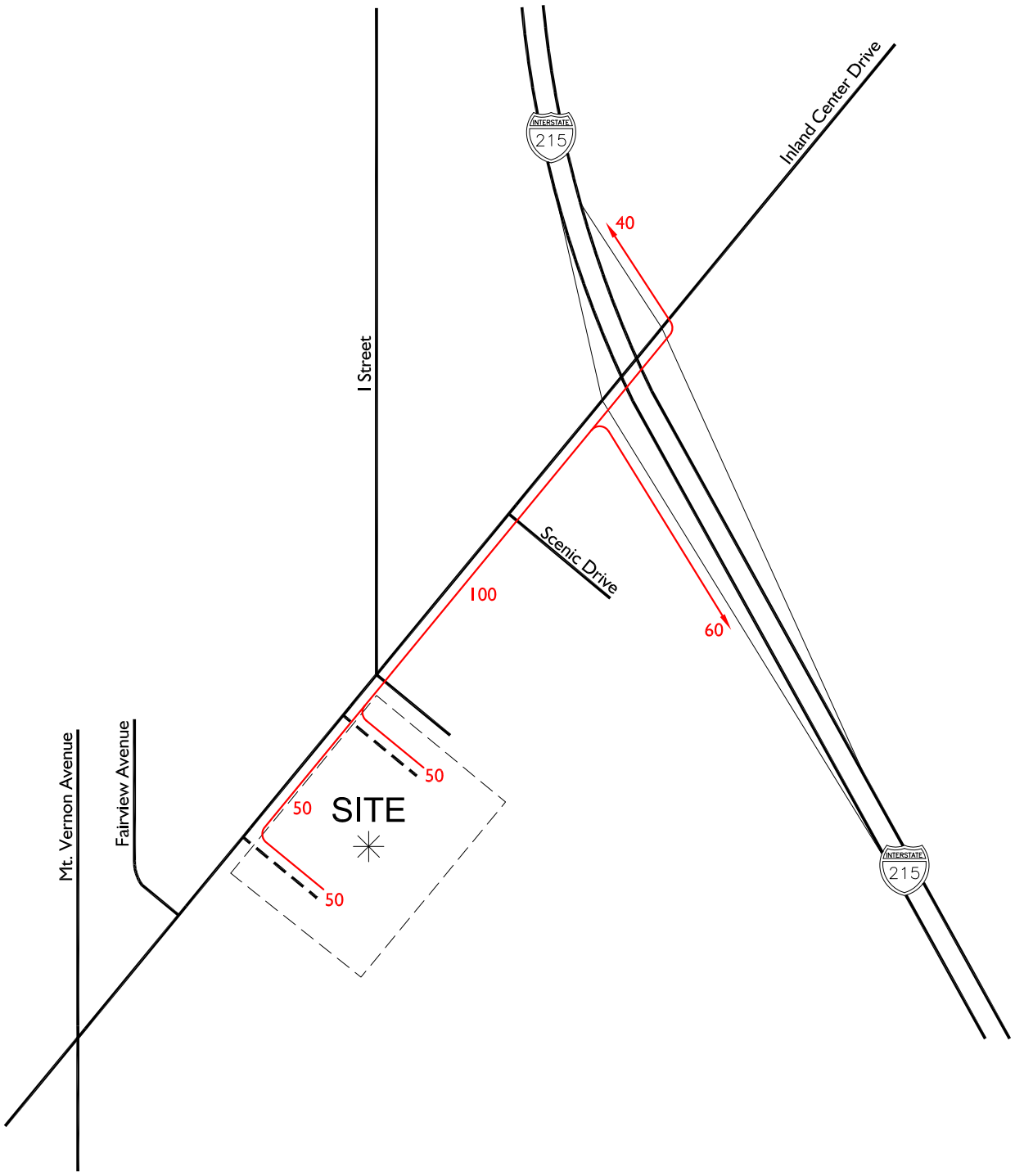
– – = Proposed Project Access

N

RK engineering group, inc.

Exhibit 4-4

Truck Outbound Project Trip Distribution



Legend:

10 = Percent From Project

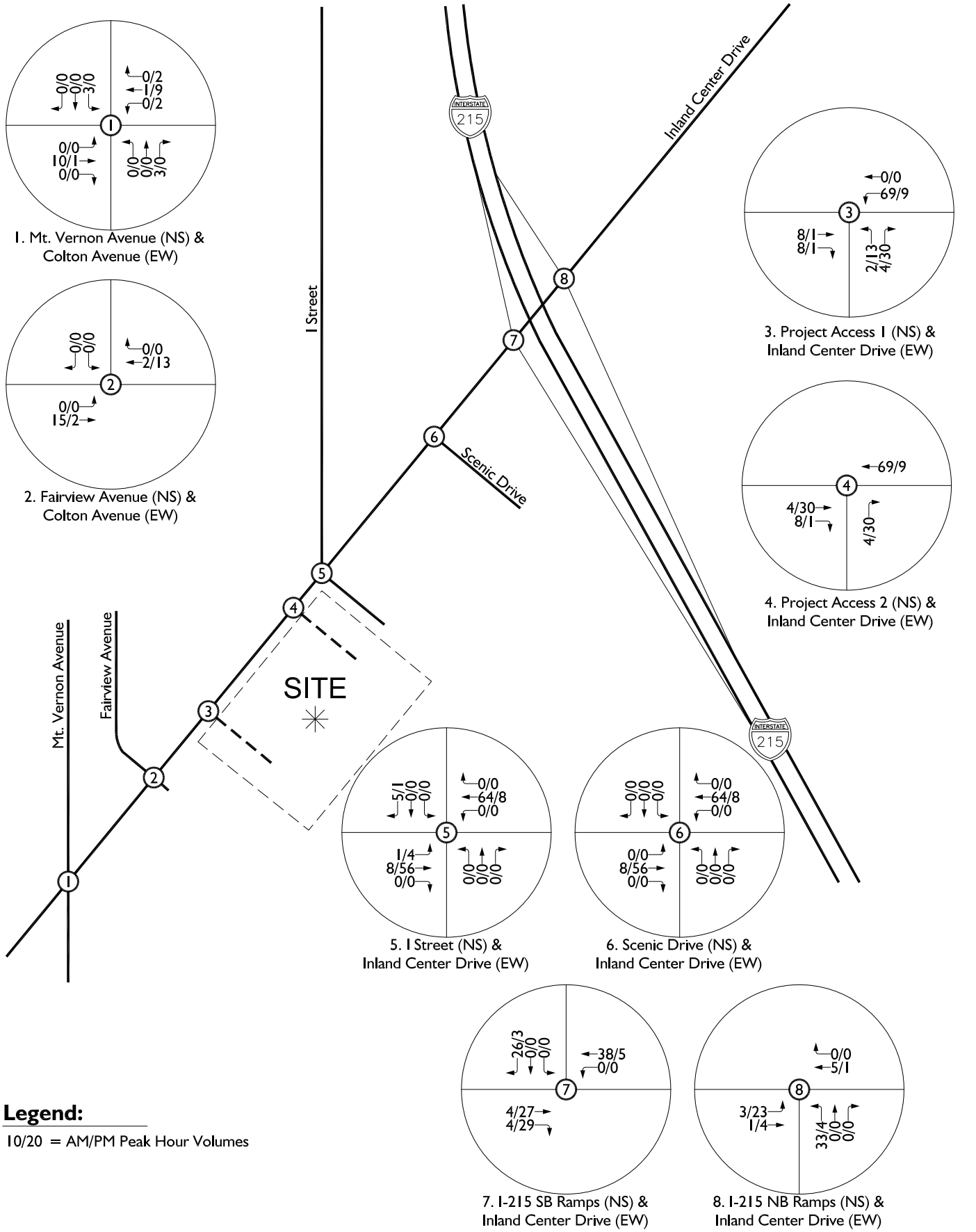
– – = Proposed Project Access

N

RK engineering group, inc.

Exhibit 4-5

Project Traffic Volumes



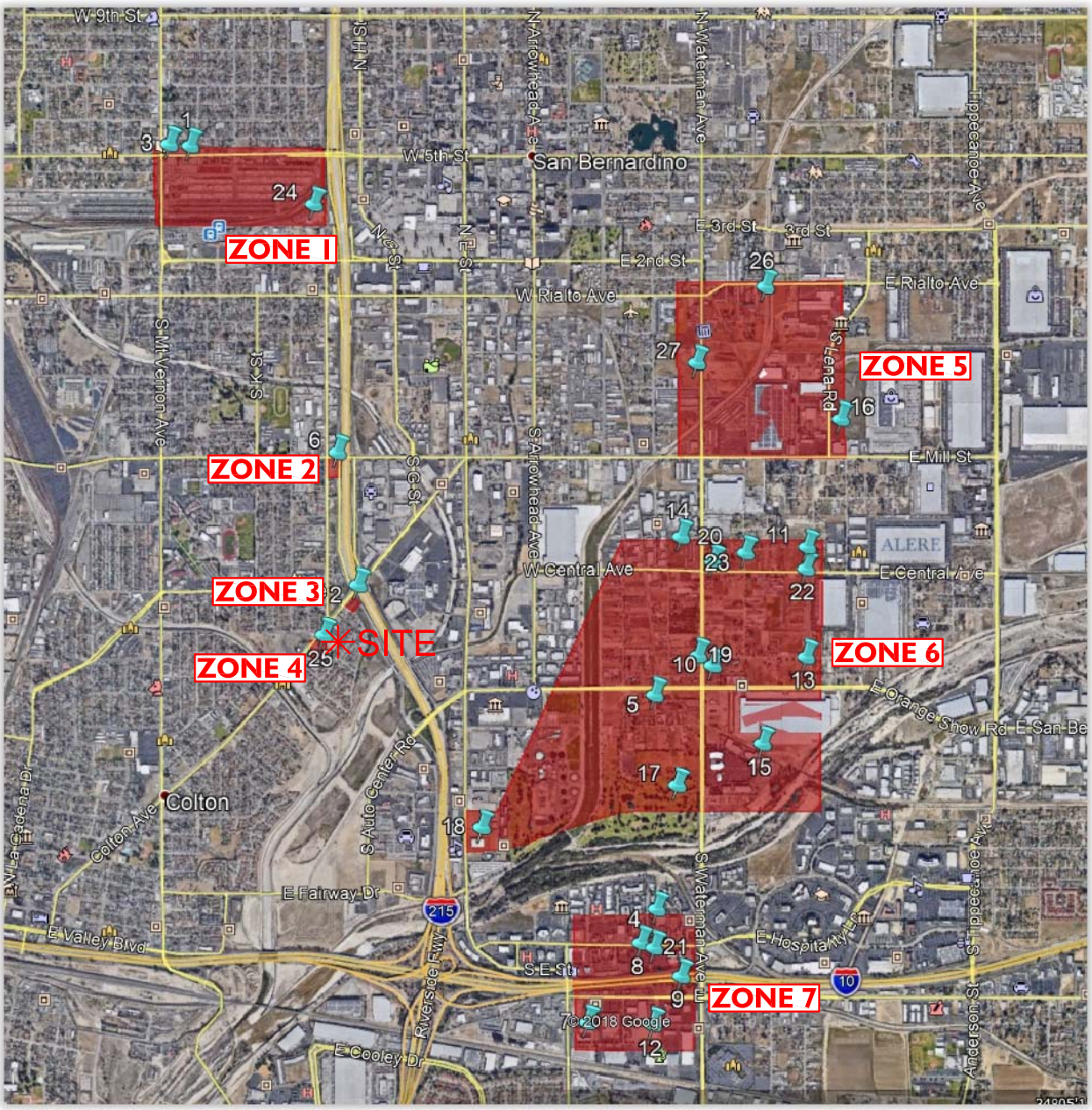
Legend:

10/20 = AM/PM Peak Hour Volumes

N

Exhibit 4-6

Related Projects Location Map



Legend:

(1) = Cumulative Project

Zone 1:

(1) = CUP 14-13
(3) = CUP 16-20
(24) = DP-D18-08

Zone 2:

(6) = CUP 17-15

Zone 3:

(2) = CUP 16-17

Zone 4:

(25) = DP-P15-01

Zone 5:

(16) = DP-D16-24
(26) = DP-P16-04
(27) = DP-P17-02

Zone 6:

(5) = CUP 17-07
(10) = CUP 17-29
(11) = DP-D15-09
(13) = DP-D15-13
(14) = DP-D15-14
(15) = DP-D16-22
(17) = DP-D16-26
(18) = DP-D16-27
(19) = DP-D17-02
(20) = DP-D17-03
(22) = DP-D18-05
(23) = DP-D18-06

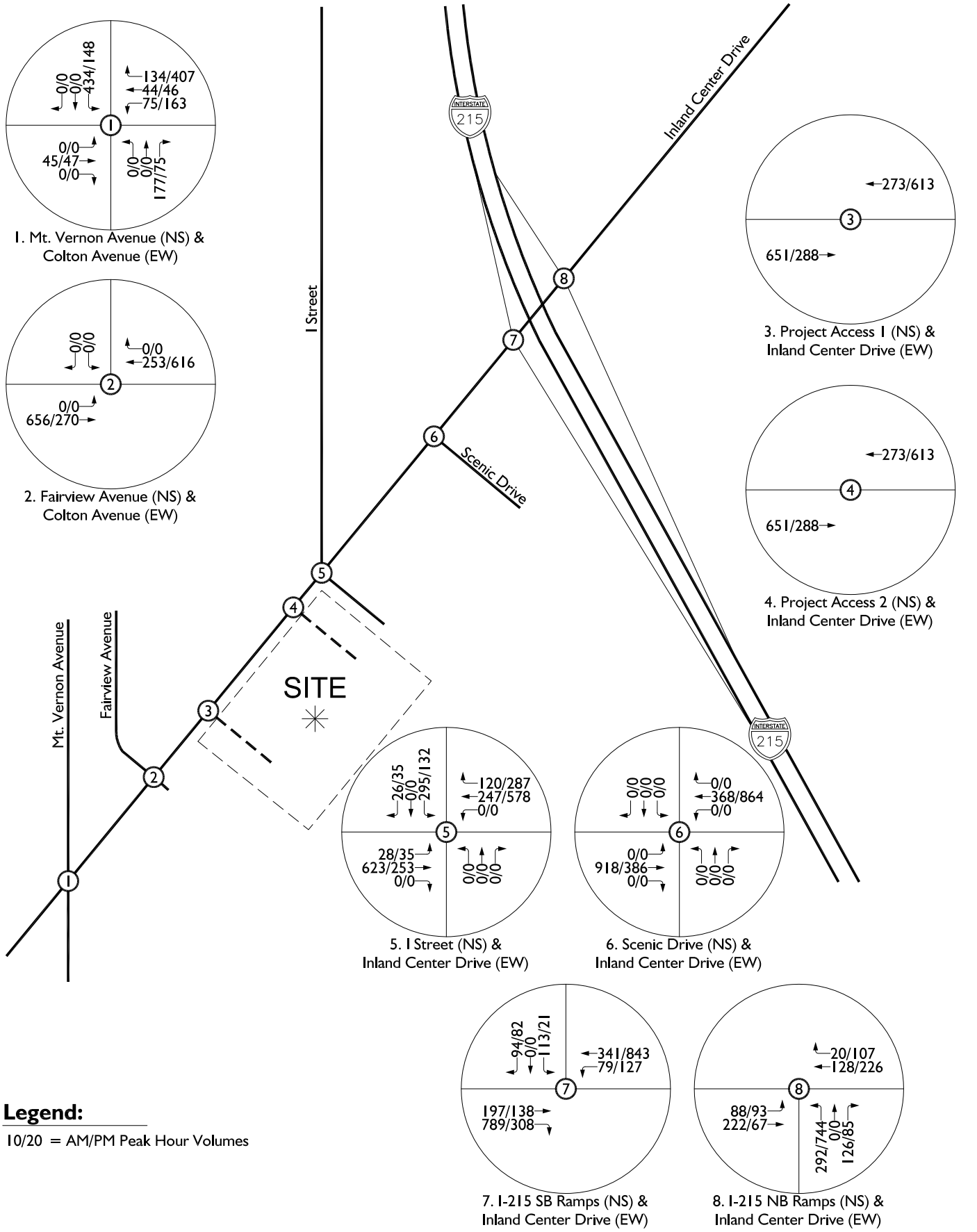
Zone 7:

(4) = CUP 16-23
(7) = CUP 17-17
(8) = CUP 17-23
(9) = CUP 17-27
(12) = DP-D15-12
(21) = DP-D17-05

N

Exhibit 4-7

Related Projects Traffic Volumes



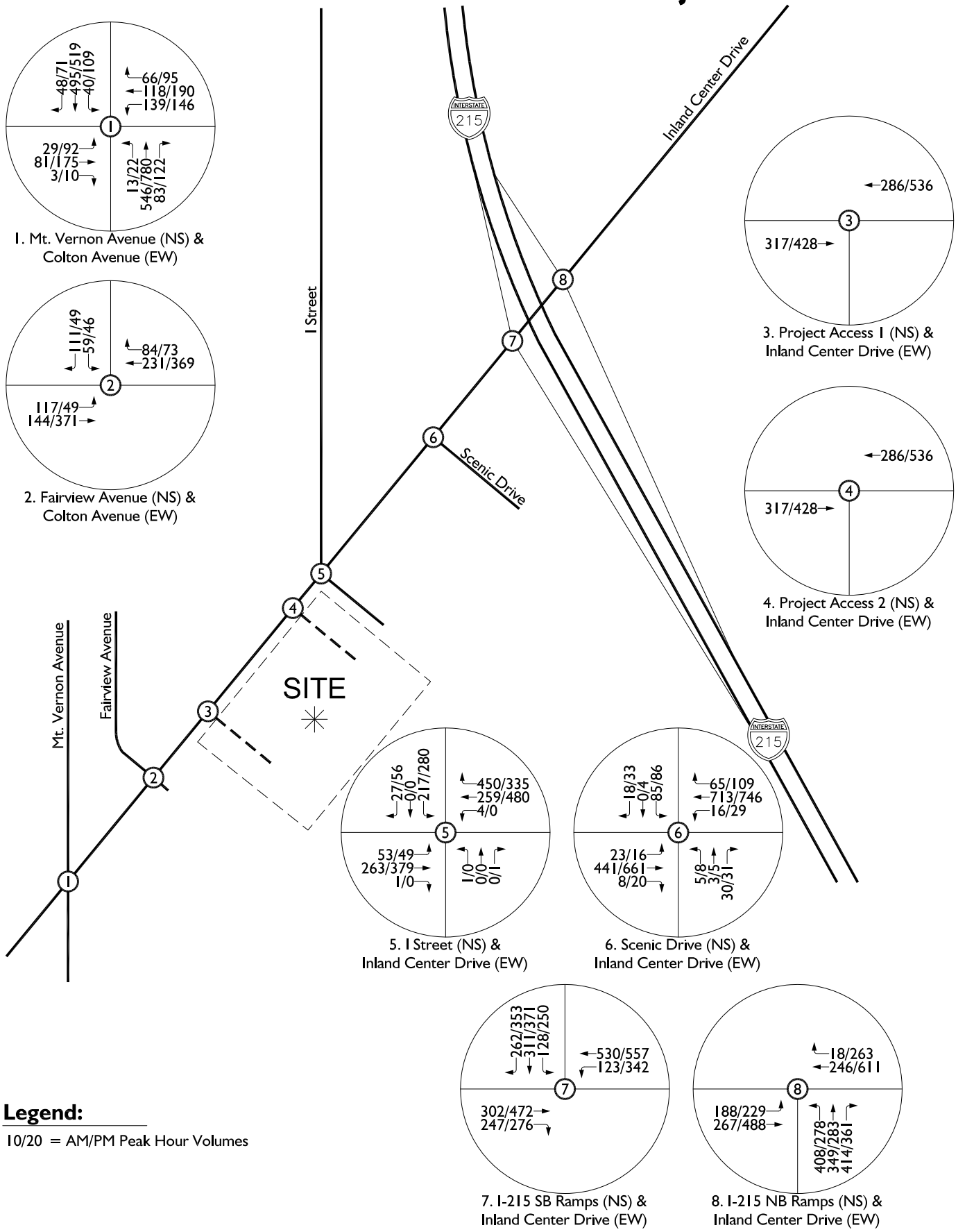
Legend:

10/20 = AM/PM Peak Hour Volumes

N

Exhibit 4-8

Project Opening Year (2020) Without Related Projects Without Project Traffic Volumes



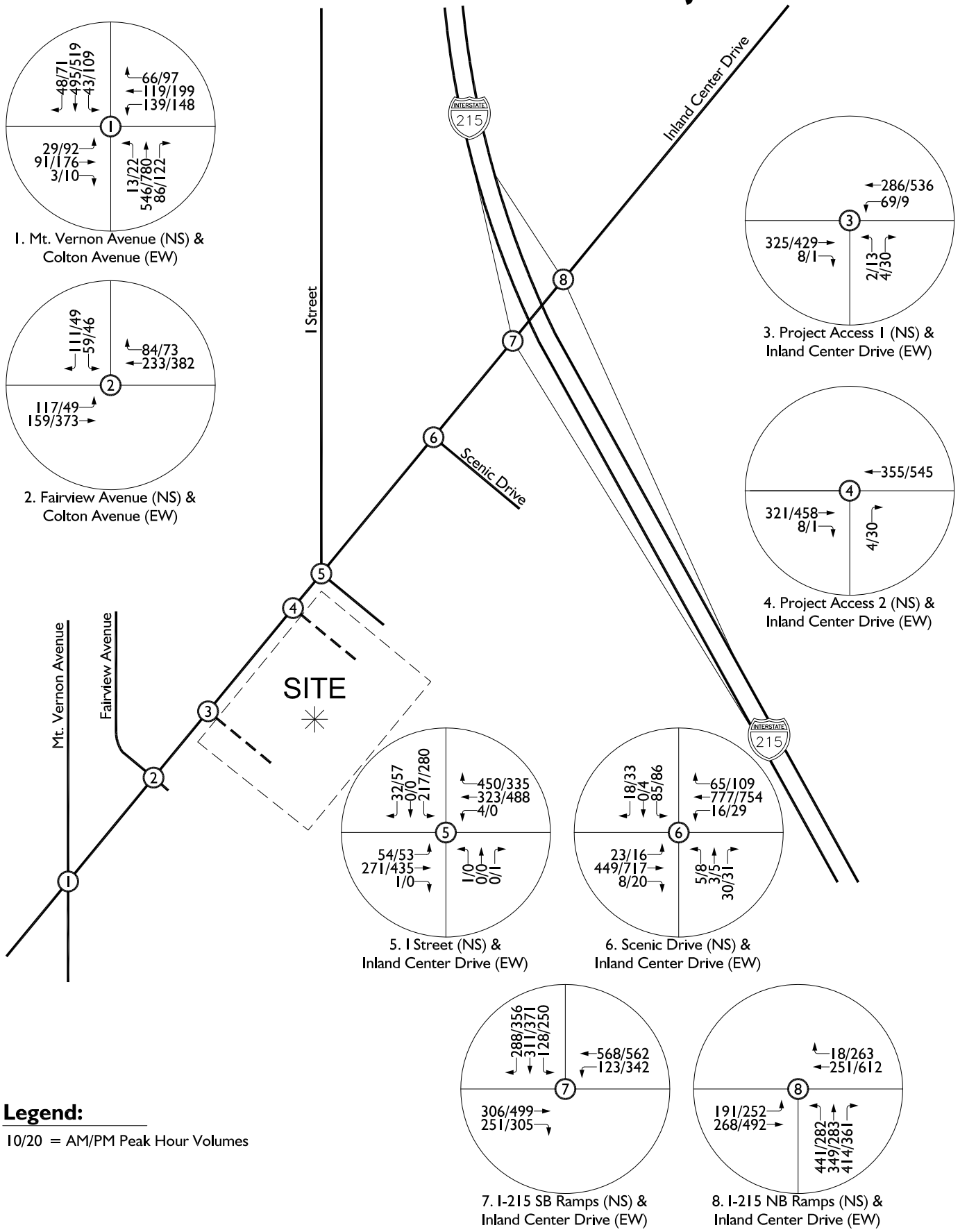
Legend:

10/20 = AM/PM Peak Hour Volumes

N

Exhibit 4-9

Project Opening Year (2020) Without Related Projects With Project Traffic Volumes



Legend:

10/20 = AM/PM Peak Hour Volumes

N

Exhibit 4-10

Project Opening Year (2020) With Related Projects Without Project Traffic Volumes

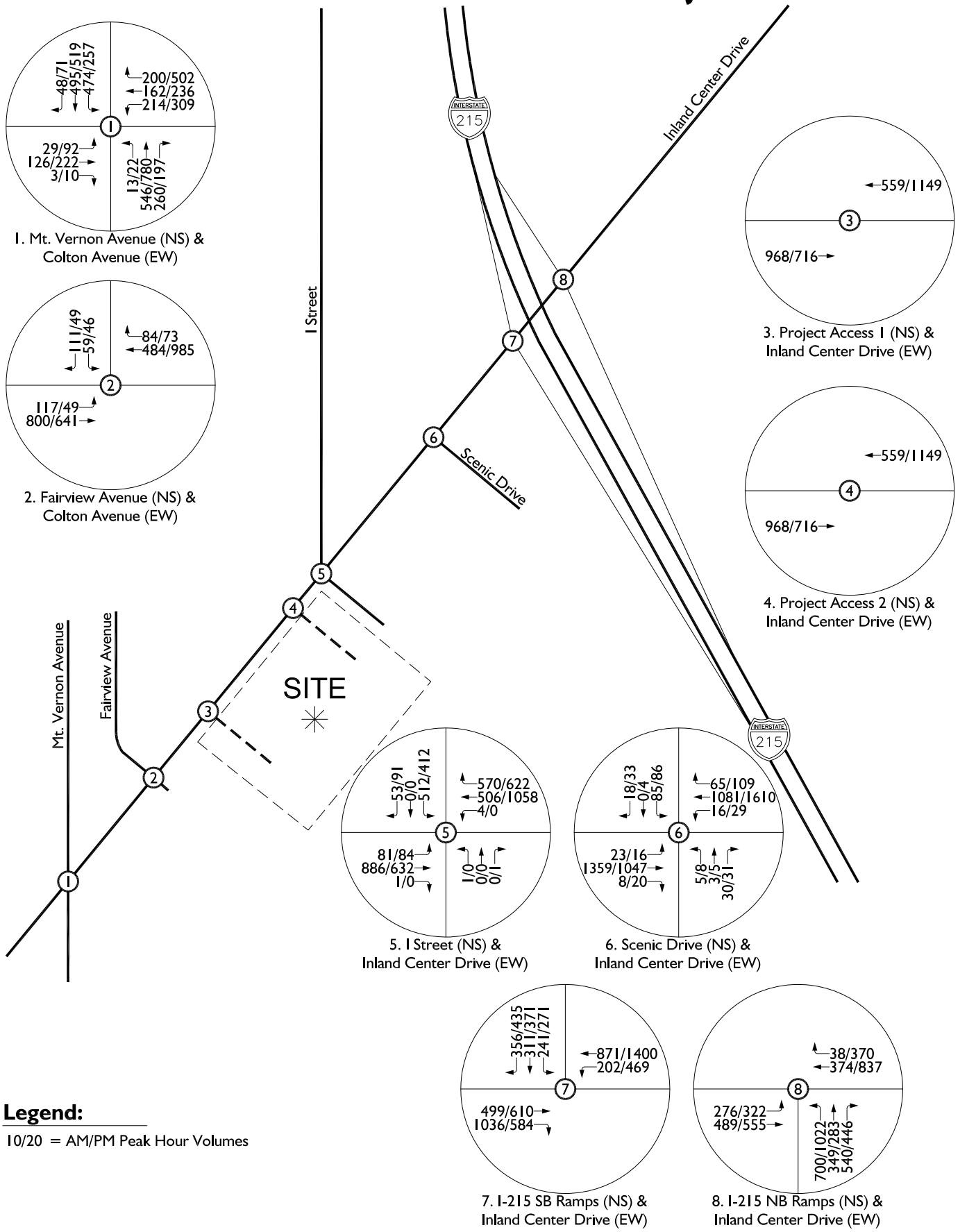
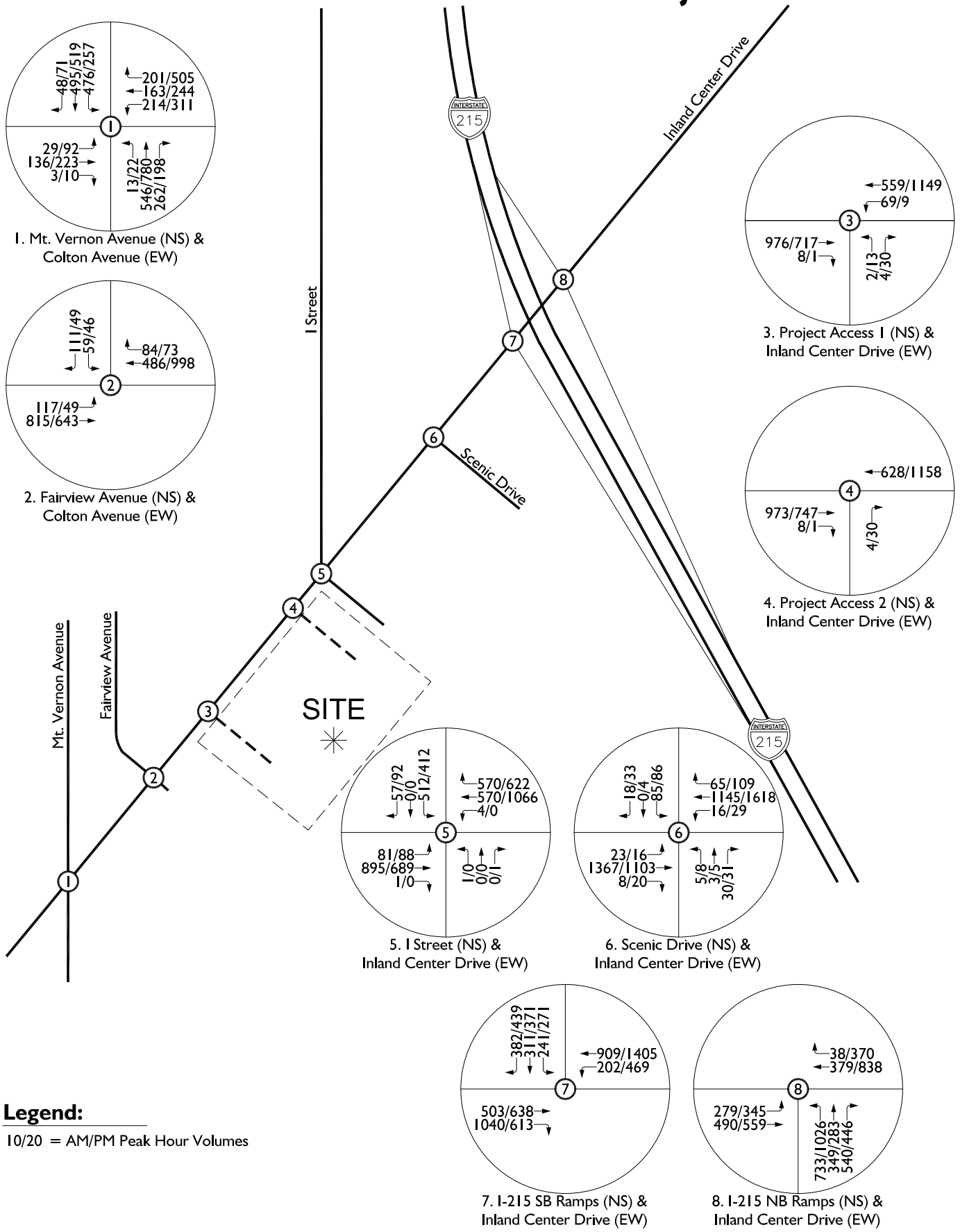


Exhibit 4-11

Project Opening Year (2020) With Related Projects With Project Traffic Volumes



Legend:

10/20 = AM/PM Peak Hour Volumes

N

Exhibit 4-12

Long Range Year (2040) Without Project Conditions

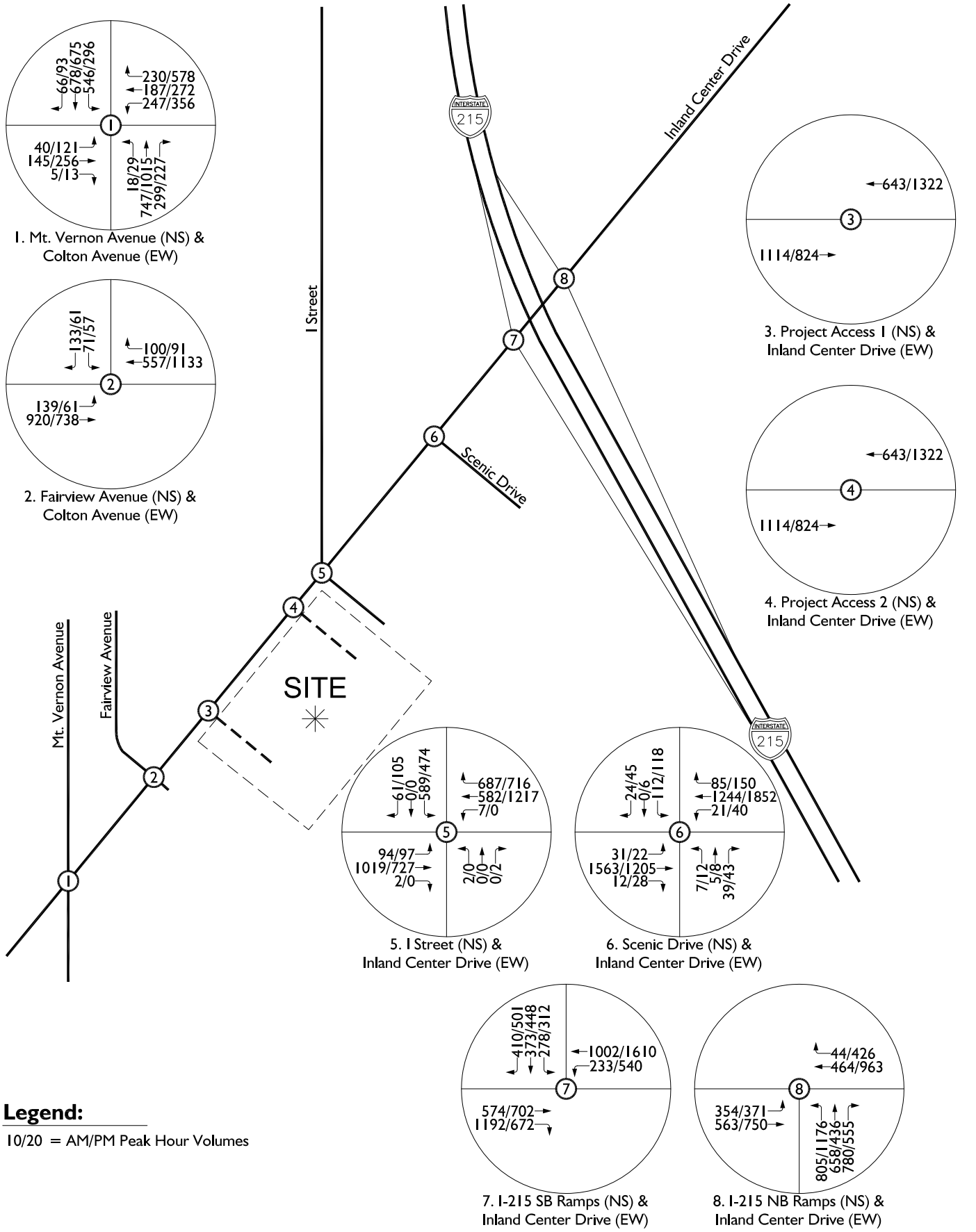
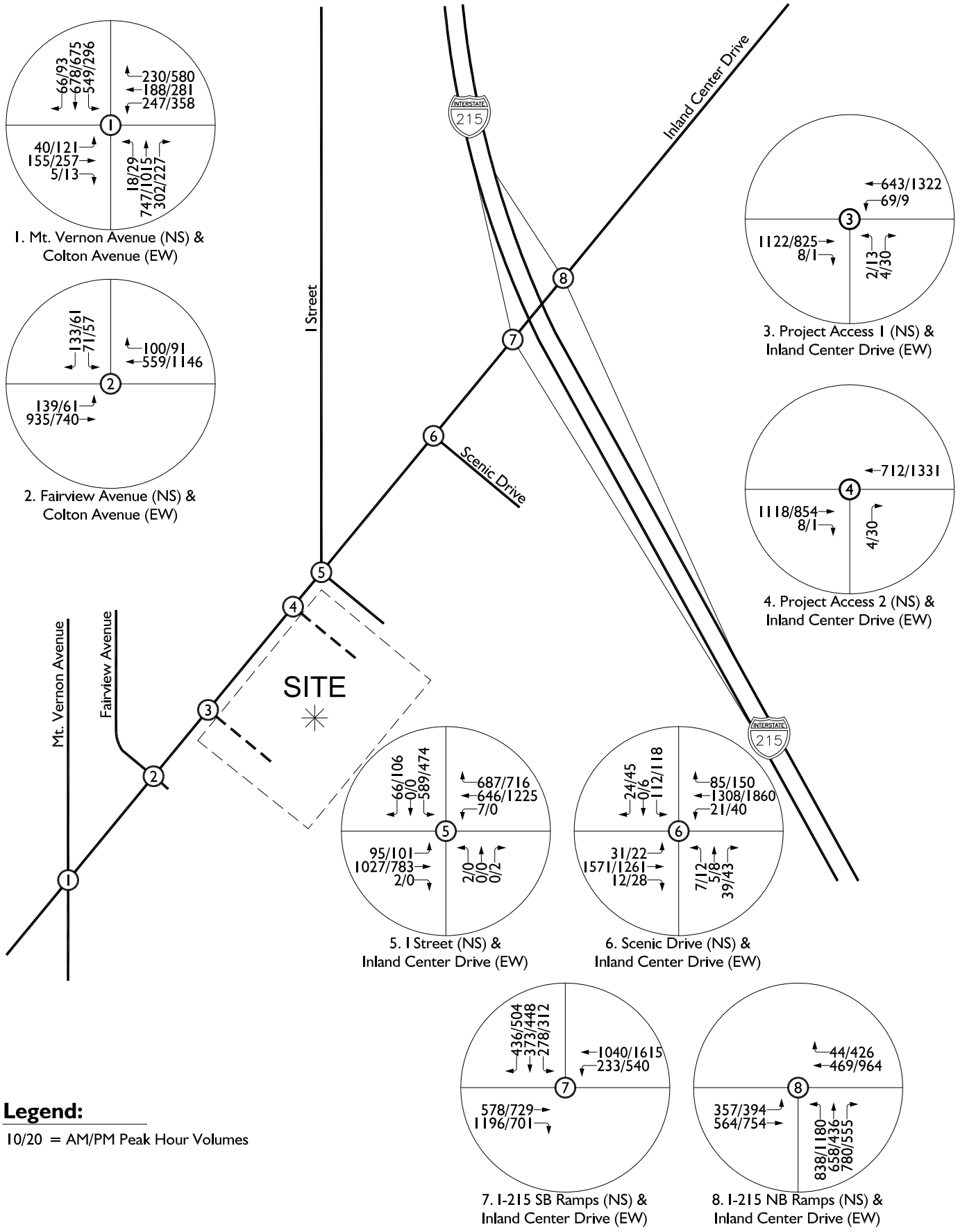


Exhibit 4-13

Long Range Year (2040) With Project Conditions



Legend:

10/20 = AM/PM Peak Hour Volumes

TABLE 4-1
Project Trip Generation Rates

Land Use	Units[1]	Peak Hour						Daily
		AM			PM			
		In	Out	Total	In	Out	Total	
Gen. Lt. Industrial - ITE Code 110	TSF							
Trip Generation Rates[2]		0.616	0.084	0.700	0.082	0.548	0.630	4.960
PCE Inbound/Outbound Splits[3]		88%	12%	100%	13%	87%	100%	--
Passenger Car Equivalent Rates Calculations								
Passenger Cars								
Recommended Mix (%)[4]		78.60%	78.60%	78.60%	78.60%	78.60%	78.60%	78.60%
PCE Factor[5]		1.0	1.0	1.0	1.0	1.0	1.0	1.0
PCE Rates		0.484	0.066	0.550	0.064	0.431	0.495	3.899
2-Axle Trucks								
Recommended Mix (%)[4]		8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
PCE Factor[5]		2.0	2.0	2.0	2.0	2.0	2.0	2.0
PCE Rates		0.099	0.013	0.112	0.013	0.088	0.101	0.794
3-Axle Trucks								
Recommended Mix (%)[4]		3.90%	3.90%	3.90%	3.90%	3.90%	3.90%	3.90%
PCE Factor[5]		2.5	2.5	2.5	2.5	2.5	2.5	2.5
PCE Rates		0.060	0.008	0.068	0.008	0.053	0.061	0.484
4-Axle Trucks								
Recommended Mix (%)[4]		9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
PCE Factor[5]		3.0	3.0	3.0	3.0	3.0	3.0	3.0
PCE Rates		0.176	0.024	0.200	0.023	0.156	0.180	1.414
Final Rates (In Passenger Car Equivalents)								
Passenger Cars		0.484	0.066	0.550	0.064	0.431	0.495	3.899
2-Axle Trucks		0.099	0.013	0.112	0.013	0.088	0.101	0.794
3-Axle Trucks		0.060	0.008	0.068	0.008	0.053	0.061	0.484
4-Axle+ Trucks		0.176	0.024	0.200	0.023	0.156	0.180	1.414

Building Size: 102.374 TSF

[1] TSF = Thousand Square Feet

[2] Light Industrial Trip Generation Source: ITE Trip Generation, 10th Ed.

[3] Inbound/Outbound Splits per ITE Trip Generation, 10th Ed., 2017

[4] Recommended Vehicle Mix Percentages per City of Fontana Truck Trip Generation Study for Light Industrial uses, August 2003 (Page 22)

[5] Recommended PCE Factor per City of San Bernardino, 2015

TABLE 4-2
Project Trip Generation

ITE TRIP GENERATION									
Land Use	Quantity	Units[1]	Weekday Peak Hour						Daily
			AM			PM			
			In	Out	Total	In	Out	Total	
Light Industrial	102.374	TSF	63	9	72	8	56	64	508

ITE TRIP GENERATION IN PASSENGER CAR EQUIVALENTS							
Vehicle Mix	Weekday Peak Hour						Daily
	AM			PM			
	In	Out	Total	In	Out	Total	
Light Industrial - Passenger Cars	50	7	57	7	44	51	399
Light Industrial - 2-Axle Trucks (2.0 x)	10	1	11	1	9	10	81
Light Industrial - 3-Axle Trucks (2.5 x)	6	1	7	1	5	6	50
Light Industrial - 4-Axle+ Trucks (3.0 x)	18	2	20	2	16	18	145
Light Industrial Trip Generation	84	11	95	11	74	85	675

[1] TSF = Thousand Square Feet

TABLE 4-3

Related Projects Trip Generation[1]

ID No.	Jurisdiction	Case Number	Land Use	ITE Trip Code	Quantity	Units[2]	Peak Hour						Daily
							AM			PM			
							In	Out	Total	In	Out	Total	
TAZ 1													
1	San Bernardino	CUP 14-13	Quality Restaurant	931	6.365	TSF	4	1	5	33	16	49	534
3	San Bernardino	CUP 16-20	Quality Restaurant	931	3.508	TSF	2	1	3	18	9	27	294
24	San Bernardino	DP-D18-08	Warehousing	150	15.219	TSF	2	1	3	1	2	3	26
						TAZ 1 Total	**8**	**3**	**11**	**52**	**27**	**79**	**854**
TAZ 2													
6	San Bernardino	CUP 17-15	Gasoline/Service Station	944	16	VFP	82	82	164	112	112	224	2,752
			Fast Food w/o Drive Thru	933	1.953	TSF	29	20	49	28	28	56	676
						TAZ 2 Total	**111**	**102**	**213**	**140**	**140**	**280**	**3,428**
TAZ 3													
2	San Bernardino	CUP 16-17	Super Convenience Market/Gas Station	960	24	VFP	337	337	674	276	276	552	5,532
			Automated Carwash	948	3.800	TSF	NA	NA	NA	27	27	54	540
						TAZ 3 Total	**337**	**337**	**674**	**303**	**303**	**606**	**6,072**
TAZ 4													
25	San Bernardino	DP-P15-01	Industrial Park	130	94.965	TSF	31	7	38	8	30	38	320
						TAZ 4 Total	**31**	**7**	**38**	**8**	**30**	**38**	**320**
TAZ 5													
16	San Bernardino	DP-D16-24	General Light Industrial	110	476.632	TSF	294	40	334	39	261	300	2,364
26	San Bernardino	DP-P16-04	Multifamily Housing (Low-Rise)	220	38	DU	4	13	17	13	8	21	278
27	San Bernardino	DP-P17-02	General Light Industrial	110	124.980	TSF	77	10	87	10	69	79	620
						TAZ 5 Total	**375**	**63**	**438**	**62**	**338**	**400**	**3,262**
TAZ 6													
5	San Bernardino	CUP 17-07	Small Office Building	712	2.4	TSF	4	1	5	2	4	6	39
10	San Bernardino	CUP 17-29	Super Convenience Market/Gas Station	960	18	VFP	253	253	506	207	207	414	4,149
11	San Bernardino	DP-D15-09	General Light Industrial	110	154.560	TSF	95	13	108	13	85	98	767
13	San Bernardino	DP-D15-13	General Light Industrial	110	337.000	TSF	208	28	236	28	185	213	1,672
14	San Bernardino	DP-D15-14	General Light Industrial	110	127.327	TSF	78	11	89	10	70	80	632
15	San Bernardino	DP-D16-22	Warehousing	150	14.202	TSF	2	1	3	1	2	3	25
17	San Bernardino	DP-D16-26	General Light Industrial	110	1,065.000	TSF	656	89	745	87	584	671	5,282
18	San Bernardino	DP-D16-27	General Office Building	710	43.953	TSF	44	7	51	8	42	50	428
19	San Bernardino	DP-D17-02	General Light Industrial	110	343.440	TSF	212	29	241	28	188	216	1,703
20	San Bernardino	DP-D17-03	General Light Industrial	110	197.500	TSF	122	17	139	16	108	124	980
22	San Bernardino	DP-D18-05	General Light Industrial	110	135.287	TSF	83	11	94	11	74	85	671
23	San Bernardino	DP-D18-06	General Light Industrial	110	3.215	TSF	2	0	2	0	2	2	16
						TAZ 6 Total	**1,759**	**460**	**2,219**	**411**	**1,551**	**1,962**	**16,364**
TAZ 7													
4	San Bernardino	CUP 16-23	All Suites Hotel	311	106	Rooms	19	17	36	18	20	38	473
7	San Bernardino	CUP 17-17	Banquet Hall[3]	NA	3.614	TSF	NA	NA	NA	103	103	206	206
8	San Bernardino	CUP 17-23	Hotel	310	98	Rooms	27	19	46	30	29	59	819
9	San Bernardino	CUP 17-27	Motel	320	44	Rooms	6	11	17	9	8	17	147
12	San Bernardino	DP-D15-12	Single Tenant Office Building	715	337.000	TSF	534	66	600	86	490	576	3,791
21	San Bernardino	DP-D17-05	Motel	320	70	Rooms	10	17	27	14	12	26	235
						TAZ 7 Total	**596**	**130**	**726**	**260**	**662**	**922**	**5,671**
						Total Cumulative Project Trip Generation	***3,217***	***1,102***	***4,319***	***1,236***	***3,051***	***4,287***	***35,971***

[1] Cumulative projects provided by City of San Bernardino.

[2] DU = dwelling unit, TSF = thousand square feet, VFP = vehicle fueling position.

[3] Trip generation for Banquet Hall was estimated using the City of San Bernardino Municipal Parking Code.

5.0 MUTCD Traffic Signal Warrant Analysis

The unsignalized study intersections have been evaluated for signalization based on the peak hour warrants and procedures contained in the *California Manual on Uniform Traffic Control Devices (CA MUTCD), 2014 Edition*.

Table 5-1 summarizes the results of the *MUTCD* peak hour signal warrant analysis at the unsignalized study intersections for the analysis scenarios evaluated as part of this report; detailed *MUTCD* signal warrant analysis sheets are contained in Appendix D.

As shown in Table 5-1, the project driveways are not expected to satisfy the MUTCD peak hour traffic signal warrants for the analysis scenarios evaluated as part of this report.

As also shown in Table 5-1, the Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

TABLE 5-1

MUTCD Peak Hour Signal Warrant Analysis Summary

Analysis Scenario	Peak Hour	Signal Warrant Satisfied?		
		Project Driveway 1 at Inland Center Drive	Project Driveway 2 at Inland Center Drive	Scenic Drive at Inland Center Drive
Project Opening Year (2020) Without Related Projects Without Project Conditions	AM Peak Hour	No	No	No
	PM Peak Hour	No	No	**Yes**
Project Opening Year (2020) Without Related Projects With Project Conditions	AM Peak Hour	No	No	No
	PM Peak Hour	No	No	**Yes**
Project Opening Year (2020) With Related Projects Without Project Conditions	AM Peak Hour	No	No	**Yes**
	PM Peak Hour	No	No	**Yes**
Project Opening Year (2020) With Related Projects With Project Conditions	AM Peak Hour	No	No	**Yes**
	PM Peak Hour	No	No	**Yes**
Long-Range Year (2040) Without Project Conditions	AM Peak Hour	No	No	**Yes**
	PM Peak Hour	No	No	**Yes**
Long-Range Year (2040) With Project Conditions	AM Peak Hour	No	No	**Yes**
	PM Peak Hour	No	No	**Yes**

6.0 Traffic Analysis

This section provides a discussion on the study intersection peak hour level of service analysis and findings.

6.1 Existing Conditions Level of Service

Existing Conditions Level of Service (LOS) calculations for the study intersections are shown in Table 6-1 and are based upon manual peak hour turning movement counts compiled for RK in August 2018 and shown in Exhibit 3-2 and the existing geometry shown in Exhibit 3-1.

As shown in Table 6-1, all study area intersections are currently operating at an acceptable level of service (LOS D or better) during the peak hours for Existing Conditions with the exception of the following study intersection which is currently operating at a deficient LOS (LOS E or F):

- Scenic Drive / Inland Center Drive (both AM and PM peak hours).

As previously shown in Section 5.0 of this report, the Scenic Drive / Inland Center Drive intersection currently satisfies the MUTCD peak hour signal warrant during the PM peak hour.

Detailed LOS analysis sheets for Existing Conditions are contained in Appendix E.

6.2 Opening Year (2020) Without Related Projects Without Project Conditions Level of Service

Opening Year (2020) Without Related Projects Without Project Conditions Level of Service (LOS) calculations for the study intersections are shown in Table 6-2 and are based upon the Opening Year (2020) Without Related Projects Without Project Conditions traffic volumes shown in Exhibit 4-8 and the existing geometry shown in Exhibit 3-1.

As shown in Table 6-2, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) Without Related Projects Without Project Conditions with the exception of the following study intersection which is forecast to continue to operate at a deficient LOS (LOS E or F):

- Scenic Drive / Inland Center Drive (both AM and PM peak hours).

As previously shown in Section 5.0 of this report, the Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Detailed LOS analysis sheets for Opening Year (2020) Without Related Projects Without Project Conditions are contained in Appendix F.

6.3 Opening Year (2020) Without Related Projects With Project Conditions Level of Service

Opening Year (2020) Without Related Projects With Project Conditions Level of Service (LOS) calculations for the study intersections are shown in Table 6-3 and are based upon the Opening Year (2020) Without Related Projects With Project Conditions traffic volumes shown in Exhibit 4-9 and the existing geometry shown in Exhibit 3-1.

As shown in Table 6-3, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) Without Related Projects With Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Project Driveway 1 / Inland Center Drive (PM peak hour only); and

- Scenic Drive / Inland Center Drive (both AM and PM peak hours).

As previously shown:

- The project driveways are not expected to satisfy the MUTCD peak hour traffic signal warrants for the analysis scenarios evaluated as part of this report.

- The Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Detailed LOS analysis sheets for Opening Year (2020) Without Related Projects With Project Conditions are contained in Appendix G.

As also shown in Table 6-3, based on agency-established thresholds of significance, the proposed project is forecast to result in a significant traffic impact at the following study intersection for Opening Year (2020) Without Related Projects With Project Conditions:

- Scenic Drive / Inland Center Drive (PM peak hour only).

As shown in Table 6-3, the following mitigation measures are identified to reduce the project traffic impacts to a level considered less than significant for Opening Year (2020) Without Related Projects With Project Conditions:

Int Mitigation #1	**Int 6 – Scenic Drive / Inland Center Drive**: It may be appropriate for the project applicant to make a fair share contribution to implement the following: a) Signalize the intersection.

However, it should be noted the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay.

Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the I Street / Inland Center Drive and also the I-215 Ramps / Inland Center Drive intersections is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location.

Installation of a traffic signal at this intersection could impede the traffic flow along Inland Center Drive and thus might not be necessary.

Detailed LOS analysis sheets for Mitigated Opening Year (2020) Without Related Projects With Project Conditions are contained in Appendix H.

6.4 Opening Year (2020) With Related Projects Without Project Conditions Level of Service

Opening Year (2020) With Related Projects Without Project Conditions Level of Service (LOS) calculations for the study intersections are shown in Table 6-4 and are based upon the Opening Year (2020) With Related Projects Without Project Conditions traffic volumes shown in Exhibit 4-10 and the existing geometry shown in Exhibit 3-1.

Opening Year (2020) With Related Projects Without Project Conditions does not assume implementation of the mitigation measures identified in the previous sections of this report.

As shown in Table 6-4, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) With Related Projects Without Project Conditions with the exception of the following study intersections which are forecast to continue to operate at a deficient LOS (LOS E or F):

- Mt Vernon Avenue / Colton Avenue (both AM and PM peak hours);
- Scenic Drive / Inland Center Drive (both AM and PM peak hours);
- I-215 Southbound Ramps / Inland Center Drive (AM peak hour only); and
- I-215 Northbound Ramps / Inland Center Drive (PM peak hour only).

As previously shown in Section 5.0 of this report, the Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Detailed LOS analysis sheets for Opening Year (2020) With Related Projects Without Project Conditions are contained in Appendix I.

6.5 Opening Year (2020) With Related Projects With Project Conditions Level of Service

Opening Year (2020) With Related Projects With Project Conditions Level of Service (LOS) calculations for the study intersections are shown in Table 6-5 and are based upon the Opening Year (2020) With Related Projects With Project Conditions traffic volumes shown in Exhibit 4-11 and the existing geometry shown in Exhibit 3-1.

Opening Year (2020) With Related Projects With Project Conditions does not assume implementation of the mitigation measures identified in the previous sections of this report.

As shown in Table 6-5, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) With Related Projects With Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt Vernon Avenue / Colton Avenue (both AM and PM peak hours);
- Project Driveway 1 / Inland Center Drive (both AM and PM peak hours);
- Scenic Drive / Inland Center Drive (both AM and PM peak hours);
- I-215 Southbound Ramps / Inland Center Drive (both AM and PM peak hours); and
- I-215 Northbound Ramps / Inland Center Drive (PM peak hour only).

As previously shown:

- The project driveways are not expected to satisfy the MUTCD peak hour traffic signal warrants for the analysis scenarios evaluated as part of this report.
- The Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Detailed LOS analysis sheets for Opening Year (2020) With Related Projects With Project Conditions are contained in Appendix J.

As also shown in Table 6-5, based on agency-established thresholds of significance, the proposed project is forecast to result in a significant traffic impact at the following study intersections for Opening Year (2020) With Related Projects With Project Conditions:

- Scenic Drive / Inland Center Drive (PM peak hour only);
- I-215 Southbound Ramps / Inland Center Drive (AM peak hour only); and
- I-215 Northbound Ramps / Inland Center Drive (both AM and PM peak hours).

As shown in Table 6-5, the following mitigation measures are identified to reduce the project traffic impacts to a level considered less than significant for Opening Year (2020) With Related Projects With Project Conditions:

Int Mitigation #2

Int 6 – Scenic Drive / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following *(Identical to Mitigation Measure #1)*:

a) Signalize the intersection.

However, it should be noted the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay.

Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the I Street / Inland Center Drive and also the I-215 Ramps / Inland Center Drive intersections is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location.

Installation of a traffic signal at this intersection could impede the traffic flow along Inland Center Drive and thus might not be necessary.

Int Mitigation #3

Int 7 – I-215 SB Ramps / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following:

a) Restripe the southbound off-ramp approach from one left-turn lane, one shared left-turn/through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane.

Int Mitigation #4

Int 8 – I-215 NB Ramps / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following:

a) Restripe the northbound off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane.

Detailed LOS analysis sheets for Mitigated Opening Year (2020) With Related Projects With Project Conditions are contained in Appendix K.

6.6 Long-Range (2040) Without Project Conditions Level of Service

Long-Range (2040) Without Project Conditions Level of Service (LOS) calculations for the study intersections are shown in Table 6-6 and are based upon the Long-Range (2040) Without Project Conditions traffic volumes shown in Exhibit 4-12 and the existing geometry shown in Exhibit 3-1.

Long-Range (2040) Without Project Conditions does not assume implementation of the mitigation measures identified in the previous sections of this report.

As shown in Table 6-6, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Long-Range (2040) Without Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt Vernon Avenue / Colton Avenue (both AM and PM peak hours);
- Scenic Drive / Inland Center Drive (both AM and PM peak hours);
- I-215 Southbound Ramps / Inland Center Drive (both AM and PM peak hours); and
- I-215 Northbound Ramps / Inland Center Drive (PM peak hour only).

As previously shown in Section 5.0 of this report, the Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Detailed LOS analysis sheets for Long-Range (2040) Without Project Conditions are contained in Appendix L.

6.7 Long-Range (2040) With Project Conditions Level of Service

Long-Range (2040) With Project Conditions Level of Service (LOS) calculations for the study intersections are shown in Table 6-7 and are based upon the Long-range (2040) With Project Conditions traffic volumes shown in Exhibit 4-13 and the existing geometry shown in Exhibit 3-1.

Long-Range (2040) With Project Conditions does not assume implementation of the mitigation measures identified in the previous sections of this report.

As shown in Table 6-7, all study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Long-Range (2040) With Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt Vernon Avenue / Colton Avenue (both AM and PM peak hours);

- Project Driveway 1 / Inland Center Drive (both AM and PM peak hours);

- Scenic Drive / Inland Center Drive (both AM and PM peak hours);

- I-215 Southbound Ramps / Inland Center Drive (both AM and PM peak hours); and

- I-215 Northbound Ramps / Inland Center Drive (PM peak hour only).

As previously shown:

- The project driveways are not expected to satisfy the MUTCD peak hour traffic signal warrants for the analysis scenarios evaluated as part of this report.

- The Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Detailed LOS analysis sheets for Long-Range (2040) With Project Conditions are contained in Appendix M.

As also shown in Table 6-7, based on agency-established thresholds of significance, the proposed project is forecast to result in a significant traffic impact at the following study intersections for Long-Range (2040) With Project Conditions:

- Scenic Drive / Inland Center Drive (PM peak hour only);

- I-215 Southbound Ramps / Inland Center Drive (AM peak hour only); and

- I-215 Northbound Ramps / Inland Center Drive (both AM and PM peak hours).

As shown in Table 6-7, the following mitigation measures are identified to reduce the project traffic impacts to a level considered less than significant for Long-Range (2040) With Project Conditions:

Int Mitigation #5

Int 6 – Scenic Drive / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following *(Identical to Mitigation Measure #1 & #2)*:

a) Signalize the intersection.

However, it should be noted the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay.

Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the I Street / Inland Center Drive and also the I-215 Ramps / Inland Center Drive intersections is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location.

Installation of a traffic signal at this intersection could impede the traffic flow along Inland Center Drive and thus might not be necessary.

Int Mitigation #6

Int 7 – I-215 SB Ramps / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following *(Identical to Mitigation Measure #3)*:

a) Restripe the southbound off-ramp approach from one left-turn lane, one shared left-turn/through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane.

Int Mitigation #7

Int 8 – I-215 NB Ramps / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following *(Identical to Mitigation Measure #4)*:

a) Restripe the northbound off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane.

Detailed LOS analysis sheets for Mitigated Long-Range (2040) With Project Conditions are contained in Appendix N.

TABLE 6-1

Intersection Analysis for Existing (2018) Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Existing Conditions					
			Northbound			Southbound			Eastbound			Westbound			AM Peak Hour			PM Peak Hour		
			L	T	R	L	T	R	L	T	R	L	T	R	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio
1	Mt Vernon Ave / Colton Ave	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	13.1	B	0.295	18.2	B	0.446
2	Fairview Ave / Colton Ave - Inland Center Dr	TS	- -	- -	- -	0.0	1.0!	0.0	1.0	1.0	0.0	0.0	0.5	0.5	22.6	C	0.325	17.6	B	0.307
3	Project Dwy 1 / Inland Center Dr	CSS	0.0	1.0!	0.0	- -	- -	- -	0.0	0.5	0.5	1.0	1.0	0.0	- -	- -	- -	- -	- -	- -
4	Project Dwy 2 / Inland Center Dr	CSS	0.0	0.0	1.0	- -	- -	- -	0.0	0.5	0.5	0.0	1.0	0.0	- -	- -	- -	- -	- -	- -
5	I St / Inland Center Dr	TS	0.0	1.0!	0.0	1.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	17.5	B	0.404	15.0	B	0.410
6	Scenic Dr / Inland Center Dr	CSS	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	**271.3**	**F**	0.291	**312.1**	**F**	0.417
7	I-215 SB Ramps / Inland Center Dr	TS	- -	- -	- -	1.5	1.0	0.5	0.0	3.0	1.0	2.0	2.0	0.0	15.2	B	0.301	19.6	B	0.461
8	I-215 NB Ramps / Inland Center Dr	TS	1.0	0.5	1.5	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	16.7	B	0.370	20.2	C	0.448

1 When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

2 Analysis Software: Delay based on HCM 2010 Methodology and Synchro analysis software (Version 10). V/C based on Traffix, Version 8.0. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

3 V/C = Volume to Capacity Ratio.

4 TS = Traffic Signal

CSS = Cross-Street Stop

TABLE 6-2

Intersection Analysis for Project Opening Year (2020) Without Related Projects Without Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Opening Year (2020) Without Related Projects Without Project Conditions					
			Northbound			Southbound			Eastbound			Westbound			AM Peak Hour			PM Peak Hour		
			L	T	R	L	T	R	L	T	R	L	T	R	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio
1	Mt Vernon Ave / Colton Ave	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	16.7	B	0.314	20.6	C	0.473
2	Fairview Ave / Colton Ave - Inland Center Dr	TS	- -	- -	- -	0.0	1.0!	0.0	1.0	1.0	0.0	0.0	0.5	0.5	22.0	C	0.344	18.4	B	0.326
3	Project Dwy 1 / Inland Center Dr	CSS	0.0	1.0!	0.0	- -	- -	- -	0.0	0.5	0.5	1.0	1.0	0.0	- -	- -	- -	- -	- -	- -
4	Project Dwy 2 / Inland Center Dr	CSS	0.0	0.0	1.0	- -	- -	- -	0.0	0.5	0.5	0.0	1.0	0.0	- -	- -	- -	- -	- -	- -
5	I St / Inland Center Dr	TS	0.0	1.0!	0.0	1.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	17.0	B	0.429	14.4	B	0.436
6	Scenic Dr / Inland Center Dr	CSS	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	**423.6**	**F**	0.308	**484.8**	**F**	0.442
7	I-215 SB Ramps / Inland Center Dr	TS	- -	- -	- -	1.5	1.0	0.5	0.0	3.0	1.0	2.0	2.0	0.0	27.4	C	0.320	27.6	C	0.489
8	I-215 NB Ramps / Inland Center Dr	TS	1.0	0.5	1.5	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	23.3	C	0.392	28.0	C	0.475

1 When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

2 Analysis Software: Delay based on HCM 2010 Methodology and Synchro analysis software (Version 10). V/C based on Traffix, Version 8.0. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

3 V/C = Volume to Capacity Ratio.

4 TS = Traffic Signal

CSS = Cross-Street Stop

TABLE 6-3

Intersection Analysis for Project Opening Year (2020) Without Related Projects With Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Opening Year (2020) Without Related Projects Without Project Conditions						Opening Year (2020) Without Related Projects With Project Conditions						Change in V/C Ratio		Significant Impact?	
			Northbound			Southbound			Eastbound			Westbound			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour						
			L	T	R	L	T	R	L	T	R	L	T	R	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	AM	PM	AM	PM
1	Mt Vernon Ave / Colton Ave	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	16.7	B	0.314	20.6	C	0.473	17.1	B	0.319	21.1	C	0.479	0.005	0.006	NO	NO
2	Fairview Ave / Colton Ave - Inland Center Dr	TS	- -	- -	- -	0.0	1.0!	0.0	1.0	1.0	0.0	0.0	0.5	0.5	22.0	C	0.344	18.4	B	0.326	21.8	C	0.346	17.9	B	0.333	0.002	0.007	NO	NO
3	Project Dwy 1 / Inland Center Dr	CSS	0.0	1.0!	0.0	- -	- -	- -	0.0	0.5	0.5	1.0	1.0	0.0	- -	- -	- -	- -	- -	- -	14.6	B	0.179	**48.2**	**E**	0.307	- -	- -	NO	NO
4	Project Dwy 2 / Inland Center Dr	CSS	0.0	0.0	1.0	- -	- -	- -	0.0	0.5	0.5	0.0	1.0	0.0	- -	- -	- -	- -	- -	- -	10.2	B	0.189	11.6	B	0.305	- -	- -	NO	NO
5	I St / Inland Center Dr	TS	0.0	1.0!	0.0	1.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	17.0	B	0.429	14.4	B	0.436	17.2	B	0.429	14.4	B	0.442	0.000	0.006	NO	NO
6	Scenic Dr / Inland Center Dr	CSS	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	**423.6**	**F**	0.308	**484.8**	**F**	0.442	**565.2**	**F**	0.313	**587.3**	**F**	0.471	0.005	0.029	NO	**YES**
	With Mitigation	*TS*	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	- -	- -	- -	- -	- -	- -	5.9	A	0.313	6.2	A	0.471	0.005	0.029	NO	NO
7	I-215 SB Ramps / Inland Center Dr	TS	- -	- -	- -	1.5	1.0	0.5	0.0	3.0	1.0	2.0	2.0	0.0	27.4	C	0.320	27.6	C	0.489	28.0	C	0.338	28.3	C	0.508	0.018	0.019	NO	NO
8	I-215 NB Ramps / Inland Center Dr	TS	1.0	0.5	1.5	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	23.3	C	0.392	28.0	C	0.475	23.7	C	0.415	28.6	C	0.487	0.023	0.012	NO	NO

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

[2] Analysis Software: Delay based on HCM 2010 Methodology and Synchro analysis software (Version 10). V/C based on Traffix, Version 8.0. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] V/C = Volume to Capacity Ratio.

[4] TS = Traffic Signal

CSS = Cross-Street Stop

TABLE 6-4

Intersection Analysis for Project Opening Year (2020) With Related Projects Without Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Opening Year (2020) With Related Projects Without Project Conditions					
			Northbound			Southbound			Eastbound			Westbound			AM Peak Hour			PM Peak Hour		
			L	T	R	L	T	R	L	T	R	L	T	R	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio
1	Mt Vernon Ave / Colton Ave	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	**70.0**	**E**	0.705	**89.4**	**F**	0.854
2	Fairview Ave / Colton Ave - Inland Center Dr	TS	- -	- -	- -	0.0	1.0!	0.0	1.0	1.0	0.0	0.0	0.5	0.5	31.2	C	0.530	31.0	C	0.651
3	Project Dwy 1 / Inland Center Dr	CSS	0.0	1.0!	0.0	- -	- -	- -	0.0	0.5	0.5	1.0	1.0	0.0	- -	- -	- -	- -	- -	- -
4	Project Dwy 2 / Inland Center Dr	CSS	0.0	0.0	1.0	- -	- -	- -	0.0	0.5	0.5	0.0	1.0	0.0	- -	- -	- -	- -	- -	- -
5	I St / Inland Center Dr	TS	0.0	1.0!	0.0	1.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	34.6	C	0.753	42.4	D	0.832
6	Scenic Dr / Inland Center Dr	CSS	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	**>999.9**	**F**	0.795	**>999.9**	**F**	0.647
7	I-215 SB Ramps / Inland Center Dr	TS	- -	- -	- -	1.5	1.0	0.5	0.0	3.0	1.0	2.0	2.0	0.0	**106.5**	**F**	0.460	53.9	D	0.655
8	I-215 NB Ramps / Inland Center Dr	TS	1.0	0.5	1.5	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	40.5	D	0.640	**123.7**	**F**	1.040

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

[2] Analysis Software: Delay based on HCM 2010 Methodology and Synchro analysis software (Version 10). V/C based on Traffix, Version 8.0. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] V/C = Volume to Capacity Ratio.

[4] TS = Traffic Signal

CSS = Cross-Street Stop

TABLE 6-5

Intersection Analysis for Project Opening Year (2020) With Related Projects With Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Opening Year (2020) With Related Projects Without Project Conditions						Opening Year (2020) With Related Projects With Project Conditions						Change in V/C Ratio		Significant Impact?	
			Northbound			Southbound			Eastbound			Westbound			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour						
			L	T	R	L	T	R	L	T	R	L	T	R	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	AM	PM	AM	PM
1	Mt Vernon Ave / Colton Ave	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	**70.0**	**E**	0.705	**89.4**	**F**	0.854	**71.9**	**E**	0.708	**89.6**	**F**	0.860	0.003	0.006	NO	NO
2	Fairview Ave / Colton Ave - Inland Center Dr	TS	- -	- -	- -	0.0	1.0!	0.0	1.0	1.0	0.0	0.0	0.5	0.5	31.2	C	0.530	31.0	C	0.651	30.2	C	0.537	33.2	C	0.658	0.007	0.007	NO	NO
3	Project Dwy 1 / Inland Center Dr	CSS	0.0	1.0!	0.0	- -	- -	- -	0.0	0.5	0.5	1.0	1.0	0.0	- -	- -	- -	- -	- -	- -	**539.9**	**F**	0.522	**>999.9**	**F**	0.630	- -	- -	NO	NO
4	Project Dwy 2 / Inland Center Dr	CSS	0.0	0.0	1.0	- -	- -	- -	0.0	0.5	0.5	0.0	1.0	0.0	- -	- -	- -	- -	- -	- -	18.4	C	0.519	15.3	C	0.628	- -	- -	NO	NO
5	I St / Inland Center Dr	TS	0.0	1.0!	0.0	1.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	34.6	C	0.753	42.4	D	0.832	36.2	D	0.758	43.2	D	0.839	0.005	0.007	NO	NO
6	Scenic Dr / Inland Center Dr	CSS	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	**>999.9**	**F**	0.795	**>999.9**	**F**	0.647	**>999.9**	**F**	0.800	**>999.9**	**F**	0.678	0.005	0.031	NO	**YES**
	With Mitigation	*TS*	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	- -	- -	- -	- -	- -	- -	52.0	D	0.800	10.5	B	0.678	0.005	0.031	NO	NO
7	I-215 SB Ramps / Inland Center Dr	TS	- -	- -	- -	1.5	1.0	0.5	0.0	3.0	1.0	2.0	2.0	0.0	**106.5**	**F**	0.460	53.9	D	0.655	**112.0**	**F**	0.486	**56.0**	**E**	0.658	0.026	0.003	**YES**	NO
	With Mitigation	TS	- -	- -	- -	*0.5*	1.0	*1.5*	0.0	3.0	1.0	2.0	2.0	0.0	- -	- -	- -	- -	- -	- -	**101.3**	**F**	0.443	48.3	D	0.610	-0.017	-0.045	NO	NO
8	I-215 NB Ramps / Inland Center Dr	TS	1.0	0.5	1.5	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	40.5	D	0.640	**123.7**	**F**	1.040	43.7	D	0.663	**128.4**	**F**	1.058	0.023	0.018	**YES**	**YES**
	With Mitigation	TS	*1.5*	0.5	*1.0*	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	- -	- -	- -	- -	- -	- -	36.5	D	0.544	**88.7**	**F**	0.800	-0.096	-0.240	NO	NO

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

[2] Analysis Software: Delay based on HCM 2010 Methodology and Synchro analysis software (Version 10). V/C based on Traffix, Version 8.0. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] V/C = Volume to Capacity Ratio.

[4] TS = Traffic Signal

CSS = Cross-Street Stop

TABLE 6-6

Intersection Analysis for Long-Range Year (2040) Without Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Long-Range (2040) Without Project Conditions					
			Northbound			Southbound			Eastbound			Westbound			AM Peak Hour			PM Peak Hour		
			L	T	R	L	T	R	L	T	R	L	T	R	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio
1	Mt Vernon Ave / Colton Ave	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	**65.5**	**E**	0.859	**118.2**	**F**	1.016
2	Fairview Ave / Colton Ave - Inland Center Dr	TS	- -	- -	- -	0.0	1.0!	0.0	1.0	1.0	0.0	0.0	0.5	0.5	27.6	C	0.615	34.4	C	0.761
3	Project Dwy 1 / Inland Center Dr	CSS	0.0	1.0!	0.0	- -	- -	- -	0.0	0.5	0.5	1.0	1.0	0.0	- -	- -	- -	- -	- -	- -
4	Project Dwy 2 / Inland Center Dr	CSS	0.0	0.0	1.0	- -	- -	- -	0.0	0.5	0.5	0.0	1.0	0.0	- -	- -	- -	- -	- -	- -
5	I St / Inland Center Dr	TS	0.0	1.0!	0.0	1.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	22.8	C	0.869	48.9	D	0.958
6	Scenic Dr / Inland Center Dr	CSS	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	**>999.9**	**F**	0.937	**>999.9**	**F**	0.776
7	I-215 SB Ramps / Inland Center Dr	TS	- -	- -	- -	1.5	1.0	0.5	0.0	3.0	1.0	2.0	2.0	0.0	**94.9**	**F**	0.528	**57.5**	**E**	0.753
8	I-215 NB Ramps / Inland Center Dr	TS	1.0	0.5	1.5	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	37.9	D	0.762	**117.6**	**F**	1.197

1 When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

2 Analysis Software: Delay based on HCM 2010 Methodology and Synchro analysis software (Version 10). V/C based on Traffix, Version 8.0. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

3 V/C = Volume to Capacity Ratio.

4 TS = Traffic Signal

CSS = Cross-Street Stop

TABLE 6-7

Intersection Analysis for Long-Range Year (2040) With Project Conditions

	Intersection	Traffic Control[3]	Intersection Approach Lane(s)[1]												Long-Range (2040) Without Project Conditions						Long-Range (2040) With Project Conditions						Change in V/C Ratio		Significant Impact?	
			Northbound			Southbound			Eastbound			Westbound			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour						
			L	T	R	L	T	R	L	T	R	L	T	R	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	Delay[2] (Secs)	HCM LOS	V/C Ratio	AM	PM	AM	PM
1	Mt Vernon Ave / Colton Ave	TS	1.0	1.5	0.5	1.0	1.5	0.5	1.0	0.5	0.5	1.0	0.5	0.5	**65.5**	**E**	0.859	**118.2**	**F**	1.016	**66.3**	**E**	0.867	**120.4**	**F**	1.022	0.008	0.006	NO	NO
2	Fairview Ave / Colton Ave - Inland Center Dr	TS	- -	- -	- -	0.0	1.0!	0.0	1.0	1.0	0.0	0.0	0.5	0.5	27.6	C	0.615	34.4	C	0.761	28.3	C	0.623	36.2	D	0.768	0.008	0.007	NO	NO
3	Project Dwy 1 / Inland Center Dr	CSS	0.0	1.0!	0.0	- -	- -	- -	0.0	0.5	0.5	1.0	1.0	0.0	- -	- -	- -	- -	- -	- -	**749.3**	**F**	0.599	**>999.9**	**F**	0.721	- -	- -	NO	NO
4	Project Dwy 2 / Inland Center Dr	CSS	0.0	0.0	1.0	- -	- -	- -	0.0	0.5	0.5	0.0	1.0	0.0	- -	- -	- -	- -	- -	- -	20.7	C	0.596	16.7	C	0.719	- -	- -	NO	NO
5	I St / Inland Center Dr	TS	0.0	1.0!	0.0	1.0	0.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	22.8	C	0.869	48.9	D	0.958	23.4	C	0.873	50.5	D	0.965	0.004	0.007	NO	NO
6	Scenic Dr / Inland Center Dr	CSS	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	**>999.9**	**F**	0.937	**>999.9**	**F**	0.776	**>999.9**	**F**	0.941	**>999.9**	**F**	0.806	0.004	0.030	NO	**YES**
	With Mitigation	*TS*	0.0	1.0!	0.0	0.0	1.0!	0.0	1.0	0.5	0.5	1.0	1.5	0.5	- -	- -	- -	- -	- -	- -	34.7	C	0.941	16.8	B	0.806	0.004	0.030	NO	NO
7	I-215 SB Ramps / Inland Center Dr	TS	- -	- -	- -	1.5	1.0	0.5	0.0	3.0	1.0	2.0	2.0	0.0	**94.9**	**F**	0.528	**57.5**	**E**	0.753	**98.4**	**F**	0.555	**60.0**	**E**	0.756	0.027	0.003	**YES**	NO
	With Mitigation	TS	- -	- -	- -	*0.5*	1.0	*1.5*	0.0	3.0	1.0	2.0	2.0	0.0	- -	- -	- -	- -	- -	- -	**89.5**	**F**	0.510	51.8	D	0.705	-0.018	-0.048	NO	NO
8	I-215 NB Ramps / Inland Center Dr	TS	1.0	0.5	1.5	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	37.9	D	0.762	**117.6**	**F**	1.197	39.7	D	0.784	**121.4**	**F**	1.213	0.022	0.016	**YES**	**YES**
	With Mitigation	TS	*1.5*	0.5	*1.0*	- -	- -	- -	1.0	2.0	0.0	0.0	4.0	1.0	- -	- -	- -	- -	- -	- -	42.0	D	0.749	**88.9**	**F**	0.945	-0.013	-0.252	NO	NO

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the thru lanes. Where "1" is indicated for the thru movement and "0"s are indicated for R/L movements, the R and/or L turns are shared with the through movement.

L = Left; T = Thru; R = Right; 1.0! = Shared Left/Thru/Right; > = Right Turn Overlap; >> = Free Right Turn; **Bold** = Deficiency; *Italics* = Improvement

[2] Analysis Software: Delay based on HCM 2010 Methodology and Synchro analysis software (Version 10). V/C based on Traffix, Version 8.0. Per the Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] V/C = Volume to Capacity Ratio.

[4] TS = Traffic Signal

CSS = Cross-Street Stop

7.0 Findings, Recommendations & Conclusions

The purpose of this traffic study is to assess the impacts of the proposed Olympic Real Estate Holdings Light Industrial development from a traffic and circulation stand point.

7.1 Proposed Project

The project site is located at the southwest corner of the intersection of Inland Center Drive and I street, in the City of San Bernardino. RK Engineering Group, INC. (RK) has previously prepared the *Olympic Real Estate Holdings Light Industrial Complex Traffic Impact Study (RK Engineering Group, Inc., April 3, 2015)*.

The proposed project is planned to consist of a single general light industrial building with a gross area of 102,374 square feet.

The project will be evaluated in a single phase and is planned to open in 2020.

Access for the proposed project is planned to be provided via two unsignalized driveways on Inland Center Drive.

This traffic study has been prepared in accordance with the traffic study guidelines, requirements and thresholds of significance for the City of San Bernardino and the County of San Bernardino Congestion Management Program (CMP).

This analysis evaluates the potential traffic impacts associated with the proposed project in accordance with the City of San Bernardino and County of San Bernardino CMP requirements and thresholds of significance.

This study is prepared in accordance with the scope of work approved by the City of San Bernardino staff. A copy of the approved scope of work is contained in Appendix A.

7.2 Project Trip Generation

Trip generation for the proposed project is determined based on ITE trip generation rates for the proposed land uses.

The project is projected to generate a total of 675 PCE-adjusted trip-ends per day, with 95 PCE-adjusted vehicles per hour during the AM peak hour and 85 PCE-adjusted vehicles per hour during the PM peak hour.

7.3 Study Area & Conditions

This traffic study has been prepared in accordance with the traffic study guidelines, requirements and thresholds of significance for the City of San Bernardino and the County of San Bernardino Congestion Management Program (CMP).

This analysis evaluates the potential traffic impacts associated with the proposed project in accordance with the City of San Bernardino and County of San Bernardino CMP requirements and thresholds of significance.

This study is prepared in accordance with the scope of work approved by the City of San Bernardino staff. A copy of the approved scope of work is contained in Appendix A.

The study area consists of the following intersections:

North-South Street	East-West Street
1. Mt. Vernon Avenue	Colton Avenue
2. Fairview Avenue	Colton Avenue – Inland Center Drive
3. Project Driveway 1	Inland Center Drive
4. Project Driveway 2	Inland Center Drive
5. 'I' Street	Inland Center Drive
6. Scenic Drive	Inland Center Drive
7. I-215 Freeway Southbound Ramps	Inland Center Drive
8. I-215 Freeway Northbound Ramps	Inland Center Drive

The analysis evaluates traffic conditions of the study intersections for the following scenarios in accordance with the City of San Bernardino and County of San Bernardino and the approved scope of work contained in Appendix A:

- Existing Conditions (2018);
- Project Opening Year (2020) Without Related Projects Without Project Conditions;

- Project Opening Year (2020) Without Related Projects With Project Conditions
- Project Opening Year (2020) With Related Projects Without Project Conditions;
- Project Opening Year (2020) With Related Projects With Project Conditions;
- Long Range Year (2040) Without Project Conditions; and
- Long Range Year (2040) With Project Conditions.

7.4 LOS Analysis & Significant Impact Summary

Existing Conditions:

All study area intersections are currently operating at an acceptable level of service (LOS D or better) during the peak hours for Existing Conditions with the exception of the following study intersection which is currently operating at a deficient LOS (LOS E or F):

- Scenic Drive / Inland Center Drive (both AM and PM peak hours).

As previously shown in Section 5.0 of this report, the Scenic Drive / Inland Center Drive intersection currently satisfies the MUTCD peak hour signal warrant during the PM peak hour.

Opening Year (2020) Without Related Project Without Project Conditions:

All study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) Without Related Projects Without Project Conditions with the exception of the following study intersection which is forecast to continue to operate at a deficient LOS (LOS E or F):

- Scenic Drive / Inland Center Drive (both AM and PM peak hours).

As previously shown in Section 5.0 of this report, the Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Opening Year (2020) Without Related Projects With Project Conditions:

All study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) Without Related Projects With Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Project Driveway 1 / Inland Center Drive (PM peak hour only); and

- Scenic Drive / Inland Center Drive (both AM and PM peak hours).

As previously shown:

- The project driveways are not expected to satisfy the MUTCD peak hour traffic signal warrants for the analysis scenarios evaluated as part of this report.

- The Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Based on agency-established thresholds of significance, the proposed project is forecast to result in a significant traffic impact at the following study intersection for Opening Year (2020) Without Related Projects With Project Conditions:

- Scenic Drive / Inland Center Drive (PM peak hour only).

The following mitigation measures are identified to reduce the project traffic impacts to a level considered less than significant for Opening Year (2020) Without Related Projects With Project Conditions:

Int Mitigation #1	**Int 6 – Scenic Drive / Inland Center Drive**: It may be appropriate for the project applicant to make a fair share contribution to implement the following: a) Signalize the intersection.

However, it should be noted the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay.

Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the I Street / Inland Center Drive and also the I-215 Ramps / Inland Center Drive intersections is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location.

Installation of a traffic signal at this intersection could impede the traffic flow along Inland Center Drive and thus might not be necessary.

Opening Year (2020) With Related Project Without Project Conditions:

All study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) With Related Projects Without Project Conditions with the exception of the following study intersections which are forecast to continue to operate at a deficient LOS (LOS E or F):

- Mt Vernon Avenue / Colton Avenue (both AM and PM peak hours);
- Scenic Drive / Inland Center Drive (both AM and PM peak hours);
- I-215 Southbound Ramps / Inland Center Drive (AM peak hour only); and
- I-215 Northbound Ramps / Inland Center Drive (PM peak hour only).

As previously shown in Section 5.0 of this report, the Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Opening Year (2020) With Related Project With Project Conditions:

All study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Opening Year (2020) With Related Projects With Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt Vernon Avenue / Colton Avenue (both AM and PM peak hours);
- Project Driveway 1 / Inland Center Drive (both AM and PM peak hours);
- Scenic Drive / Inland Center Drive (both AM and PM peak hours);
- I-215 Southbound Ramps / Inland Center Drive (both AM and PM peak hours); and
- I-215 Northbound Ramps / Inland Center Drive (PM peak hour only).

As previously shown:

- The project driveways are not expected to satisfy the MUTCD peak hour traffic signal warrants for the analysis scenarios evaluated as part of this report.
- The Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Based on agency-established thresholds of significance, the proposed project is forecast to result in a significant traffic impact at the following study intersections for Opening Year (2020) With Related Projects With Project Conditions:

- Scenic Drive / Inland Center Drive (PM peak hour only);
- I-215 Southbound Ramps / Inland Center Drive (AM peak hour only); and
- I-215 Northbound Ramps / Inland Center Drive (both AM and PM peak hours).

The following mitigation measures are identified to reduce the project traffic impacts to a level considered less than significant for Opening Year (2020) With Related Projects With Project Conditions:

Int Mitigation #2

Int 6 – Scenic Drive / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following *(Identical to Mitigation Measure #1)*:

a) Signalize the intersection.

However, it should be noted the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay.

Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the I Street / Inland Center Drive and also the I-215 Ramps / Inland Center Drive intersections is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location.

Installation of a traffic signal at this intersection could impede the traffic flow along Inland Center Drive and thus might not be necessary.

Int Mitigation #3

Int 7 – I-215 SB Ramps / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following:

a) Restripe the southbound off-ramp approach from one left-turn lane, one shared left-turn/through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane.

Int Mitigation #4

Int 8 – I-215 NB Ramps / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following:

a) Restripe the northbound off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane.

Long-Range (2040) Without Project Conditions:

All study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Long-Range (2040) Without Project Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt Vernon Avenue / Colton Avenue (both AM and PM peak hours);
- Scenic Drive / Inland Center Drive (both AM and PM peak hours);
- I-215 Southbound Ramps / Inland Center Drive (both AM and PM peak hours); and
- I-215 Northbound Ramps / Inland Center Drive (PM peak hour only).

As previously shown in Section 5.0 of this report, the Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Long-Range (2040) With Project Conditions:

All study area intersections are forecast to continue to operate at an acceptable level of service (LOS D or better) during the peak hours for Long-Range (2040) With Project

Conditions with the exception of the following study intersections which are forecast to operate at a deficient LOS (LOS E or F):

- Mt Vernon Avenue / Colton Avenue (both AM and PM peak hours);
- Project Driveway 1 / Inland Center Drive (both AM and PM peak hours);
- Scenic Drive / Inland Center Drive (both AM and PM peak hours);
- I-215 Southbound Ramps / Inland Center Drive (both AM and PM peak hours); and
- I-215 Northbound Ramps / Inland Center Drive (PM peak hour only).

As previously shown:

- The project driveways are not expected to satisfy the MUTCD peak hour traffic signal warrants for the analysis scenarios evaluated as part of this report.
- The Scenic Drive / Inland Center Drive study intersection currently satisfies the MUTCD peak hour traffic signal warrants based on the PM peak hour traffic volumes at the intersection and is also forecast to satisfy the MUTCD peak hour traffic signal warrants during both the AM and PM peak hours for all future analysis scenarios.

Based on agency-established thresholds of significance, the proposed project is forecast to result in a significant traffic impact at the following study intersections for Long-Range (2040) With Project Conditions:

- Scenic Drive / Inland Center Drive (PM peak hour only);
- I-215 Southbound Ramps / Inland Center Drive (AM peak hour only); and
- I-215 Northbound Ramps / Inland Center Drive (both AM and PM peak hours).

The following mitigation measures are identified to reduce the project traffic impacts to a level considered less than significant for Long-Range (2040) With Project Conditions:

Int Mitigation #5

Int 6 – Scenic Drive / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following *(Identical to Mitigation Measure #1 & #2)*:

a) Signalize the intersection.

However, it should be noted the identified deficient operation and excess delay at this intersection is experienced only by vehicles on the minor street (stop controlled) approach of the intersection and vehicles traveling along the major roadway (Inland Center Drive) have free flow movement with minimal delay.

Additionally, even though the analysis identifies a deficient LOS at the minor street approach for this location, the close proximity of this study intersection to the traffic signal at the I Street / Inland Center Drive and also the I-215 Ramps / Inland Center Drive intersections is expected to create adequate gaps and breaks in the flow of traffic on Inland Center Drive to allow vehicles to enter the intersection from the minor street (stop controlled) approach at this location.

Installation of a traffic signal at this intersection could impede the traffic flow along Inland Center Drive and thus might not be necessary.

Int Mitigation #6

Int 7 – I-215 SB Ramps / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following *(Identical to Mitigation Measure #3)*:

a) Restripe the southbound off-ramp approach from one left-turn lane, one shared left-turn/through lane and one shared through/right-turn lane to consist of one shared left-turn/through lane, one shared through/right-turn lane and one right-turn lane.

Int Mitigation #7

Int 8 – I-215 NB Ramps / Inland Center Drive: It may be appropriate for the project applicant to make a fair share contribution to implement the following *(Identical to Mitigation Measure #4)*:

a) Restripe the northbound off-ramp approach from one left-turn lane, one shared through/right-turn lane, and one right-turn lane to consist of one left-turn lane, one shared left-turn/through lane, and right-turn lane.

7.5 Fair Share Calculations

Project fair share contribution calculations for the impacted study intersections are summarized in Table 7-1

7.6 Site Access Recommendations

I. Sight distance at all project access points should be reviewed with respect to City of San Bernardino sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

II. Provide appropriate signage and pavement markings at the project site driveways, including stop bars and stop signs.

III. Heavy trucks should use the City of San Bernardino preferred truck routes as much as possible to access the site.

TABLE 7-1

Project Fair-Share Intersection Contribution

Project Fair-Share Contribution for Project Opening Year (2020) Without Related Projects With Project										
	Existing Traffic		Project Opening Year 2020 With Project Traffic		Growth in Traffic		Project Traffic		Project % of Project Opening Year 2020 With Project Growth in Traffic	
Intersection	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
6 Scenic Drive / Inland Center Drive	1,327	1,648	1,479	1,812	152	164	72	64	47.37%	39.02%
7 I-215 SB Ramps / Inland Center Dr	1,795	2,471	1,975	2,685	180	214	72	64	40.00%	29.91%
8 I-215 NB Ramps / Inland Center Dr	1,782	2,369	1,932	2,545	150	176	42	32	28.00%	18.18%

Project Fair-Share Contribution for Project Opening Year (2020) With Related Projects With Project										
	Existing Traffic		Project Opening Year 2020 With Related Projects With Project Traffic		Growth in Traffic		Project Traffic		Project % of Project Opening Year 2020 With Related Projects With Project Growth in Traffic	
Intersection	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
6 Scenic Drive / Inland Center Drive	1,327	1,648	2,765	3,062	1,438	1,414	72	64	5.01%	4.53%
7 I-215 SB Ramps / Inland Center Dr	1,795	2,471	3,588	4,206	1,793	1,735	72	64	4.02%	3.69%
8 I-215 NB Ramps / Inland Center Dr	1,782	2,369	2,808	3,867	1,026	1,498	42	32	4.09%	2.14%

Project Fair-Share Contribution for Long Range Year (2040)										
	Existing Traffic		Long Range Year 2040 With Project Traffic		Growth in Traffic		Project Traffic		Project % of Long Range Year 2040 With Project Growth in Traffic	
Intersection	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
6 Scenic Drive / Inland Center Drive	1,327	1,648	3,215	3,593	1,888	1,945	72	64	3.81%	3.29%
7 I-215 SB Ramps / Inland Center Dr	1,795	2,471	4,134	4,849	2,339	2,378	72	64	3.08%	2.69%
8 I-215 NB Ramps / Inland Center Dr	1,782	2,369	3,710	4,709	1,928	2,340	42	32	2.18%	1.37%

[1] Project Fair-Share Contribution represents the project's traffic contribution at each study area intersection as a percentage of the overall growth in traffic for Year 2040 conditions. This table is for informational purposes only and is not tied to mitigation.

Appendix A

Approved Scope of Work

Scope of Study Form

To be completed by applicant and approved by Public Works prior to start of study

Project Name: OLYMPIC REAL ESTATE HOLDINGS LIGHT INDUSTRIAL PROJECT
Project Address: INLAND CENTER DRIVE, SAN BERNARDINO, CA
Project Description: SINGLE GENERAL LIGHT INDUSTRIAL BUILDING WITH A GROSS AREA OF 102,374 SF
Developer's Name: OLYMPIC REAL ESTATE HOLDINGS, INC.
Address: 9444 ABRAHAM WAY, SANTEE, CA 92071
Telephone No. _____ Fax Number: _____
Email Address:

Trip Generation Rates From: ITE 10TH Ed. Other: _____

Trip Generation For:

	Land Use (1)	Land Use (2)
Land Use (1)	GENERAL LIGHT INDUSTRIAL	
ITE Land Use Code	110	
Daily Trips	Weekday: 675 (PCE ADJ.)	
AM Peak Hour Trips		
Inbound	84 (PCE ADJUSTED)	
Outbound	11 (PCE ADJUSTED)	
Total	95 (PCE ADJUSTED)	
PM Peak Hour Trips		
Inbound	11 (PCE ADJUSTED)	
Outbound	74 (PCE ADJUSTED)	
Total	85 (PCE ADJUSTED)	

(Use Additional Sheet(s), if necessary)

Pass-by Trips (%), if applicable: _____ %

	Land Use (1)	Land Use (2)
Land Use (1)		
ITE Land Use Code		
Daily Trips		
AM Peak Hour Trips		
Inbound		
Outbound		
Total		
PM Peak Hour Trips:		
Inbound		
Outbound		
Total		

Project Opening Year: 2020 **Build-out Year:** 2040

Study Intersections:
1. Mt. Vernon Avenue / Colton Avenue
2. Fairview Avenue / Colton Avenue
3. Project Access 1 / Inland Center Drive
4. Project Access 2 / Inland Center Drive
5. I Street / Inland Center Drive
6. Scenic Drive / Inland Center Drive
7. I-215 Freeway Southbound Ramps / Inland Center Drive
8. I-215 Freeway Northbound Ramps / Inland Center Drive
9. _____
10. _____

(Use Additional Sheet(s) and Map, if necessary)

Ambient Growth Rate: 3 %

Trip Distribution: East % West % North % South % (See attached)

Preparer's Name: ALEX TABRIZI
Address: 4000 WESTERLY PLACE SUITE 280, NEWPORT BEACH, CA 92660
Telephone No. 949-474-0809 Fax Number: _____
Email Address: AT@RKENGINEER.COM
Signature: _____ Date: 07/23/2018

Approved By (Public Works Department):
Signature: _____ Date: 7/23/18
Name: Mahmoud Khodr Title: Traffic Engineer

OLYMPIC REAL ESTATE HOLDINGS LIGHT INDUSTRIAL PROJECT
Traffic Impact Study Scope of Work
July 23, 2018

The following provides information on the proposed project, summarizes the analysis scope, parameters, and assumptions for review and approval, and also includes request for information on items related to the study.

A. Project Description: The project site is located at the southwest corner of the intersection of Inland Center Drive and I street, in the City of San Bernardino. RK Engineering Group, INC. (RK) has previously prepared the *Olympic Real Estate Holdings Light Industrial Complex Traffic Impact Study (RK Engineering Group, Inc., April 3, 2015)*.

The currently proposed project is planned to consist of a single general light industrial building with a gross area of 102,374 square feet.

The project will be evaluated in a single phase and is planned to open in 2020.

Access for the proposed project is planned to be provided via two unsignalized driveways on Inland Center Drive.

Exhibit A shows the location of the proposed project. Exhibit B shows the proposed site plan.

B. Project Trip Generation: Trip generation for the proposed project is determined based on ITE 10th Edition trip generation rates for the proposed land uses as shown in Table 1. To account for truck trips within the study area, trip generation rates were also converted into Passenger Car Equivalent (PCE) rates.

Utilizing the ITE trip generation rates shown in Table 1, Table 2 summarizes the daily and peak hour trip generation for the proposed project.

As shown in Table 2, the proposed project is forecast to generate approximately 508 daily trips which include approximately 72 AM peak hour trip and approximately 64 PM peak hour trips. With the application of the PCE rates, the proposed project is forecast to generate approximately 675 daily PCE trips, which include approximately 95 AM peak hour trips, and 85 PM peak hour trips.

C. Project Trip Distribution: Exhibit C shows the trip distribution for the proposed project.

D. Study Intersections: Consistent with the previous traffic study, the analysis will evaluate the following study intersections:

1. Mt. Vernon Avenue / Colton Avenue;
2. Fairview Avenue / Colton Avenue;
3. Project Access 1 / Inland Center Drive;
4. Project Access 2 / Inland Center Drive;
5. I Street / Inland Center Drive;
6. Scenic Drive / Inland Center Drive;
7. I-215 Freeway Southbound Ramps / Inland Center Drive; and
8. I-215 Freeway Northbound Ramps / Inland Center Drive.

E. Analysis Scenarios: The analysis will evaluate traffic conditions for the following scenarios during the weekday AM and weekday PM peak hour conditions:

- Existing Conditions (2018);
- Project Opening Year (2020) Without Related Projects Without Project Conditions;
- Project Opening Year (2020) Without Related Projects With Project Conditions
- Project Opening Year (2020) With Related Projects Without Project Conditions;
- Project Opening Year (2020) With Related Projects With Project Conditions;
- Long Range Year (2040) Without Project Conditions; and
- Long Range Year (2040) With Project Conditions.

F. Traffic Analysis Parameters: The analysis will utilize the following parameters in accordance with the *City of San Bernardino*:

- For this study, the HCM level of service grades will be determined utilizing the HCM 2010 Methodology and the Synchro analysis software.

- The V/C ratio for evaluation of V/C differentials and potential impacts will be based on HCM 2000 Methodology and the Traffix analysis software.

G. Existing Traffic Counts: The analysis will utilize new traffic counts. The counts **will** be collected by vehicle classification.

AM peak period counts will be collected during one typical weekday from 7:00 AM to 9:00 AM. PM peak period counts will be collected during one typical weekday from 4:00 PM to 6:00 PM.

H. Forecast Opening Year (2020) Conditions Traffic Volumes: Project Opening Year (2020) background traffic volumes will be derived by applying an annual growth rate of three (3) percent per year to existing traffic volumes and addition of traffic associated with specific cumulative projects in the area provided by City of San Bernardino Staff.

I. Forecast Long Range Year (2040) Conditions Traffic Volumes: Long Range Year (2040) Without project traffic volumes will be based on SBTAM model runs and projections for the study area. Long Range Year (2040) With project traffic volumes will be derived by manually adding project trips to the Long Range Year (2040) Without project traffic volumes obtained from SBTAM.

J. Performance Criteria:

City of San Bernardino Study Intersections: The acceptable Level of Service (LOS) for intersections within the City of San Bernardino is LOS D or better.

K. Significant Impact Criteria:

Any intersection operating at a deficient LOS will be considered impacted and would require mitigations to achieve acceptable operations when any of the following changes in the volume to capacity (V/C) ratios occur between the "without Project" and the "with Project" conditions as shown on the following page:

LOS Without Project	V/C Difference
C	>0.0400
D	>0.0200
E,F	>0.0100

For this study, the HCM level of service grades will be determined utilizing the HCM 2010 Methodology and the Synchro analysis software.

The V/C ratio for evaluation of V/C differentials and potential impacts will be based on HCM 2000 Methodology and the Traffix analysis software.

L. Request for Information: Please provide information on the following for use in the traffic study:

- RK will contact the City's planning department for information on cumulative projects that need to be included in the traffic analysis (location, land use type(s), and land use quantities); and

- Information on future roadway and circulation system modifications/improvements that are planned within the study area and would potentially affect the analysis.

If you have any questions, or would like further review, please call us at (949) 474-0809.

Sincerely,
RK ENGINEERING GROUP, INC.

Alex Tabrizi, PE, TE
Associate Principal

Attachments

Approved by:

_____

City of San Bernardino

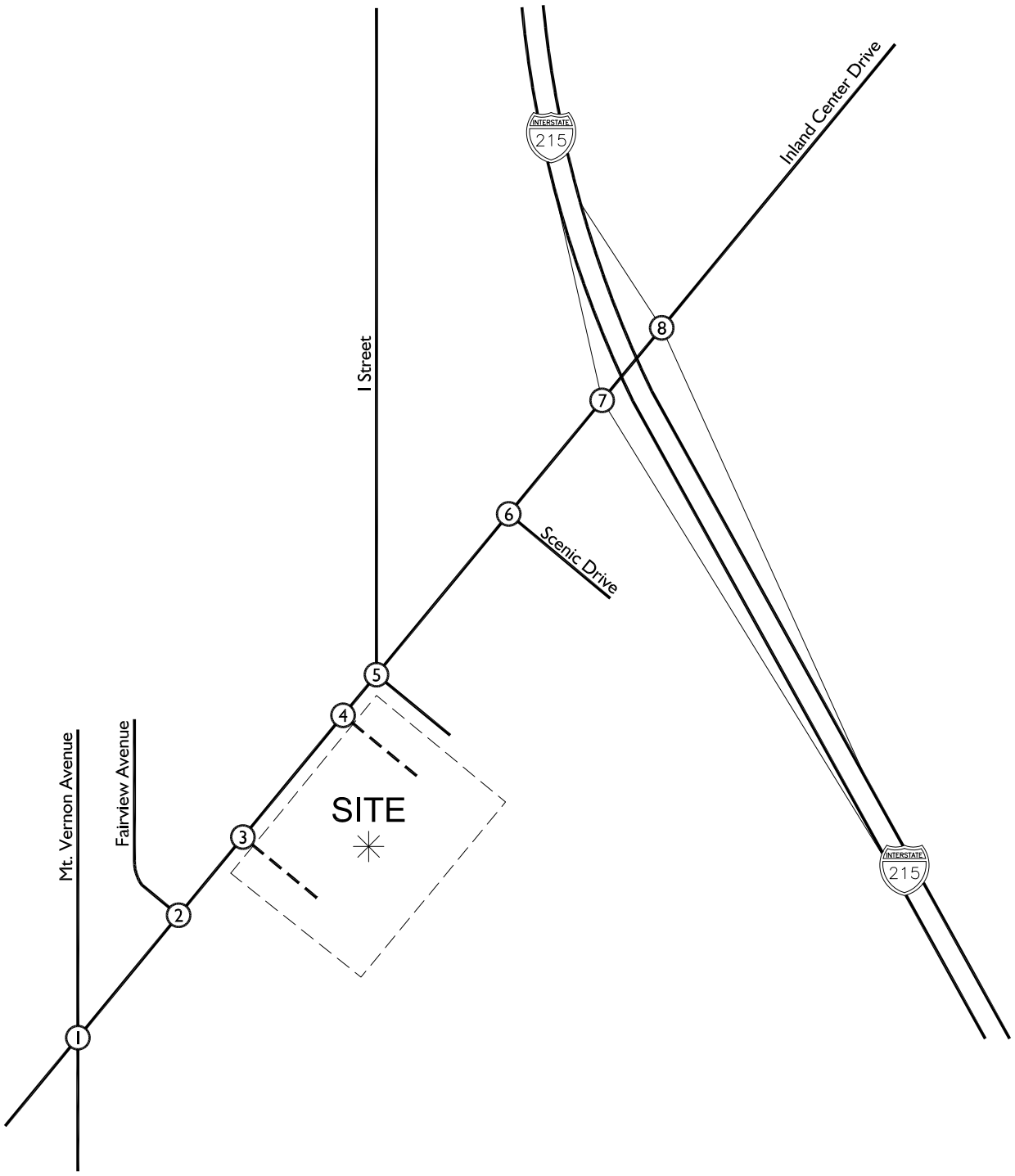
_____

Date

Attachments

Exhibit A

Location Map



Legend:

① = Study Area Intersection

– – = Proposed Project Access

N

Exhibit B

Site Plan

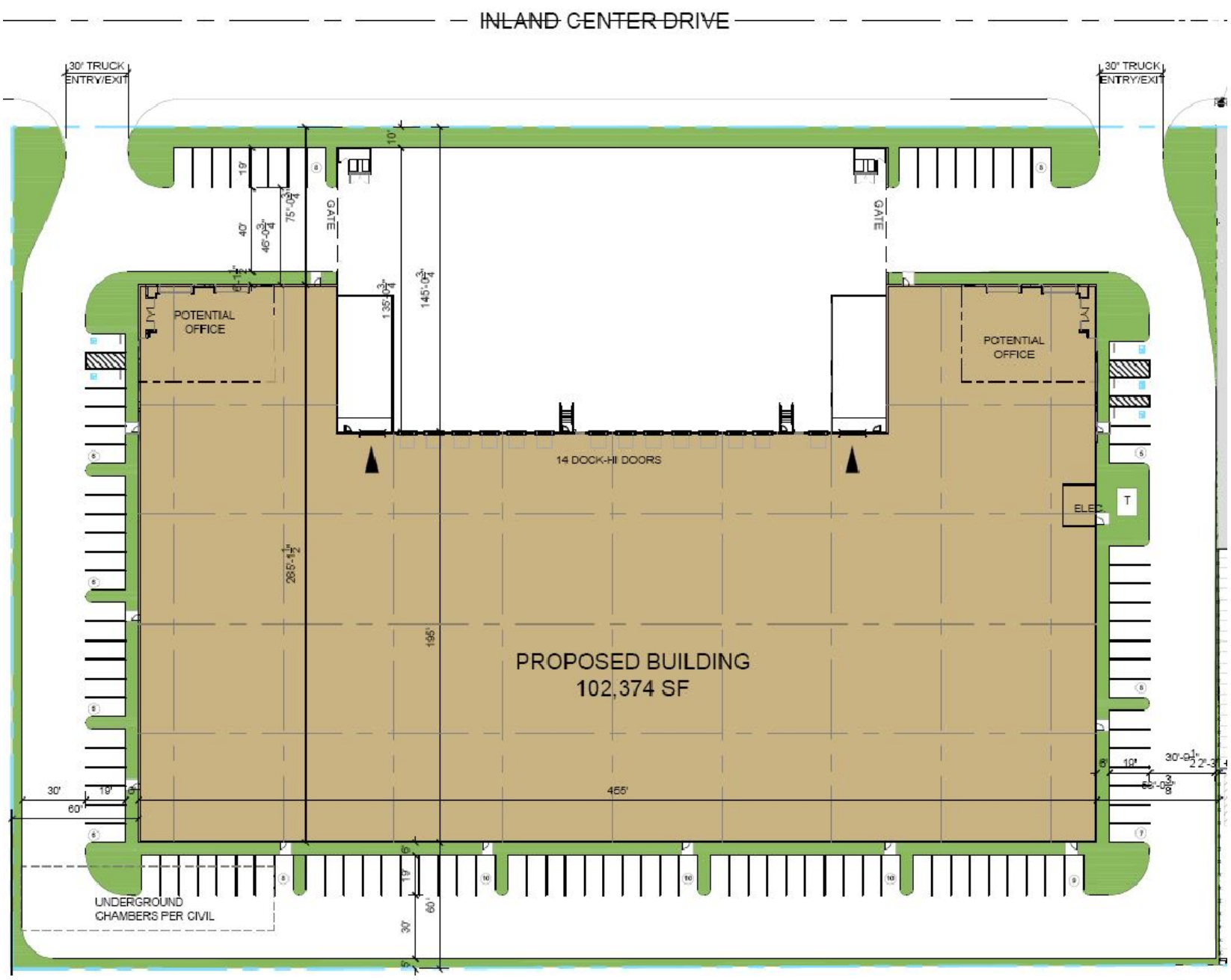
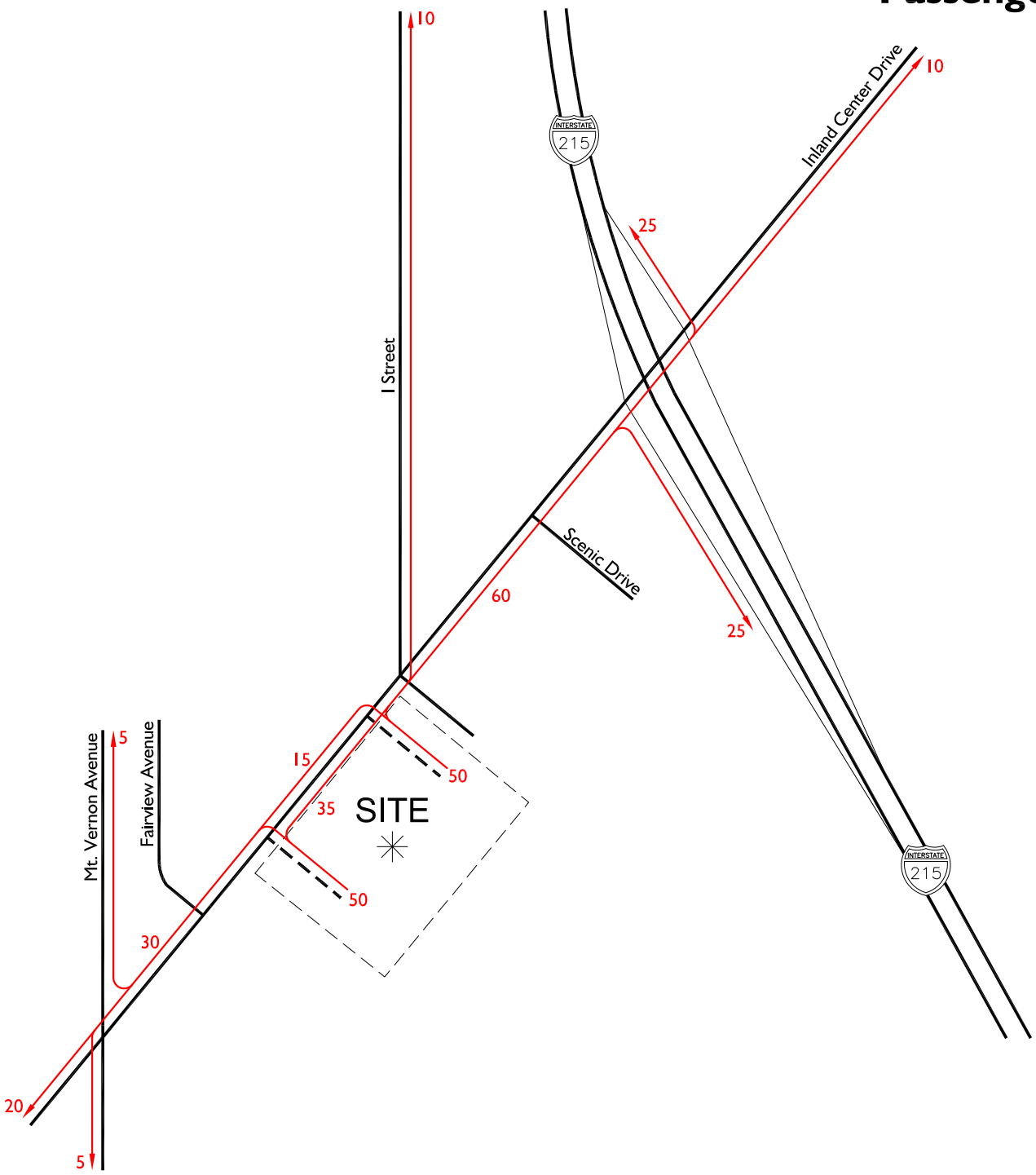


Exhibit C-1

Project Trip Distribution
Passenger Cars



Legend:

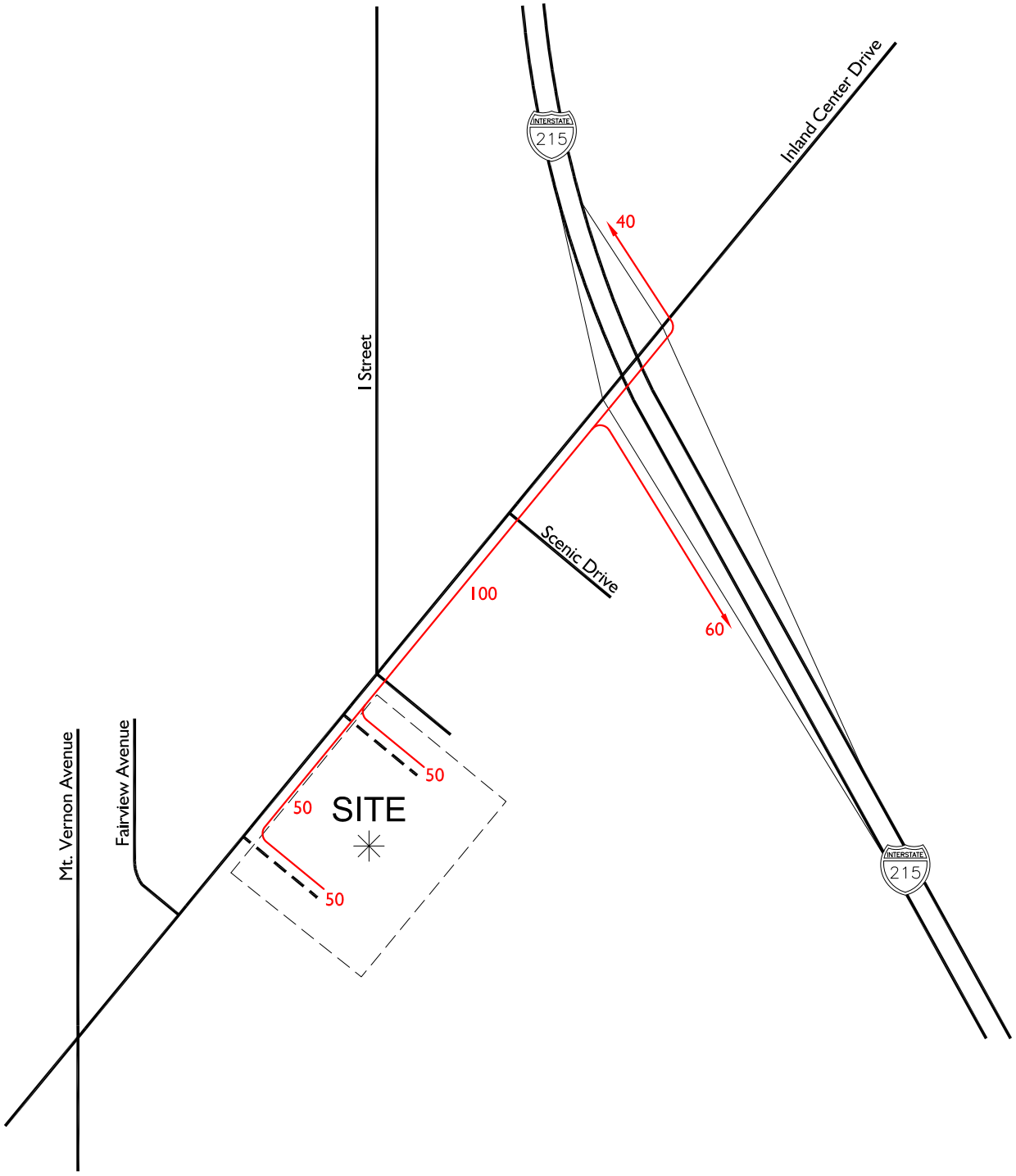
10 = Percent From Project

– – = Proposed Project Access

N

Exhibit C-2

Project Trip Distribution
Trucks



Legend:

10 = Percent From Project

– – = Proposed Project Access

N

TABLE 1

General Light Industrial Trip Generation Rates

Land Use	Units[1]	Peak Hour						Daily
		AM			PM			
		In	Out	Total	In	Out	Total	
Gen. Lt. Industrial - ITE Code 110	TSF							
Trip Generation Rates[2]		0.616	0.084	0.700	0.082	0.548	0.630	4.960
PCE Inbound/Outbound Splits[3]		88%	12%	100%	13%	87%	100%	--
Passenger Car Equivalent Rates Calculations								
Passenger Cars								
Recommended Mix (%)[4]		78.60%	78.60%	78.60%	78.60%	78.60%	78.60%	78.60%
PCE Factor[5]		1.0	1.0	1.0	1.0	1.0	1.0	1.0
PCE Rates		0.484	0.066	0.550	0.064	0.431	0.495	3.899
2-Axle Trucks								
Recommended Mix (%)[4]		8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
PCE Factor[5]		2.0	2.0	2.0	2.0	2.0	2.0	2.0
PCE Rates		0.099	0.013	0.112	0.013	0.088	0.101	0.794
3-Axle Trucks								
Recommended Mix (%)[4]		3.90%	3.90%	3.90%	3.90%	3.90%	3.90%	3.90%
PCE Factor[5]		2.5	2.5	2.5	2.5	2.5	2.5	2.5
PCE Rates		0.060	0.008	0.068	0.008	0.053	0.061	0.484
4-Axle Trucks								
Recommended Mix (%)[4]		9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
PCE Factor[5]		3.0	3.0	3.0	3.0	3.0	3.0	3.0
PCE Rates		0.176	0.024	0.200	0.023	0.156	0.180	1.414
Final Rates (In Passenger Car Equivalents)								
Passenger Cars		0.484	0.066	0.550	0.064	0.431	0.495	3.899
2-Axle Trucks		0.099	0.013	0.112	0.013	0.088	0.101	0.794
3-Axle Trucks		0.060	0.008	0.068	0.008	0.053	0.061	0.484
4-Axle+ Trucks		0.176	0.024	0.200	0.023	0.156	0.180	1.414

Building Size: 102.374 TSF

[1] TSF = Thousand Square Feet

[2] Light Industrial Trip Generation Source: ITE Trip Generation, 10th Ed.

[3] Inbound/Outbound Splits per ITE Trip Generation, 10th Ed., 2017

[4] Recommended Vehicle Mix Percentages per City of Fontana Truck Trip Generation Study for Light Industrial uses, August 2003 (Page 22)

[5] Recommended PCE Factor per City of San Bernardino, 2015

TABLE 2
General Light Industrial Trip Generation Rates

ITE TRIP GENERATION									
			Weekday Peak Hour						
			AM			PM			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
Light Industrial	102.374	TSF	63	9	72	8	56	64	508

ITE TRIP GENERATION IN PASSENGER CAR EQUIVALENTS							
	Weekday Peak Hour						
	AM			PM			
Vehicle Mix	In	Out	Total	In	Out	Total	Daily
Light Industrial - Passenger Cars	50	7	57	7	44	51	399
Light Industrial - 2-Axle Trucks (2.0 x)	10	1	11	1	9	10	81
Light Industrial - 3-Axle Trucks (2.5 x)	6	1	7	1	5	6	50
Light Industrial - 4-Axle+ Trucks (3.0 x)	18	2	20	2	16	18	145
Light Industrial Trip Generation	84	11	95	11	74	85	675

[1] TSF = Thousand Square Feet

Appendix B

Existing Traffic Count Worksheets

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

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

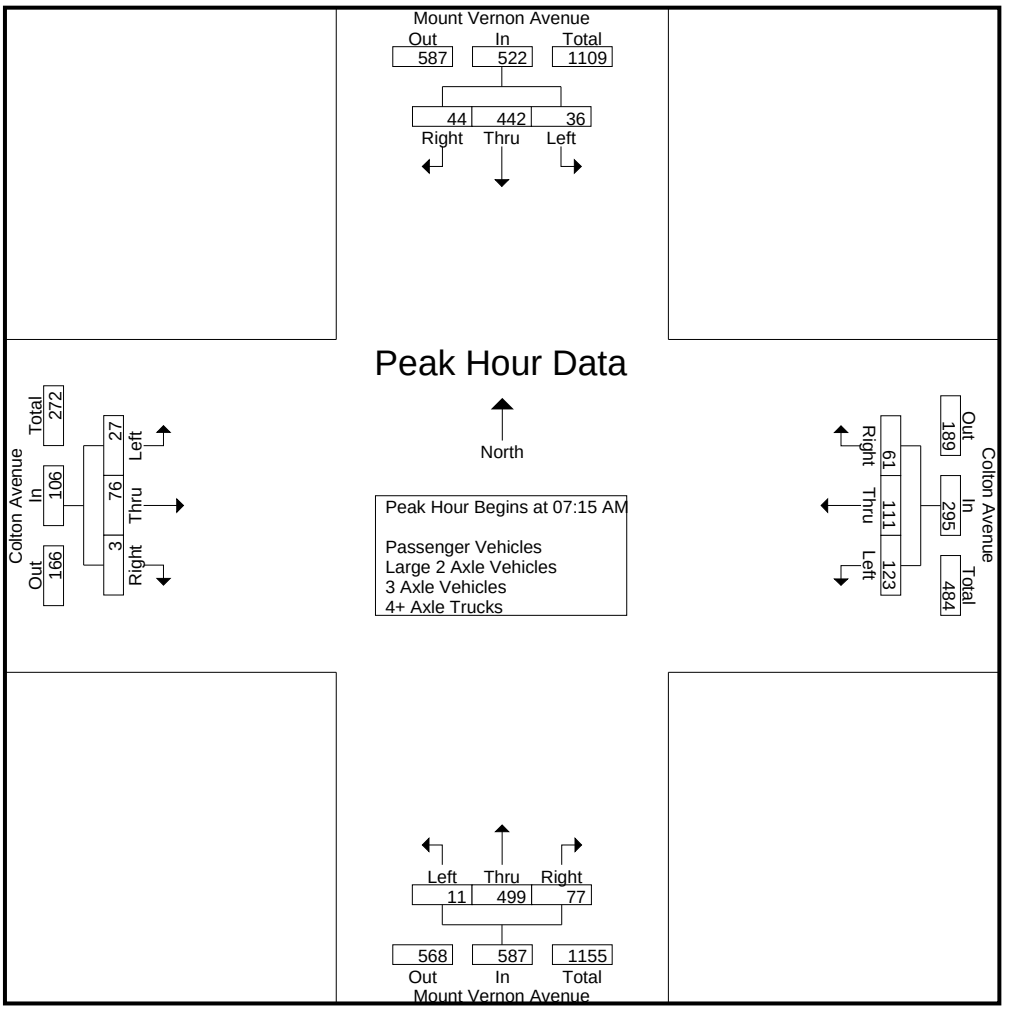
	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	71	6	83	30	19	7	56	0	60	20	80	0	10	1	11	230
07:15 AM	2	94	8	104	36	17	11	64	4	111	27	142	5	13	0	18	328
07:30 AM	14	124	10	148	50	35	17	102	0	142	32	174	7	21	0	28	452
07:45 AM	16	124	12	152	25	30	14	69	2	126	6	134	11	23	1	35	390
Total	38	413	36	487	141	101	49	291	6	439	85	530	23	67	2	92	1400
08:00 AM	4	100	14	118	12	29	19	60	5	120	12	137	4	19	2	25	340
08:15 AM	13	119	14	146	11	18	14	43	2	82	10	94	5	9	7	21	304
08:30 AM	5	72	8	85	11	18	6	35	4	109	18	131	11	26	2	39	290
08:45 AM	8	100	11	119	20	23	18	61	9	105	11	125	12	17	5	34	339
Total	30	391	47	468	54	88	57	199	20	416	51	487	32	71	16	119	1273
Grand Total	68	804	83	955	195	189	106	490	26	855	136	1017	55	138	18	211	2673
Apprch %	7.1	84.2	8.7		39.8	38.6	21.6		2.6	84.1	13.4		26.1	65.4	8.5		
Total %	2.5	30.1	3.1	35.7	7.3	7.1	4	18.3	1	32	5.1	38	2.1	5.2	0.7	7.9	
Passenger Vehicles	62	761	80	903	184	187	102	473	24	815	128	967	54	137	17	208	2551
% Passenger Vehicles	91.2	94.7	96.4	94.6	94.4	98.9	96.2	96.5	92.3	95.3	94.1	95.1	98.2	99.3	94.4	98.6	95.4
Large 2 Axle Vehicles	6	31	3	40	7	2	4	13	2	31	5	38	1	1	1	3	94
% Large 2 Axle Vehicles	8.8	3.9	3.6	4.2	3.6	1.1	3.8	2.7	7.7	3.6	3.7	3.7	1.8	0.7	5.6	1.4	3.5
3 Axle Vehicles	0	3	0	3	1	0	0	1	0	2	1	3	0	0	0	0	7
% 3 Axle Vehicles	0	0.4	0	0.3	0.5	0	0	0.2	0	0.2	0.7	0.3	0	0	0	0	0.3
4+ Axle Trucks	0	9	0	9	3	0	0	3	0	7	2	9	0	0	0	0	21
% 4+ Axle Trucks	0	1.1	0	0.9	1.5	0	0	0.6	0	0.8	1.5	0.9	0	0	0	0	0.8

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 07:15 AM																	
07:15 AM	2	94	8	104	36	17	11	64	4	111	27	142	5	13	0	18	328
07:30 AM	14	**124**	10	148	**50**	**35**	17	**102**	0	**142**	**32**	**174**	7	21	0	28	**452**
07:45 AM	**16**	124	12	**152**	25	30	14	69	2	126	6	134	**11**	**23**	1	**35**	390
08:00 AM	4	100	**14**	118	12	29	**19**	60	**5**	120	12	137	4	19	**2**	25	340
Total Volume	36	442	44	522	123	111	61	295	11	499	77	587	27	76	3	106	1510
% App. Total	6.9	84.7	8.4		41.7	37.6	20.7		1.9	85	13.1		25.5	71.7	2.8		
PHF	.563	.891	.786	.859	.615	.793	.803	.723	.550	.879	.602	.843	.614	.826	.375	.757	.835

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

City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:15 AM				07:45 AM			
+0 mins.	14	**124**	10	148	36	17	11	64	4	111	27	142	**11**	23	1	35
+15 mins.	**16**	124	12	**152**	**50**	**35**	17	**102**	0	**142**	**32**	**174**	4	19	2	25
+30 mins.	4	100	**14**	118	25	30	14	69	2	126	6	134	5	9	**7**	21
+45 mins.	13	119	14	146	12	29	**19**	60	**5**	120	12	137	11	**26**	2	**39**
Total Volume	47	467	50	564	123	111	61	295	11	499	77	587	31	77	12	120
% App. Total	8.3	82.8	8.9		41.7	37.6	20.7		1.9	85	13.1		25.8	64.2	10	
PHF	.734	.942	.893	.928	.615	.793	.803	.723	.550	.879	.602	.843	.705	.740	.429	.769

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	5	64	5	74	29	18	7	54	0	51	15	66	0	10	1	11	205
07:15 AM	2	90	8	100	34	17	11	62	4	109	27	140	5	13	0	18	320
07:30 AM	13	119	10	142	49	35	16	100	0	141	31	172	7	21	0	28	442
07:45 AM	15	117	12	144	24	30	14	68	1	119	6	126	11	23	1	35	373
Total	35	390	35	460	136	100	48	284	5	420	79	504	23	67	2	92	1340
08:00 AM	4	95	13	112	11	29	19	59	5	116	12	133	4	19	2	25	329
08:15 AM	12	116	14	142	11	17	12	40	2	77	8	87	5	9	6	20	289
08:30 AM	5	66	8	79	9	18	5	32	4	102	18	124	10	25	2	37	272
08:45 AM	6	94	10	110	17	23	18	58	8	100	11	119	12	17	5	34	321
Total	27	371	45	443	48	87	54	189	19	395	49	463	31	70	15	116	1211
Grand Total	62	761	80	903	184	187	102	473	24	815	128	967	54	137	17	208	2551
Apprch %	6.9	84.3	8.9		38.9	39.5	21.6		2.5	84.3	13.2		26	65.9	8.2		
Total %	2.4	29.8	3.1	35.4	7.2	7.3	4	18.5	0.9	31.9	5	37.9	2.1	5.4	0.7	8.2	

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	90	8	100	34	17	11	62	4	109	27	140	5	13	0	18	320
07:30 AM	13	**119**	10	142	**49**	**35**	16	**100**	0	**141**	**31**	**172**	7	21	0	28	**442**
07:45 AM	**15**	117	12	**144**	24	30	14	68	1	119	6	126	**11**	**23**	1	**35**	373
08:00 AM	4	95	**13**	112	11	29	**19**	59	**5**	116	12	133	4	19	**2**	25	329
Total Volume	34	421	43	498	118	111	60	289	10	485	76	571	27	76	3	106	1464
% App. Total	6.8	84.5	8.6		40.8	38.4	20.8		1.8	84.9	13.3		25.5	71.7	2.8		
PHF	.567	.884	.827	.865	.602	.793	.789	.723	.500	.860	.613	.830	.614	.826	.375	.757	.828

Counts Unlimited
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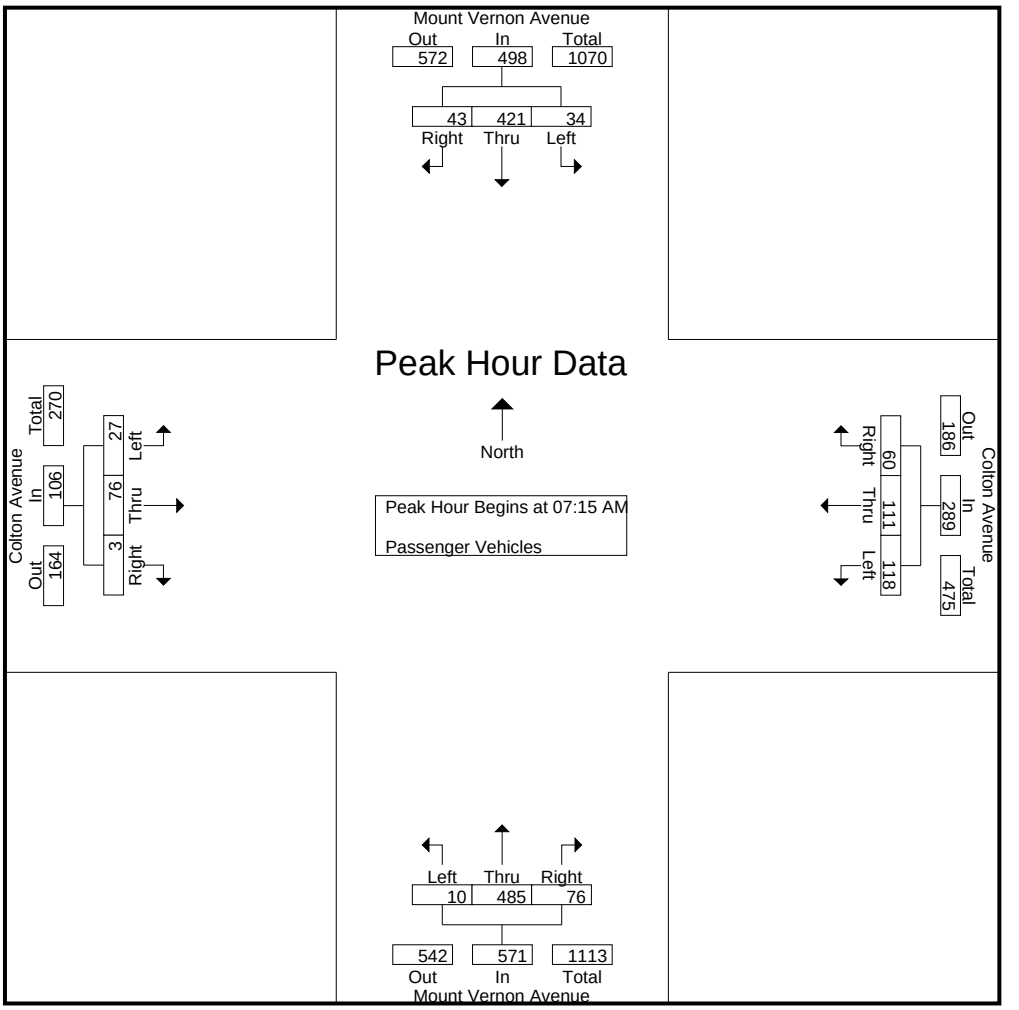
City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	2	90	8	100	34	17	11	62	4	109	27	140	5	13	0	18
+15 mins.	13	**119**	10	142	**49**	**35**	16	**100**	0	**141**	**31**	**172**	7	21	0	28
+30 mins.	**15**	117	12	**144**	24	30	14	68	1	119	6	126	**11**	**23**	1	**35**
+45 mins.	4	95	**13**	112	11	29	**19**	59	**5**	116	12	133	4	19	**2**	25
Total Volume	34	421	43	498	118	111	60	289	10	485	76	571	27	76	3	106
% App. Total	6.8	84.5	8.6		40.8	38.4	20.8		1.8	84.9	13.3		25.5	71.7	2.8	
PHF	.567	.884	.827	.865	.602	.793	.789	.723	.500	.860	.613	.830	.614	.826	.375	.757

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018

Groups Printed- Large 2 Axle Vehicles

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	5	1	7	1	1	0	2	0	6	3	9	0	0	0	0	18
07:15 AM	0	3	0	3	1	0	0	1	0	2	0	2	0	0	0	0	6
07:30 AM	1	4	0	5	0	0	1	1	0	1	1	2	0	0	0	0	8
07:45 AM	1	4	0	5	1	0	0	1	1	5	0	6	0	0	0	0	12
Total	3	16	1	20	3	1	1	5	1	14	4	19	0	0	0	0	44
08:00 AM	0	5	1	6	0	0	0	0	0	4	0	4	0	0	0	0	10
08:15 AM	1	2	0	3	0	1	2	3	0	3	1	4	0	0	1	1	11
08:30 AM	0	4	0	4	1	0	1	2	0	5	0	5	1	1	0	2	13
08:45 AM	2	4	1	7	3	0	0	3	1	5	0	6	0	0	0	0	16
Total	3	15	2	20	4	1	3	8	1	17	1	19	1	1	1	3	50
Grand Total	6	31	3	40	7	2	4	13	2	31	5	38	1	1	1	3	94
Apprch %	15	77.5	7.5		53.8	15.4	30.8		5.3	81.6	13.2		33.3	33.3	33.3		
Total %	6.4	33	3.2	42.6	7.4	2.1	4.3	13.8	2.1	33	5.3	40.4	1.1	1.1	1.1	3.2	

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	3	0	3	**1**	0	0	**1**	0	2	0	2	0	0	0	0	6
07:30 AM	**1**	4	0	5	0	0	**1**	1	0	1	**1**	2	0	0	0	0	8
07:45 AM	1	4	0	5	1	0	0	1	**1**	**5**	0	**6**	0	0	0	0	**12**
08:00 AM	0	**5**	**1**	**6**	0	0	0	0	0	4	0	4	0	0	0	0	10
Total Volume	2	16	1	19	2	0	1	3	1	12	1	14	0	0	0	0	36
% App. Total	10.5	84.2	5.3		66.7	0	33.3		7.1	85.7	7.1		0	0	0		
PHF	.500	.800	.250	.792	.500	.000	.250	.750	.250	.600	.250	.583	.000	.000	.000	.000	.750

Counts Unlimited
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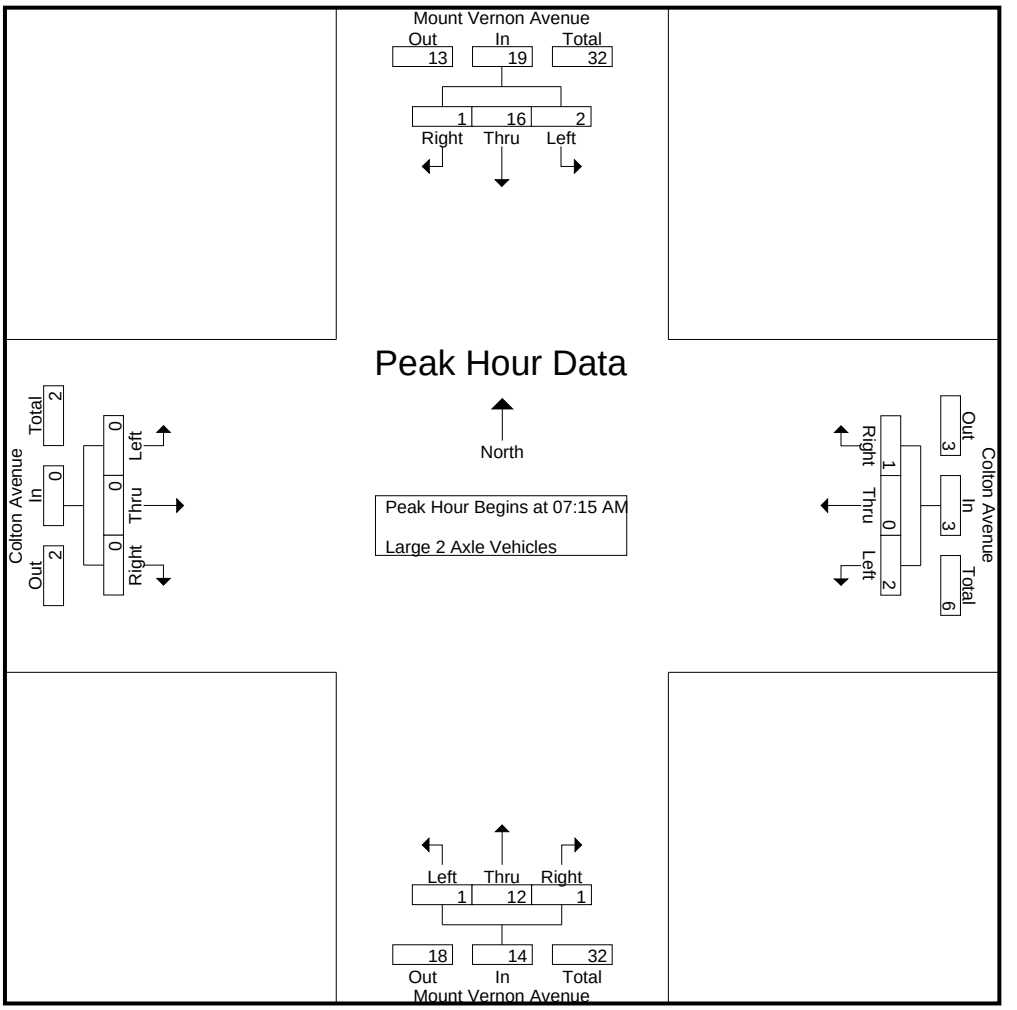
City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	3	0	3	**1**	0	0	**1**	0	2	0	2	0	0	0	0
+15 mins.	**1**	4	0	5	0	0	**1**	1	0	1	**1**	2	0	0	0	0
+30 mins.	1	4	0	5	1	0	0	1	**1**	**5**	0	**6**	0	0	0	0
+45 mins.	0	**5**	**1**	**6**	0	0	0	0	0	4	0	4	0	0	0	0
Total Volume	2	16	1	19	2	0	1	3	1	12	1	14	0	0	0	0
% App. Total	10.5	84.2	5.3		66.7	0	33.3		7.1	85.7	7.1		0	0	0	
PHF	.500	.800	.250	.792	.500	.000	.250	.750	.250	.600	.250	.583	.000	.000	.000	.000

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
Grand Total	0	3	0	3	1	0	0	1	0	2	1	3	0	0	0	0	7
Apprch %	0	100	0		100	0	0		0	66.7	33.3		0	0	0		
Total %	0	42.9	0	42.9	14.3	0	0	14.3	0	28.6	14.3	42.9	0	0	0	0	

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500

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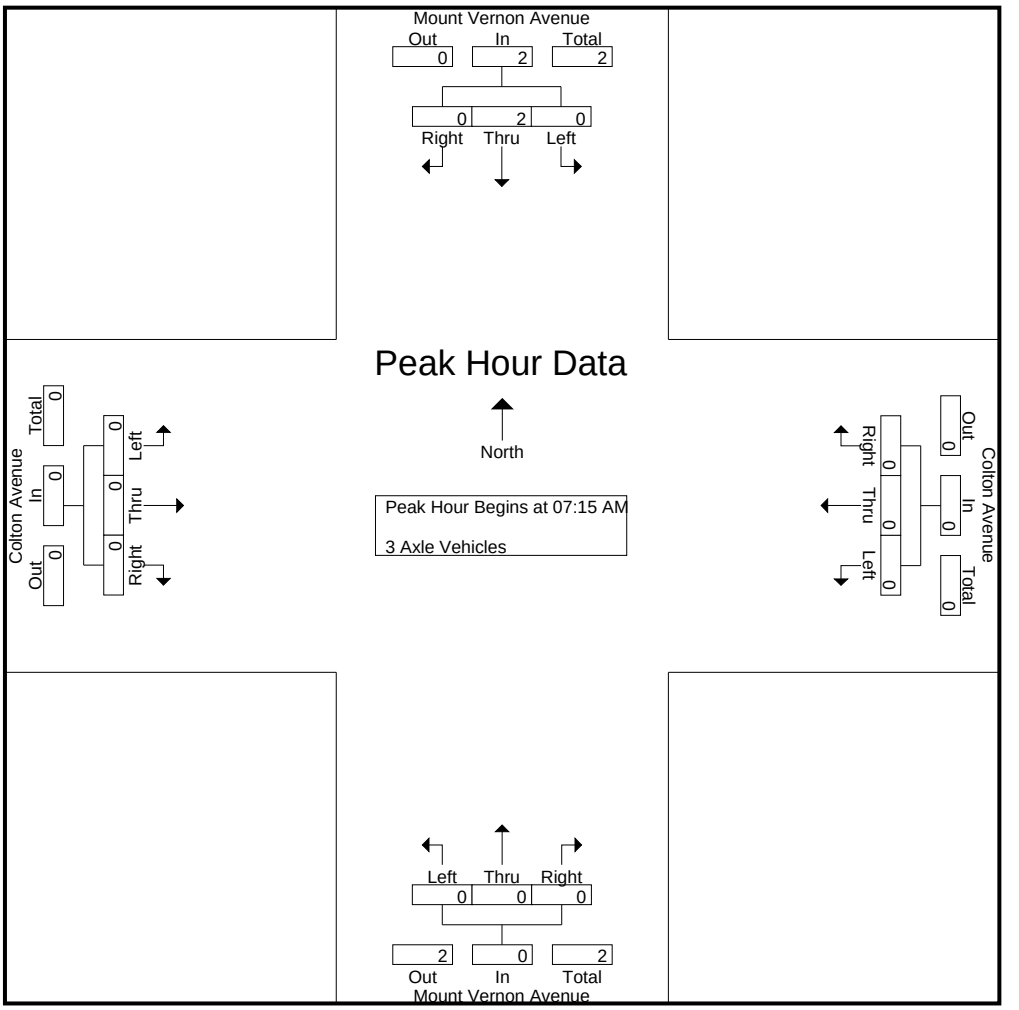
City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018

Groups Printed- 4+ Axle Trucks

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	0	1	0	1	0	0	0	0	0	2	1	3	0	0	0	0	4
07:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
07:45 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total	0	4	0	4	2	0	0	2	0	4	1	5	0	0	0	0	11
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	0	0	0	2	1	3	0	0	0	0	4
08:30 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	5	0	5	1	0	0	1	0	3	1	4	0	0	0	0	10
Grand Total	0	9	0	9	3	0	0	3	0	7	2	9	0	0	0	0	21
Apprch %	0	100	0		100	0	0		0	77.8	22.2		0	0	0		
Total %	0	42.9	0	42.9	14.3	0	0	14.3	0	33.3	9.5	42.9	0	0	0	0	

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0	1
07:30 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
07:45 AM	0	**2**	0	**2**	0	0	0	0	0	**2**	0	**2**	0	0	0	0	**4**
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	3	0	3	3	0	0	3	0	2	0	2	0	0	0	0	8
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0		
PHF	.000	.375	.000	.375	.750	.000	.000	.750	.000	.250	.000	.250	.000	.000	.000	.000	.500

Counts Unlimited
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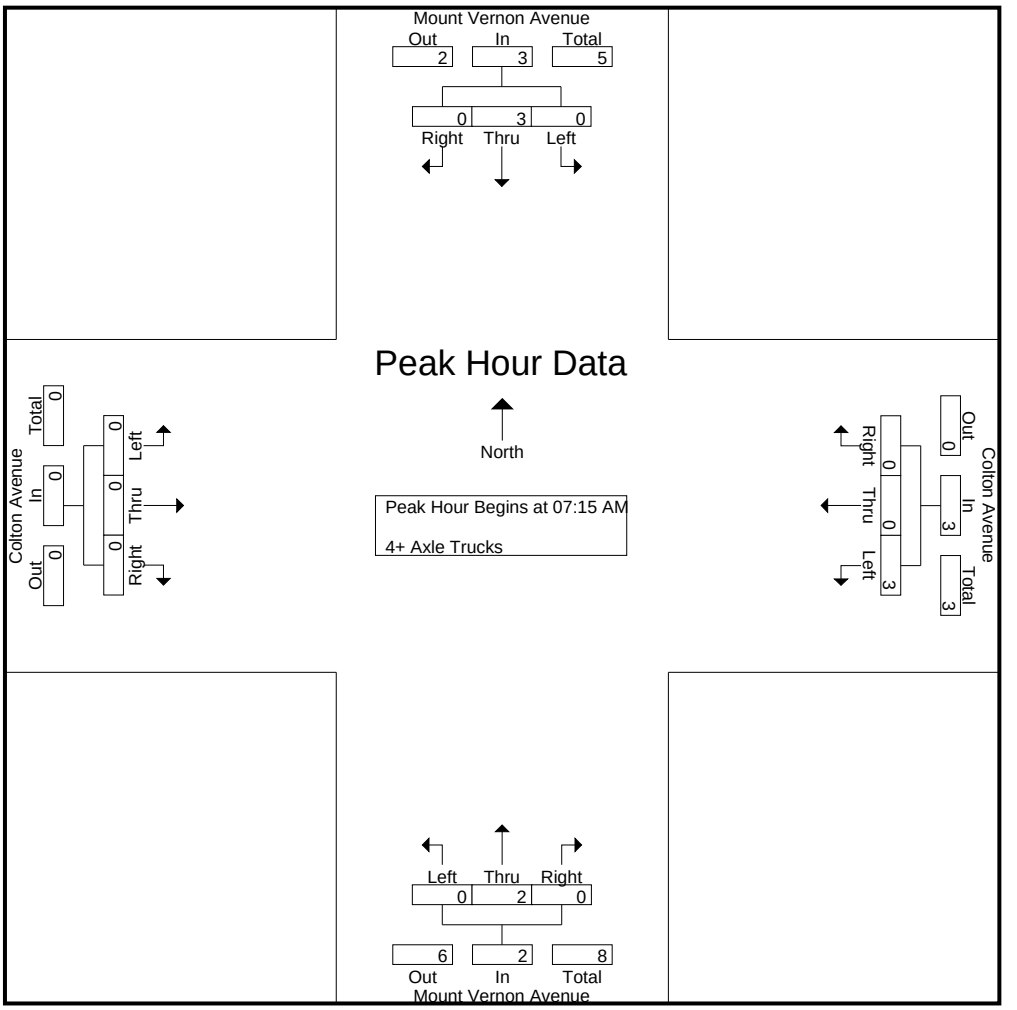
City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	**2**	0	**2**	0	0	0	0	0	**2**	0	**2**	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	3	0	3	3	0	0	3	0	2	0	2	0	0	0	0
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0	
PHF	.000	.375	.000	.375	.750	.000	.000	.750	.000	.250	.000	.250	.000	.000	.000	.000

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	20	137	17	174	29	38	26	93	4	135	24	163	14	35	1	50	480
04:15 PM	34	124	10	168	28	55	23	106	6	140	21	167	16	41	1	58	499
04:30 PM	21	109	16	146	19	40	24	83	10	175	33	218	16	45	2	63	510
04:45 PM	26	135	15	176	25	31	27	83	6	145	21	172	26	46	2	74	505
Total	101	505	58	664	101	164	100	365	26	595	99	720	72	167	6	245	1994
05:00 PM	27	106	24	157	34	48	22	104	4	159	20	183	17	50	2	69	513
05:15 PM	25	111	18	154	43	56	28	127	6	164	33	203	20	37	1	58	542
05:30 PM	23	121	15	159	27	36	18	81	5	227	28	260	27	45	5	77	577
05:45 PM	27	138	10	175	30	38	21	89	6	176	33	215	23	31	1	55	534
Total	102	476	67	645	134	178	89	401	21	726	114	861	87	163	9	259	2166
Grand Total	203	981	125	1309	235	342	189	766	47	1321	213	1581	159	330	15	504	4160
Apprch %	15.5	74.9	9.5		30.7	44.6	24.7		3	83.6	13.5		31.5	65.5	3		
Total %	4.9	23.6	3	31.5	5.6	8.2	4.5	18.4	1.1	31.8	5.1	38	3.8	7.9	0.4	12.1	
Passenger Vehicles	202	955	124	1281	231	339	186	756	47	1294	207	1548	158	328	15	501	4086
% Passenger Vehicles	99.5	97.3	99.2	97.9	98.3	99.1	98.4	98.7	100	98	97.2	97.9	99.4	99.4	100	99.4	98.2
Large 2 Axle Vehicles	1	16	0	17	3	3	3	9	0	24	6	30	1	2	0	3	59
% Large 2 Axle Vehicles	0.5	1.6	0	1.3	1.3	0.9	1.6	1.2	0	1.8	2.8	1.9	0.6	0.6	0	0.6	1.4
3 Axle Vehicles	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
% 3 Axle Vehicles	0	0.3	0.8	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	7	0	7	1	0	0	1	0	3	0	3	0	0	0	0	11
% 4+ Axle Trucks	0	0.7	0	0.5	0.4	0	0	0.1	0	0.2	0	0.2	0	0	0	0	0.3

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 05:00 PM																	
05:00 PM	**27**	106	**24**	157	34	48	22	104	4	159	20	183	17	**50**	2	69	513
05:15 PM	25	111	18	154	**43**	**56**	**28**	**127**	**6**	164	**33**	203	20	37	1	58	542
05:30 PM	23	121	15	159	27	36	18	81	5	**227**	28	**260**	**27**	45	**5**	**77**	**577**
05:45 PM	27	**138**	10	**175**	30	38	21	89	6	176	33	215	23	31	1	55	534
Total Volume	102	476	67	645	134	178	89	401	21	726	114	861	87	163	9	259	2166
% App. Total	15.8	73.8	10.4		33.4	44.4	22.2		2.4	84.3	13.2		33.6	62.9	3.5		
PHF	.944	.862	.698	.921	.779	.795	.795	.789	.875	.800	.864	.828	.806	.815	.450	.841	.938

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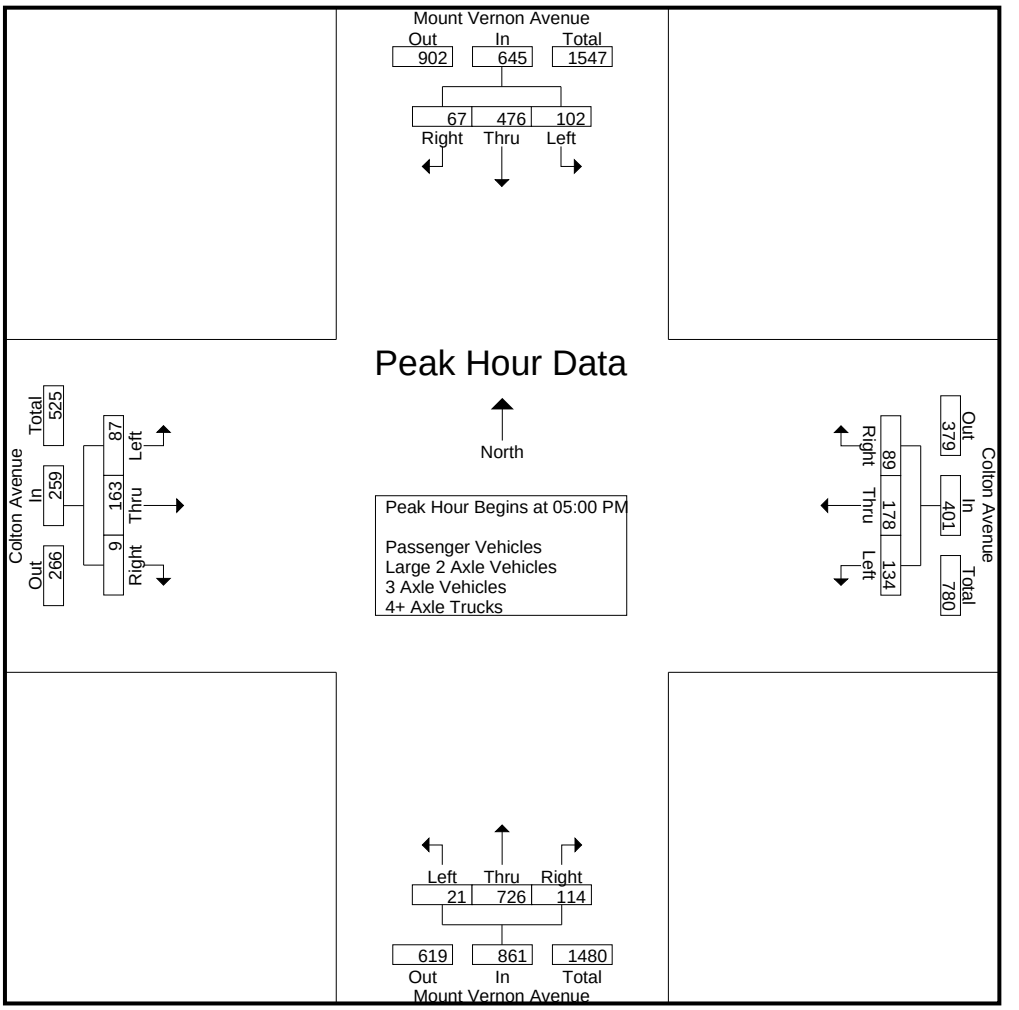
City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				05:00 PM				04:45 PM			
+0 mins.	20	**137**	**17**	174	34	48	22	104	4	159	20	183	26	46	2	74
+15 mins.	**34**	124	10	168	**43**	**56**	**28**	**127**	**6**	164	**33**	203	17	**50**	2	69
+30 mins.	21	109	16	146	27	36	18	81	5	**227**	28	**260**	20	37	1	58
+45 mins.	26	135	15	**176**	30	38	21	89	6	176	33	215	**27**	45	**5**	**77**
Total Volume	101	505	58	664	134	178	89	401	21	726	114	861	90	178	10	278
% App. Total	15.2	76.1	8.7		33.4	44.4	22.2		2.4	84.3	13.2		32.4	64	3.6	
PHF	.743	.922	.853	.943	.779	.795	.795	.789	.875	.800	.864	.828	.833	.890	.500	.903

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018

Groups Printed- Passenger Vehicles

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	20	131	16	167	29	37	25	91	4	129	23	156	14	35	1	50	464
04:15 PM	34	118	10	162	28	55	23	106	6	136	19	161	15	41	1	57	486
04:30 PM	21	106	16	143	19	39	23	81	10	170	31	211	16	45	2	63	498
04:45 PM	26	134	15	175	24	31	27	82	6	141	21	168	26	46	2	74	499
Total	101	489	57	647	100	162	98	360	26	576	94	696	71	167	6	244	1947
05:00 PM	27	103	24	154	34	48	22	104	4	157	20	181	17	50	2	69	508
05:15 PM	24	109	18	151	42	56	27	125	6	162	32	200	20	35	1	56	532
05:30 PM	23	120	15	158	25	36	18	79	5	224	28	257	27	45	5	77	571
05:45 PM	27	134	10	171	30	37	21	88	6	175	33	214	23	31	1	55	528
Total	101	466	67	634	131	177	88	396	21	718	113	852	87	161	9	257	2139
Grand Total	202	955	124	1281	231	339	186	756	47	1294	207	1548	158	328	15	501	4086
Apprch %	15.8	74.6	9.7		30.6	44.8	24.6		3	83.6	13.4		31.5	65.5	3		
Total %	4.9	23.4	3	31.4	5.7	8.3	4.6	18.5	1.2	31.7	5.1	37.9	3.9	8	0.4	12.3	

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**27**	103	**24**	154	34	48	22	104	4	157	20	181	17	**50**	2	69	508
05:15 PM	24	109	18	151	**42**	**56**	**27**	**125**	**6**	162	32	200	20	35	1	56	532
05:30 PM	23	120	15	158	25	36	18	79	5	**224**	28	**257**	**27**	45	**5**	**77**	**571**
05:45 PM	27	**134**	10	**171**	30	37	21	88	6	175	**33**	214	23	31	1	55	528
Total Volume	101	466	67	634	131	177	88	396	21	718	113	852	87	161	9	257	2139
% App. Total	15.9	73.5	10.6		33.1	44.7	22.2		2.5	84.3	13.3		33.9	62.6	3.5		
PHF	.935	.869	.698	.927	.780	.790	.815	.792	.875	.801	.856	.829	.806	.805	.450	.834	.937

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City of San Bernardino
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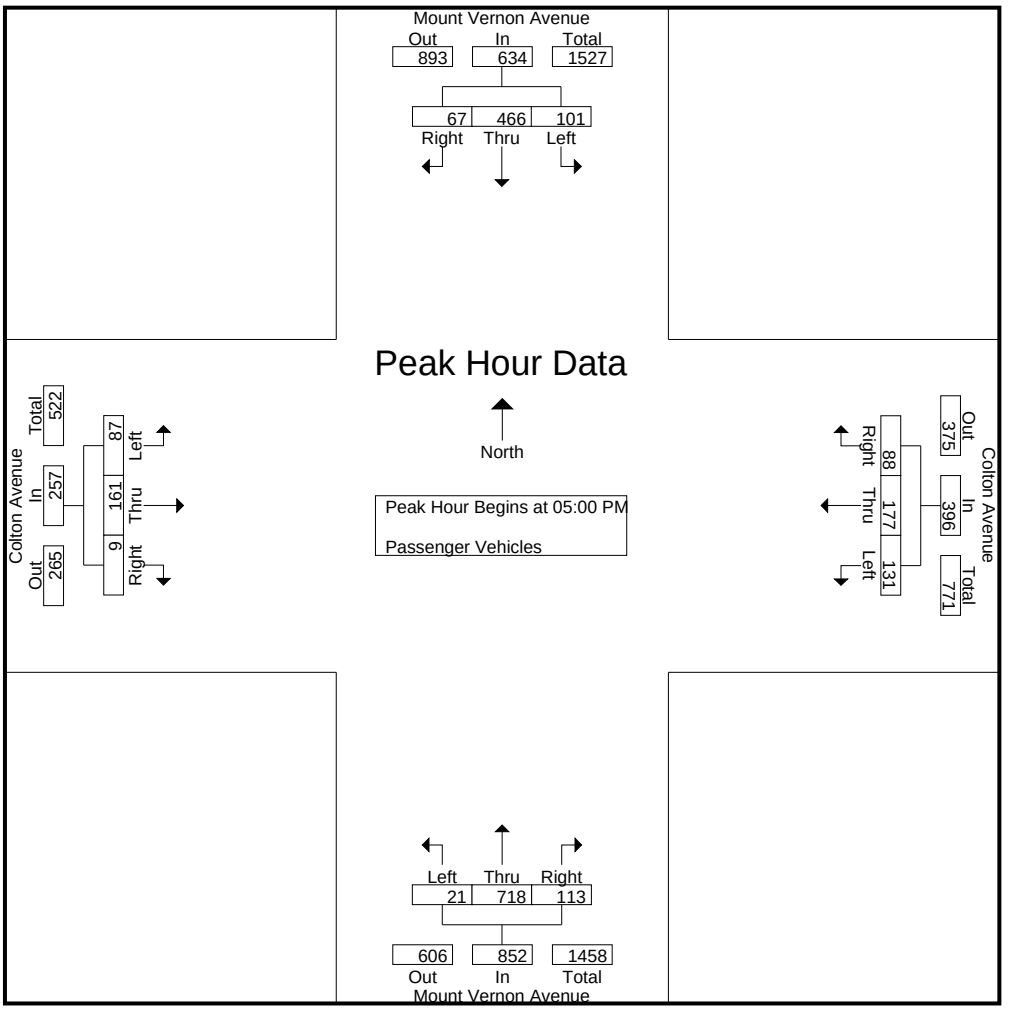
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**27**	103	**24**	154	34	48	22	104	4	157	20	181	17	**50**	2	69
+15 mins.	24	109	18	151	**42**	**56**	**27**	**125**	**6**	162	32	200	20	35	1	56
+30 mins.	23	120	15	158	25	36	18	79	5	**224**	28	**257**	**27**	45	**5**	**77**
+45 mins.	27	**134**	10	**171**	30	37	21	88	6	175	**33**	214	23	31	1	55
Total Volume	101	466	67	634	131	177	88	396	21	718	113	852	87	161	9	257
% App. Total	15.9	73.5	10.6		33.1	44.7	22.2		2.5	84.3	13.3		33.9	62.6	3.5	
PHF	.935	.869	.698	.927	.780	.790	.815	.792	.875	.801	.856	.829	.806	.805	.450	.834

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	0	3	0	3	0	1	1	2	0	5	1	6	0	0	0	0	11
04:15 PM	0	4	0	4	0	0	0	0	0	3	2	5	1	0	0	1	10
04:30 PM	0	2	0	2	0	1	1	2	0	5	2	7	0	0	0	0	11
04:45 PM	0	0	0	0	1	0	0	1	0	4	0	4	0	0	0	0	5
Total	0	9	0	9	1	2	2	5	0	17	5	22	1	0	0	1	37
05:00 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:15 PM	1	1	0	2	1	0	1	2	0	1	1	2	0	2	0	2	8
05:30 PM	0	1	0	1	1	0	0	1	0	3	0	3	0	0	0	0	5
05:45 PM	0	4	0	4	0	1	0	1	0	1	0	1	0	0	0	0	6
Total	1	7	0	8	2	1	1	4	0	7	1	8	0	2	0	2	22
Grand Total	1	16	0	17	3	3	3	9	0	24	6	30	1	2	0	3	59
Apprch %	5.9	94.1	0		33.3	33.3	33.3		0	80	20		33.3	66.7	0		
Total %	1.7	27.1	0	28.8	5.1	5.1	5.1	15.3	0	40.7	10.2	50.8	1.7	3.4	0	5.1	

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:15 PM	**1**	1	0	2	**1**	0	**1**	**2**	0	1	**1**	2	0	**2**	0	**2**	**8**
05:30 PM	0	1	0	1	1	0	0	1	0	**3**	0	**3**	0	0	0	0	5
05:45 PM	0	**4**	0	**4**	0	**1**	0	1	0	1	0	1	0	0	0	0	6
Total Volume	1	7	0	8	2	1	1	4	0	7	1	8	0	2	0	2	22
% App. Total	12.5	87.5	0		50	25	25		0	87.5	12.5		0	100	0		
PHF	.250	.438	.000	.500	.500	.250	.250	.500	.000	.583	.250	.667	.000	.250	.000	.250	.688

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City of San Bernardino
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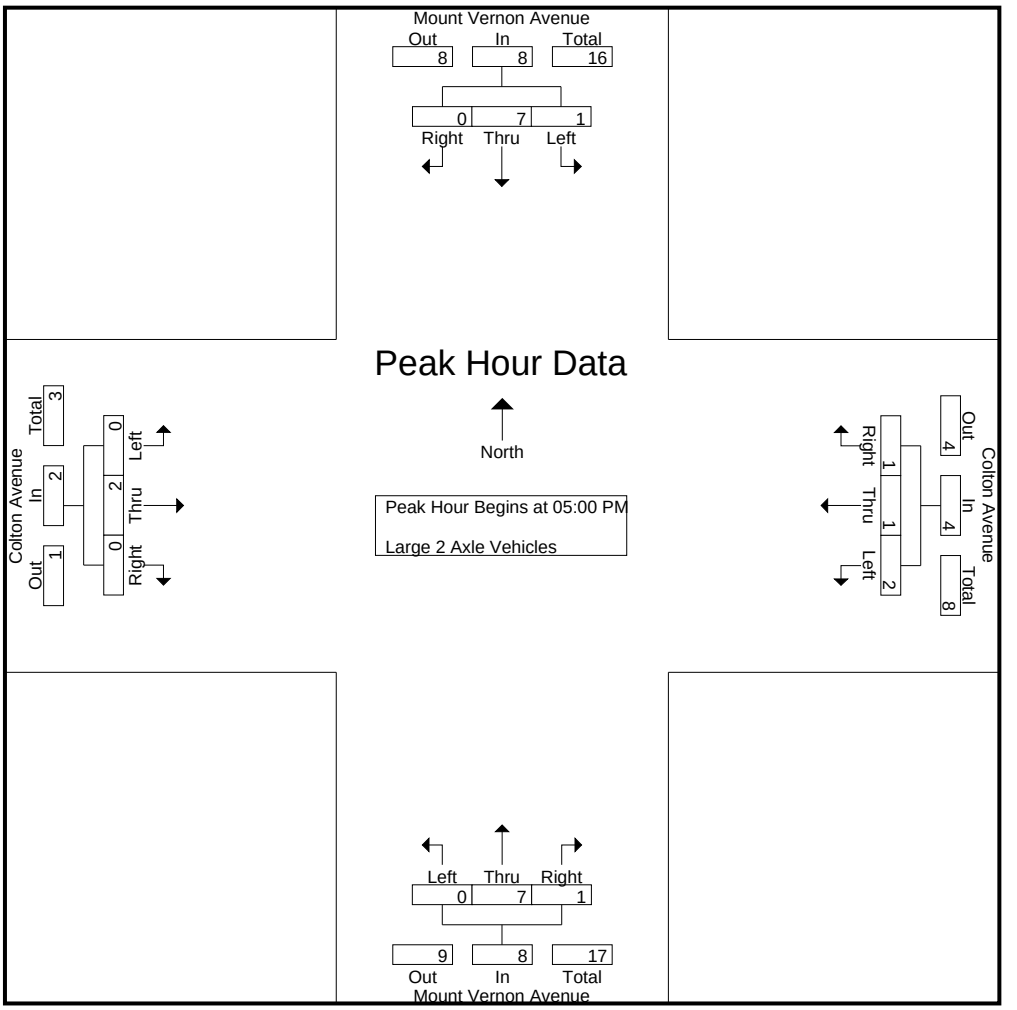
File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	**1**	1	0	2	**1**	0	**1**	**2**	0	1	**1**	2	0	**2**	0	**2**
+30 mins.	0	1	0	1	1	0	0	1	0	**3**	0	**3**	0	0	0	0
+45 mins.	0	**4**	0	**4**	0	**1**	0	1	0	1	0	1	0	0	0	0
Total Volume	1	7	0	8	2	1	1	4	0	7	1	8	0	2	0	2
% App. Total	12.5	87.5	0		50	25	25		0	87.5	12.5		0	100	0	
PHF	.250	.438	.000	.500	.500	.250	.250	.500	.000	.583	.250	.667	.000	.250	.000	.250

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City of San Bernardino
N/S: Mount Vernon Avenue
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Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	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	0	0
Grand Total	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Apprch %	0	75	25		0	0	0		0	0	0		0	0	0		
Total %	0	75	25	100	0	0	0	0	0	0	0	0	0	0	0	0	

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of San Bernardino
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File Name : 01_SBC_Mt Vernon_Colton PM
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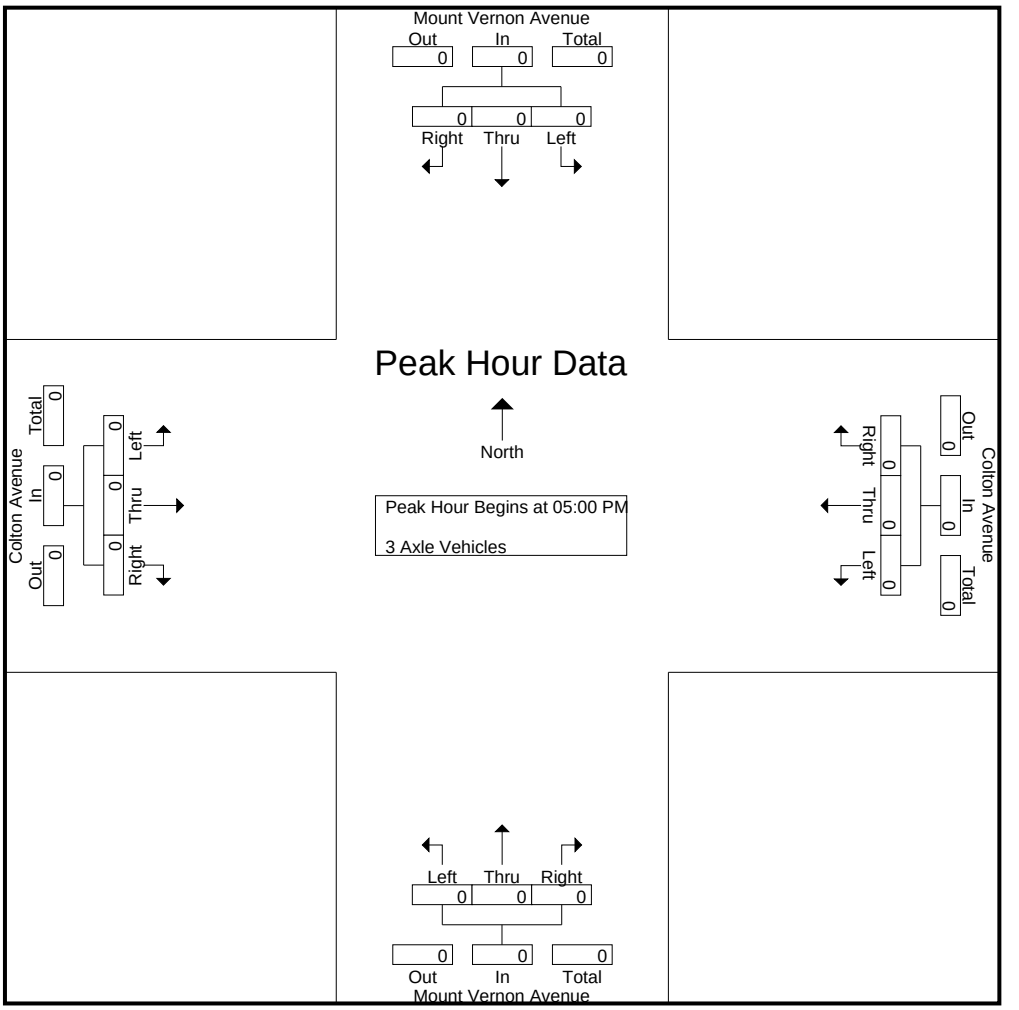

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
05:00 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	3	1	0	0	1	0	1	0	1	0	0	0	0	5
Grand Total	0	7	0	7	1	0	0	1	0	3	0	3	0	0	0	0	11
Apprch %	0	100	0		100	0	0		0	100	0		0	0	0		
Total %	0	63.6	0	63.6	9.1	0	0	9.1	0	27.3	0	27.3	0	0	0	0	

	Mount Vernon Avenue Southbound				Colton Avenue Westbound				Mount Vernon Avenue Northbound				Colton 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	**2**
05:15 PM	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0	2
05:30 PM	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	3	0	3	1	0	0	1	0	1	0	1	0	0	0	0	5
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0		
PHF	.000	.375	.000	.375	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.625

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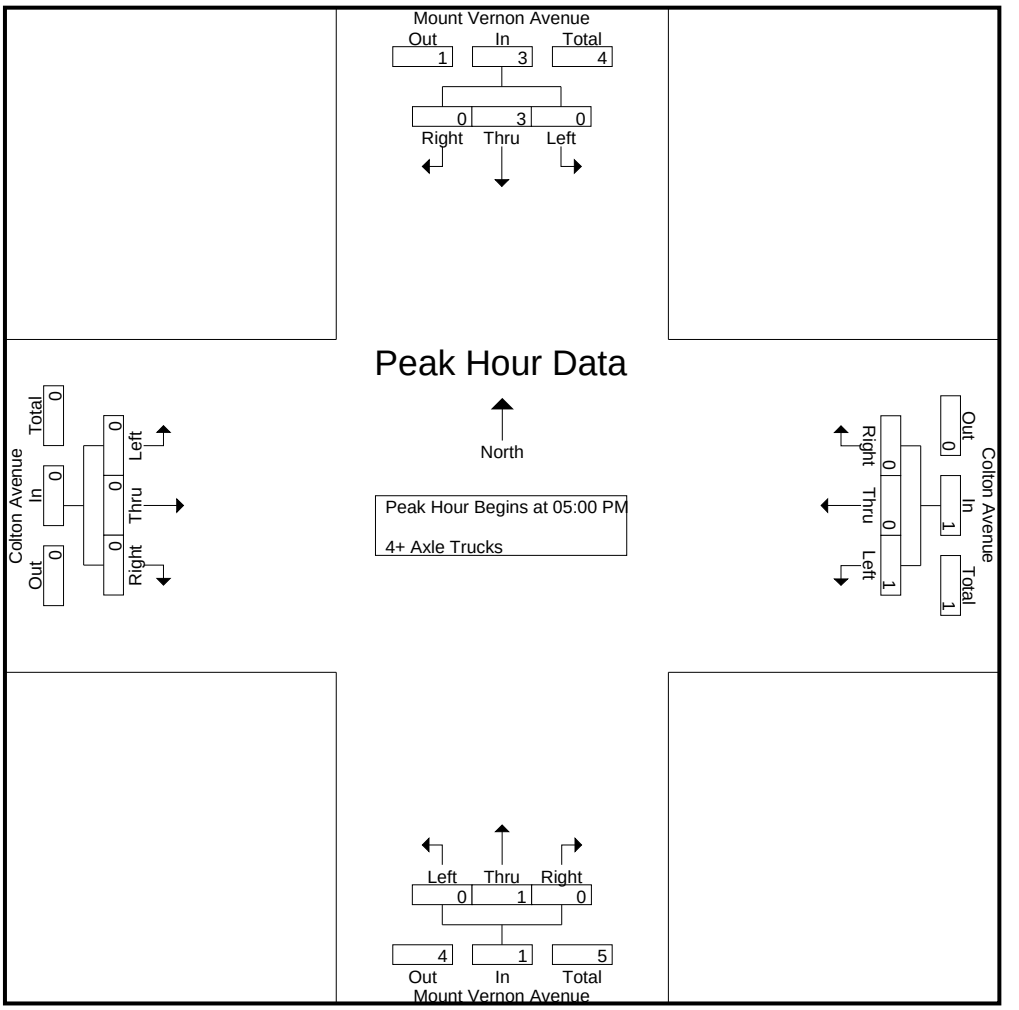
City of San Bernardino
N/S: Mount Vernon Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 01_SBC_Mt Vernon_Colton PM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+30 mins.	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	3	0	3	1	0	0	1	0	1	0	1	0	0	0	0
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0	
PHF	.000	.375	.000	.375	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000

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City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	11	19	30	43	15	58	20	25	45	133
07:15 AM	18	25	43	47	28	75	33	18	51	169
07:30 AM	15	41	56	64	31	95	45	41	86	237
07:45 AM	12	18	30	57	5	62	8	46	54	146
Total	56	103	159	211	79	290	106	130	236	685
08:00 AM	9	6	15	55	6	61	5	31	36	112
08:15 AM	4	4	8	46	2	48	3	39	42	98
08:30 AM	7	7	14	32	4	36	2	51	53	103
08:45 AM	8	2	10	58	6	64	0	33	33	107
Total	28	19	47	191	18	209	10	154	164	420
Grand Total	84	122	206	402	97	499	116	284	400	1105
Apprch %	40.8	59.2		80.6	19.4		29	71		
Total %	7.6	11	18.6	36.4	8.8	45.2	10.5	25.7	36.2	
Passenger Vehicles	83	120	203	386	96	482	111	273	384	1069
% Passenger Vehicles	98.8	98.4	98.5	96	99	96.6	95.7	96.1	96	96.7
Large 2 Axle Vehicles	1	1	2	13	1	14	3	10	13	29
% Large 2 Axle Vehicles										
3 Axle Vehicles	0	0	0	1	0	1	0	1	1	2
% 3 Axle Vehicles	0	0	0	0.2	0	0.2	0	0.4	0.2	0.2
4+ Axle Trucks	0	1	1	2	0	2	2	0	2	5
% 4+ Axle Trucks	0	0.8	0.5	0.5	0	0.4	1.7	0	0.5	0.5

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue 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 07:00 AM										
07:00 AM	11	19	30	43	15	58	20	25	45	133
07:15 AM	**18**	25	43	47	28	75	33	18	51	169
07:30 AM	15	**41**	**56**	**64**	**31**	**95**	**45**	41	**86**	**237**
07:45 AM	12	18	30	57	5	62	8	**46**	54	146
Total Volume	56	103	159	211	79	290	106	130	236	685
% App. Total	35.2	64.8		72.8	27.2		44.9	55.1		
PHF	.778	.628	.710	.824	.637	.763	.589	.707	.686	.723

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City of San Bernardino
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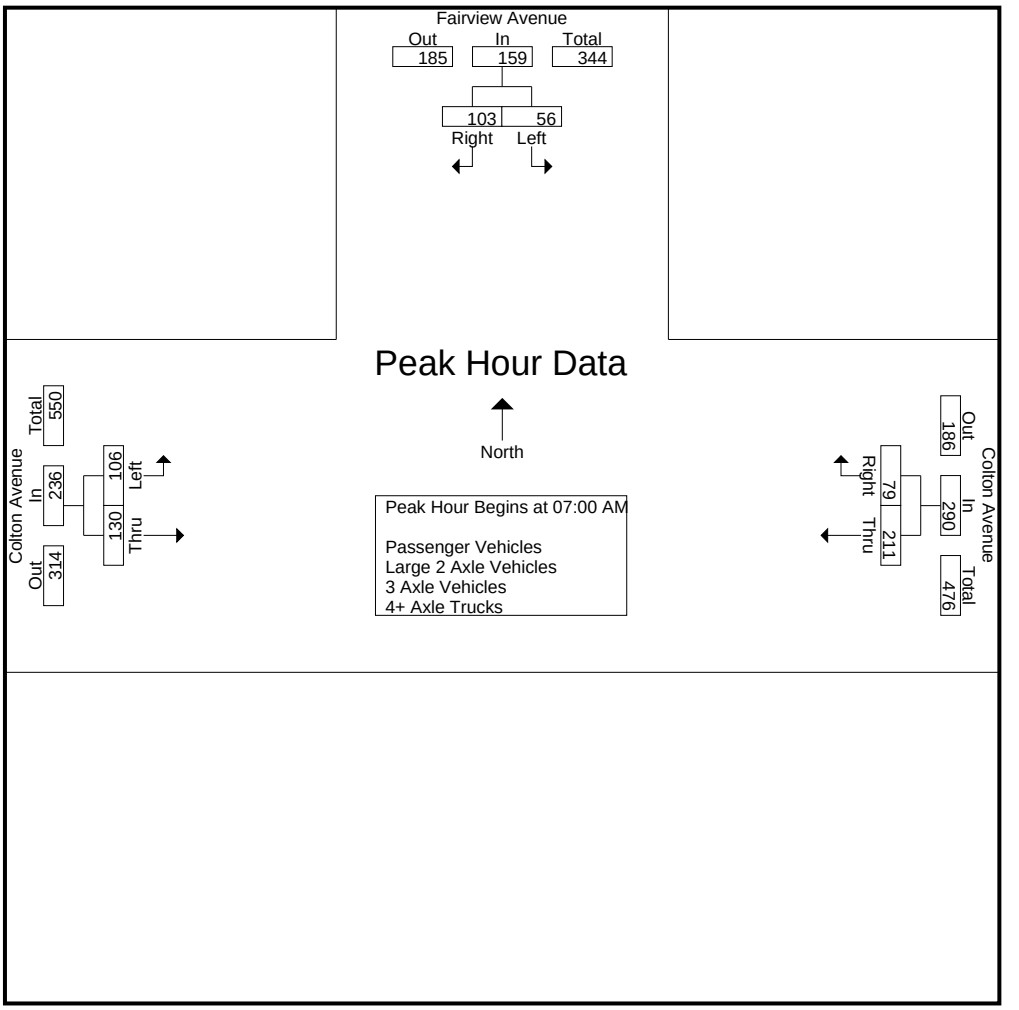

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:15 AM			07:00 AM		
+0 mins.	11	19	30	47	28	75	20	25	45
+15 mins.	**18**	25	43	**64**	**31**	**95**	33	18	51
+30 mins.	15	**41**	**56**	57	5	62	**45**	41	**86**
+45 mins.	12	18	30	55	6	61	8	**46**	54
Total Volume	56	103	159	223	70	293	106	130	236
% App. Total	35.2	64.8		76.1	23.9		44.9	55.1	
PHF	.778	.628	.710	.871	.565	.771	.589	.707	.686

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City of San Bernardino
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Groups Printed- Passenger Vehicles

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	11	19	30	41	15	56	17	22	39	125
07:15 AM	18	25	43	45	28	73	33	18	51	167
07:30 AM	15	40	55	63	31	94	45	40	85	234
07:45 AM	12	18	30	56	5	61	8	45	53	144
Total	56	102	158	205	79	284	103	125	228	670
08:00 AM	9	6	15	54	6	60	5	30	35	110
08:15 AM	4	4	8	43	2	45	1	37	38	91
08:30 AM	7	6	13	30	4	34	2	49	51	98
08:45 AM	7	2	9	54	5	59	0	32	32	100
Total	27	18	45	181	17	198	8	148	156	399
Grand Total	83	120	203	386	96	482	111	273	384	1069
Apprch %	40.9	59.1		80.1	19.9		28.9	71.1		
Total %	7.8	11.2	19	36.1	9	45.1	10.4	25.5	35.9	

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue 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 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	11	19	30	41	15	56	17	22	39	125
07:15 AM	**18**	25	43	45	28	73	33	18	51	167
07:30 AM	15	**40**	**55**	**63**	**31**	**94**	**45**	40	**85**	**234**
07:45 AM	12	18	30	56	5	61	8	**45**	53	144
Total Volume	56	102	158	205	79	284	103	125	228	670
% App. Total	35.4	64.6		72.2	27.8		45.2	54.8		
PHF	.778	.638	.718	.813	.637	.755	.572	.694	.671	.716

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Site Code : 10518598
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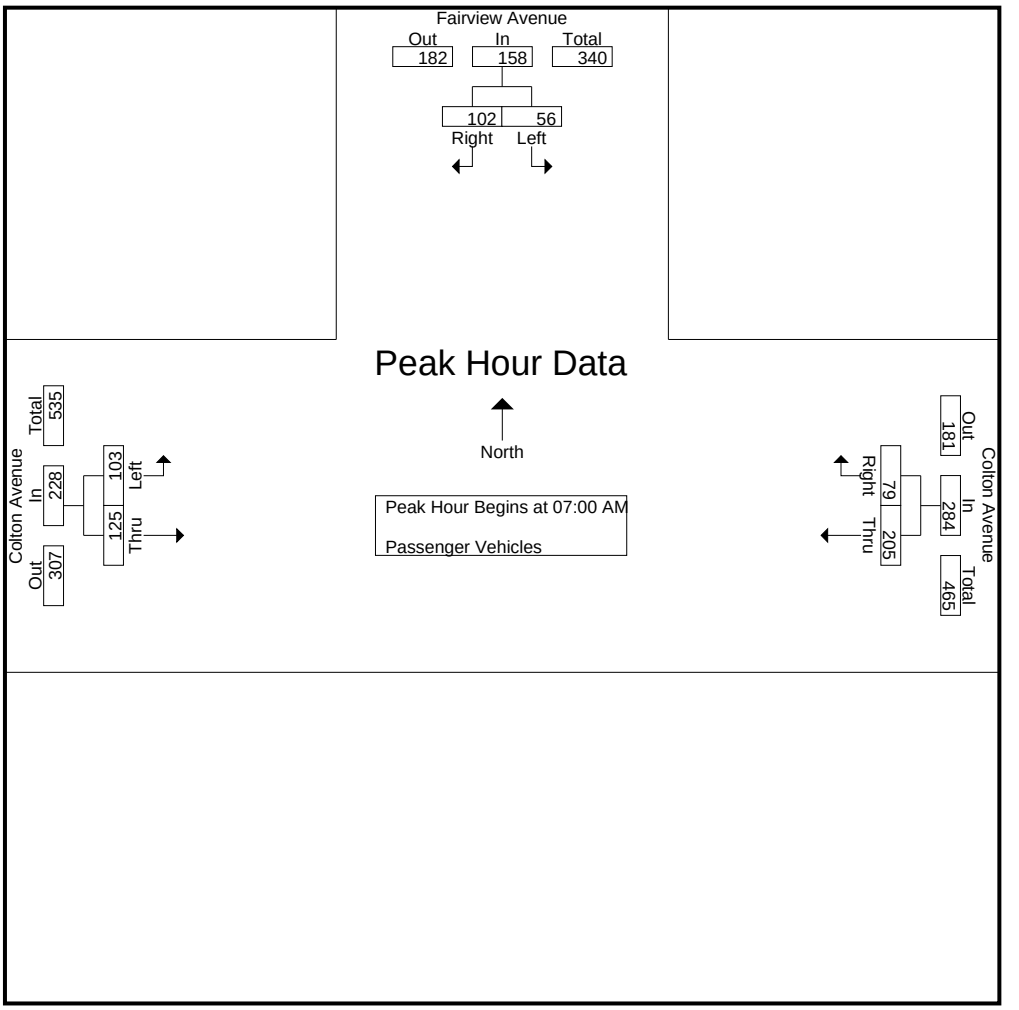

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	11	19	30	41	15	56	17	22	39
+15 mins.	**18**	25	43	45	28	73	33	18	51
+30 mins.	15	**40**	**55**	**63**	**31**	**94**	**45**	40	**85**
+45 mins.	12	18	30	56	5	61	8	**45**	53
Total Volume	56	102	158	205	79	284	103	125	228
% App. Total	35.4	64.6		72.2	27.8		45.2	54.8	
PHF	.778	.638	.718	.813	.637	.755	.572	.694	.671

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Groups Printed- Large 2 Axle Vehicles

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	2	0	2	2	2	4	6
07:15 AM	0	0	0	1	0	1	0	0	0	1
07:30 AM	0	0	0	1	0	1	0	1	1	2
07:45 AM	0	0	0	1	0	1	0	1	1	2
Total	0	0	0	5	0	5	2	4	6	11
08:00 AM	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	3	0	3	1	2	3	6
08:30 AM	0	1	1	1	0	1	0	2	2	4
08:45 AM	1	0	1	4	1	5	0	1	1	7
Total	1	1	2	8	1	9	1	6	7	18
Grand Total	1	1	2	13	1	14	3	10	13	29
Apprch %	50	50		92.9	7.1		23.1	76.9		
Total %	3.4	3.4	6.9	44.8	3.4	48.3	10.3	34.5	44.8	

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue 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 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	**2**	0	**2**	**2**	**2**	**4**	**6**
07:15 AM	0	0	0	1	0	1	0	0	0	1
07:30 AM	0	0	0	1	0	1	0	1	1	2
07:45 AM	0	0	0	1	0	1	0	1	1	2
Total Volume	0	0	0	5	0	5	2	4	6	11
% App. Total	0	0		100	0		33.3	66.7		
PHF	.000	.000	.000	.625	.000	.625	.250	.500	.375	.458

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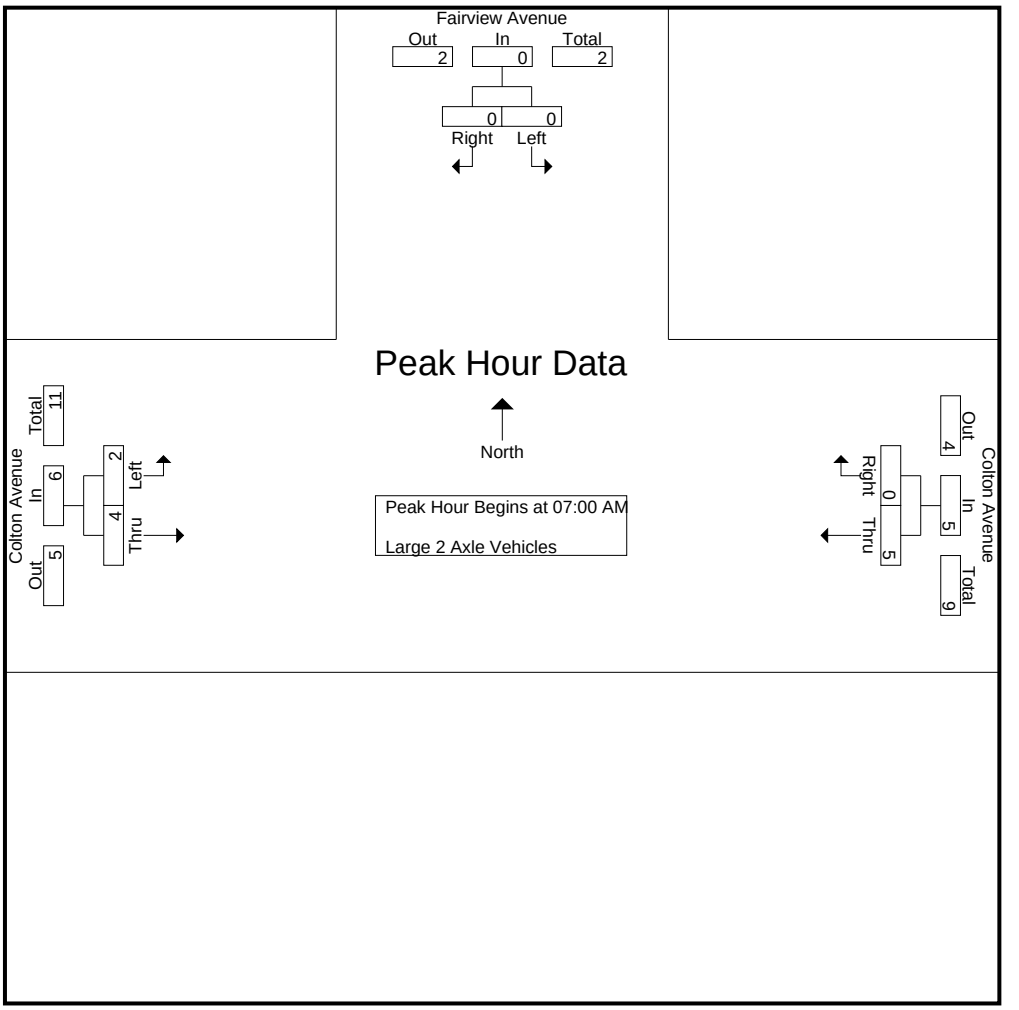

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	**2**	0	**2**	**2**	**2**	**4**
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	1	0	1	0	1	1
+45 mins.	0	0	0	1	0	1	0	1	1
Total Volume	0	0	0	5	0	5	2	4	6
% App. Total	0	0		100	0		33.3	66.7	
PHF	.000	.000	.000	.625	.000	.625	.250	.500	.375

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N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton AM
Site Code : 10518598
Start Date : 8/16/2018

Groups Printed- 3 Axle Vehicles

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	1	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	0	0	1
Grand Total	0	0	0	1	0	1	0	1	1	2
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	50	0	50	0	50	50	

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue 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 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	**1**	**1**	**1**
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0		0	0		0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

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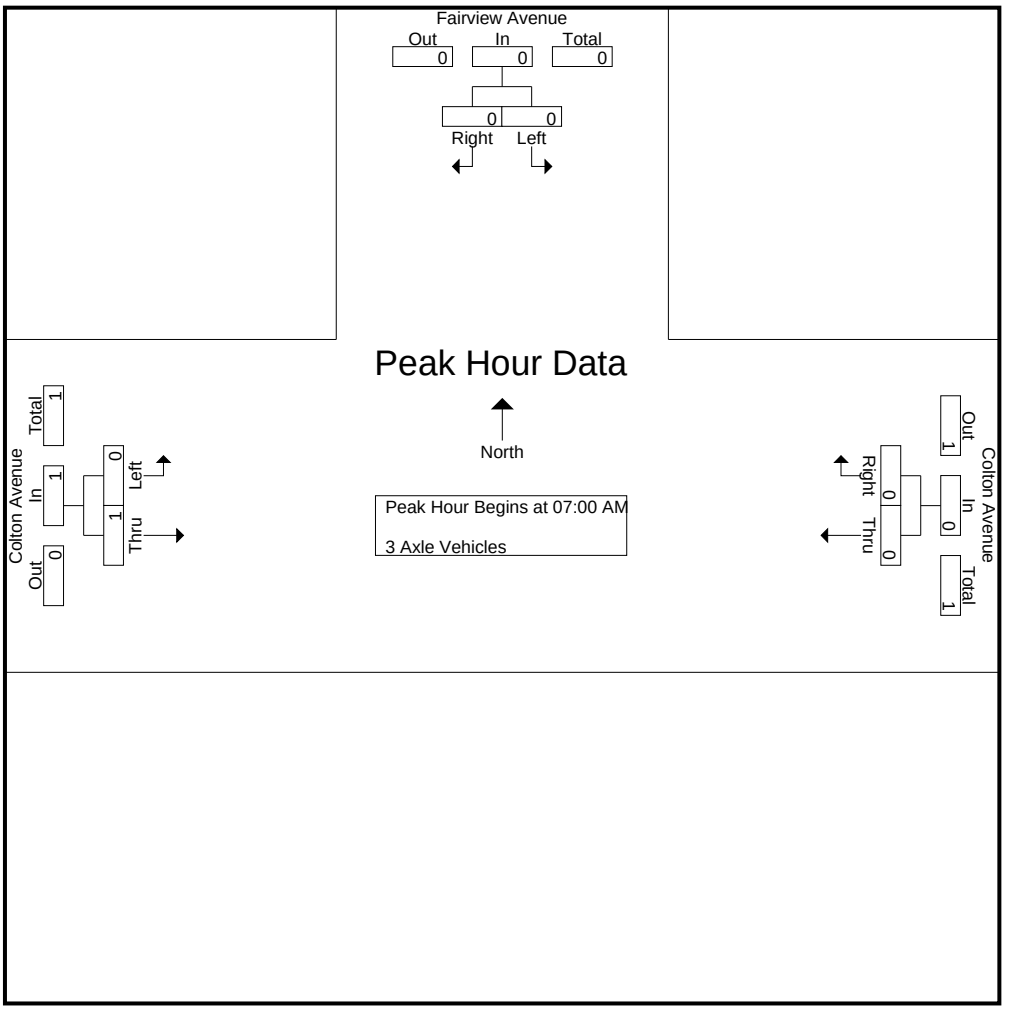

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	**1**	**1**
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	1
% App. Total	0	0		0	0		0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250

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Groups Printed- 4+ Axle Trucks

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	1	0	1	0	0	0	1
07:30 AM	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	1	0	1	1	0	1	3
08:00 AM	0	0	0	1	0	1	0	0	0	1
08:15 AM	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	1	0	1	2
Grand Total	0	1	1	2	0	2	2	0	2	5
Apprch %	0	100		100	0		100	0		
Total %	0	20	20	40	0	40	40	0	40	

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue 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 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	**1**	0	**1**	**1**
07:15 AM	0	0	0	**1**	0	**1**	0	0	0	1
07:30 AM	0	**1**	**1**	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	1	0	1	1	0	1	3
% App. Total	0	100		100	0		100	0		
PHF	.000	.250	.250	.250	.000	.250	.250	.000	.250	.750

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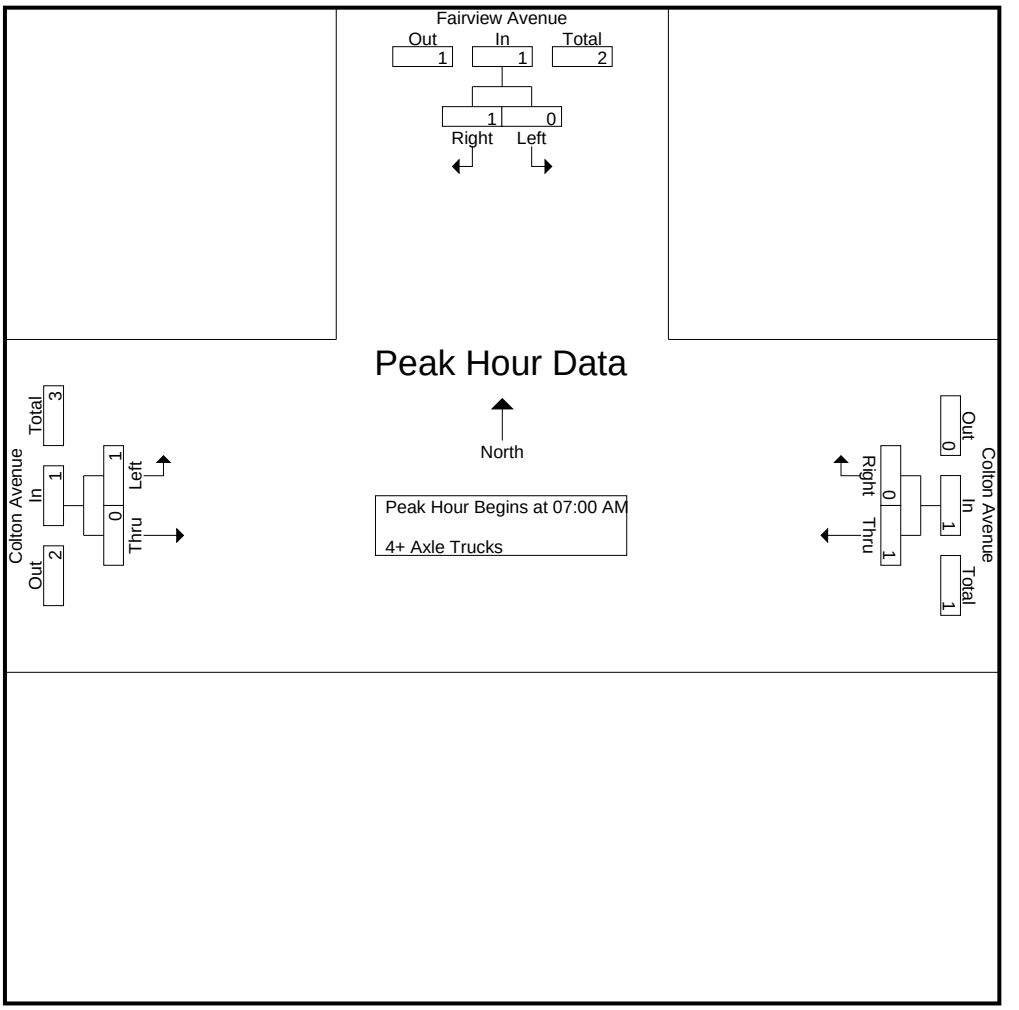

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	**1**	0	**1**	0	0	0
+30 mins.	0	**1**	**1**	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	1	0	1	1	0	1
% App. Total	0	100		100	0		100	0	
PHF	.000	.250	.250	.250	.000	.250	.250	.000	.250

Counts Unlimited
PO Box 1178
Corona, CA 92878
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City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	5	3	8	75	13	88	14	54	68	164
04:15 PM	5	0	5	69	16	85	14	74	88	178
04:30 PM	7	6	13	90	25	115	20	74	94	222
04:45 PM	9	2	11	59	17	76	18	61	79	166
Total	26	11	37	293	71	364	66	263	329	730
05:00 PM	8	9	17	82	16	98	14	81	95	210
05:15 PM	8	10	18	99	23	122	16	91	107	247
05:30 PM	12	12	24	77	14	91	8	89	97	212
05:45 PM	15	15	30	84	16	100	8	86	94	224
Total	43	46	89	342	69	411	46	347	393	893
Grand Total	69	57	126	635	140	775	112	610	722	1623
Apprch %	54.8	45.2		81.9	18.1		15.5	84.5		
Total %	4.3	3.5	7.8	39.1	8.6	47.8	6.9	37.6	44.5	
Passenger Vehicles	69	57	126	626	140	766	112	605	717	1609
% Passenger Vehicles	100	100	100	98.6	100	98.8	100	99.2	99.3	99.1
Large 2 Axle Vehicles	0	0	0	6	0	6	0	3	3	9
% Large 2 Axle Vehicles										
3 Axle Vehicles	0	0	0	2	0	2	0	0	0	2
% 3 Axle Vehicles	0	0	0	0.3	0	0.3	0	0	0	0.1
4+ Axle Trucks	0	0	0	1	0	1	0	2	2	3
% 4+ Axle Trucks	0	0	0	0.2	0	0.1	0	0.3	0.3	0.2

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue 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 05:00 PM										
05:00 PM	8	9	17	82	16	98	14	81	95	210
05:15 PM	8	10	18	**99**	**23**	**122**	**16**	**91**	**107**	**247**
05:30 PM	12	12	24	77	14	91	8	89	97	212
05:45 PM	**15**	**15**	**30**	84	16	100	8	86	94	224
Total Volume	43	46	89	342	69	411	46	347	393	893
% App. Total	48.3	51.7		83.2	16.8		11.7	88.3		
PHF	.717	.767	.742	.864	.750	.842	.719	.953	.918	.904

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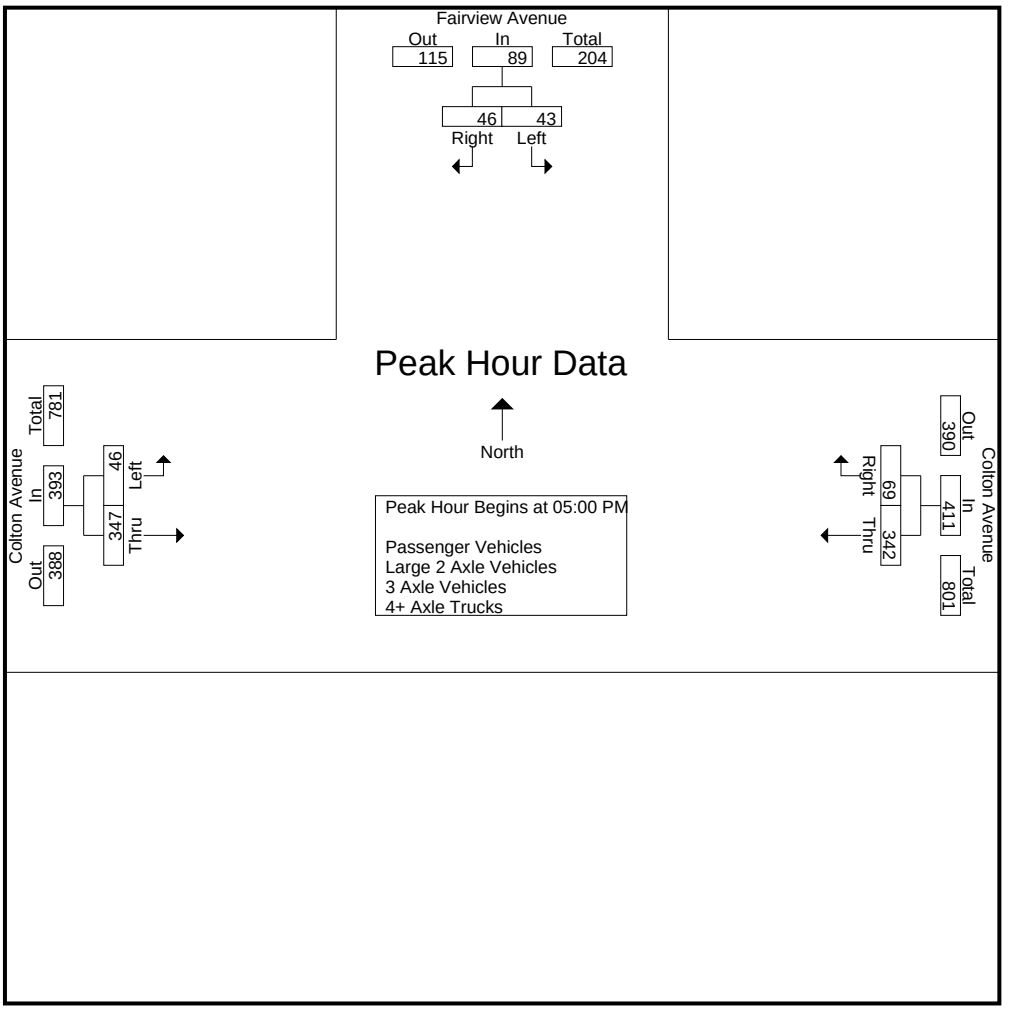
City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			05:00 PM		
+0 mins.	8	9	17	90	**25**	115	14	81	95
+15 mins.	8	10	18	59	17	76	**16**	**91**	**107**
+30 mins.	12	12	24	82	16	98	8	89	97
+45 mins.	**15**	**15**	**30**	**99**	23	**122**	8	86	94
Total Volume	43	46	89	330	81	411	46	347	393
% App. Total	48.3	51.7		80.3	19.7		11.7	88.3	
PHF	.717	.767	.742	.833	.810	.842	.719	.953	.918

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City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
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Groups Printed- Passenger Vehicles

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	5	3	8	74	13	87	14	54	68	163
04:15 PM	5	0	5	67	16	83	14	74	88	176
04:30 PM	7	6	13	90	25	115	20	72	92	220
04:45 PM	9	2	11	57	17	74	18	60	78	163
Total	26	11	37	288	71	359	66	260	326	722
05:00 PM	8	9	17	80	16	96	14	81	95	208
05:15 PM	8	10	18	98	23	121	16	90	106	245
05:30 PM	12	12	24	77	14	91	8	89	97	212
05:45 PM	15	15	30	83	16	99	8	85	93	222
Total	43	46	89	338	69	407	46	345	391	887
Grand Total	69	57	126	626	140	766	112	605	717	1609
Apprch %	54.8	45.2		81.7	18.3		15.6	84.4		
Total %	4.3	3.5	7.8	38.9	8.7	47.6	7	37.6	44.6	

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	8	9	17	80	16	96	14	81	95	208
05:15 PM	8	10	18	**98**	**23**	**121**	**16**	**90**	**106**	**245**
05:30 PM	12	12	24	77	14	91	8	89	97	212
05:45 PM	**15**	**15**	**30**	83	16	99	8	85	93	222
Total Volume	43	46	89	338	69	407	46	345	391	887
% App. Total	48.3	51.7		83	17		11.8	88.2		
PHF	.717	.767	.742	.862	.750	.841	.719	.958	.922	.905

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City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
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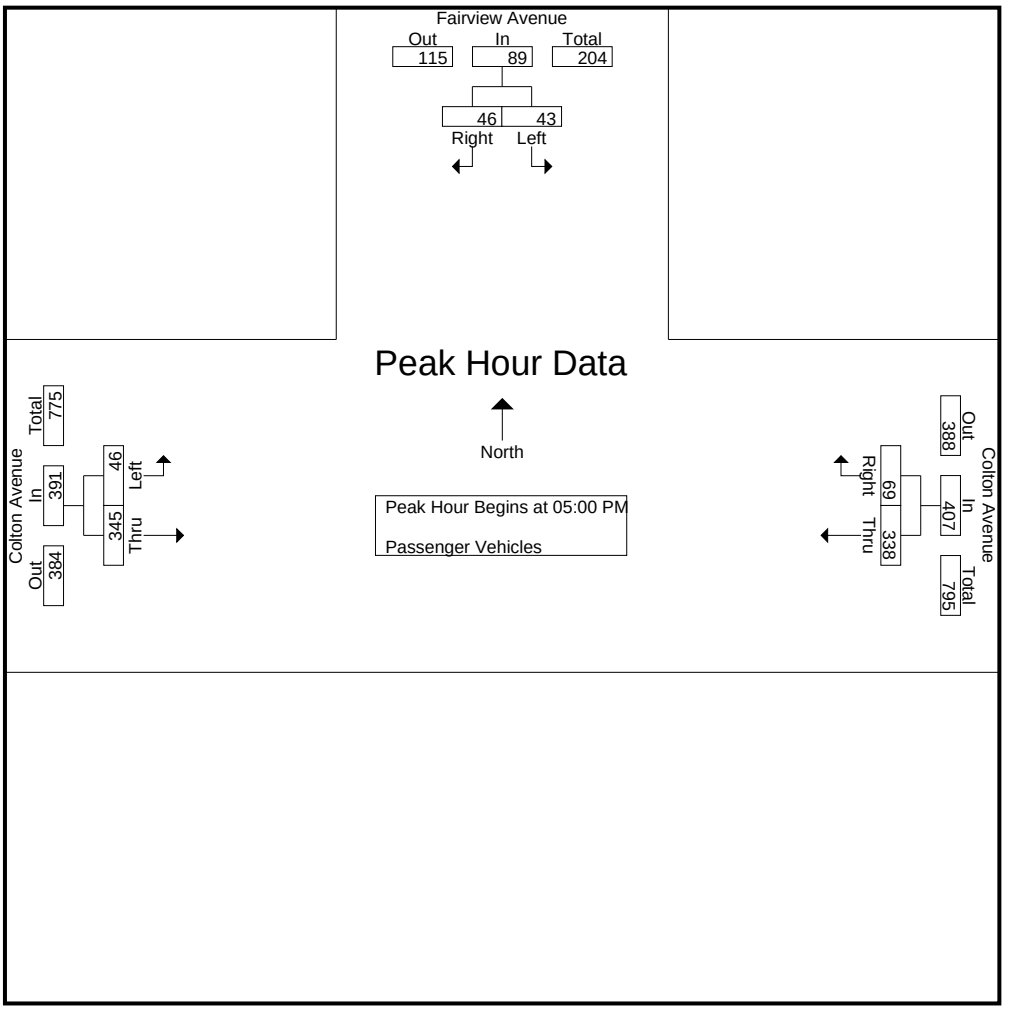

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	8	9	17	80	16	96	14	81	95
+15 mins.	8	10	18	**98**	**23**	**121**	**16**	**90**	**106**
+30 mins.	12	12	24	77	14	91	8	89	97
+45 mins.	**15**	**15**	**30**	83	16	99	8	85	93
Total Volume	43	46	89	338	69	407	46	345	391
% App. Total	48.3	51.7		83	17		11.8	88.2	
PHF	.717	.767	.742	.862	.750	.841	.719	.958	.922

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City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	2	2	2
04:45 PM	0	0	0	2	0	2	0	0	0	2
Total	0	0	0	4	0	4	0	2	2	6
05:00 PM	0	0	0	1	0	1	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	1	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	2	0	2	0	1	1	3
Grand Total	0	0	0	6	0	6	0	3	3	9
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	66.7	0	66.7	0	33.3	33.3	

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	**1**	0	**1**	0	0	0	**1**
05:15 PM	0	0	0	0	0	0	0	**1**	**1**	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	1	0	1	0	0	0	1
Total Volume	0	0	0	2	0	2	0	1	1	3
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.500	.000	.500	.000	.250	.250	.750

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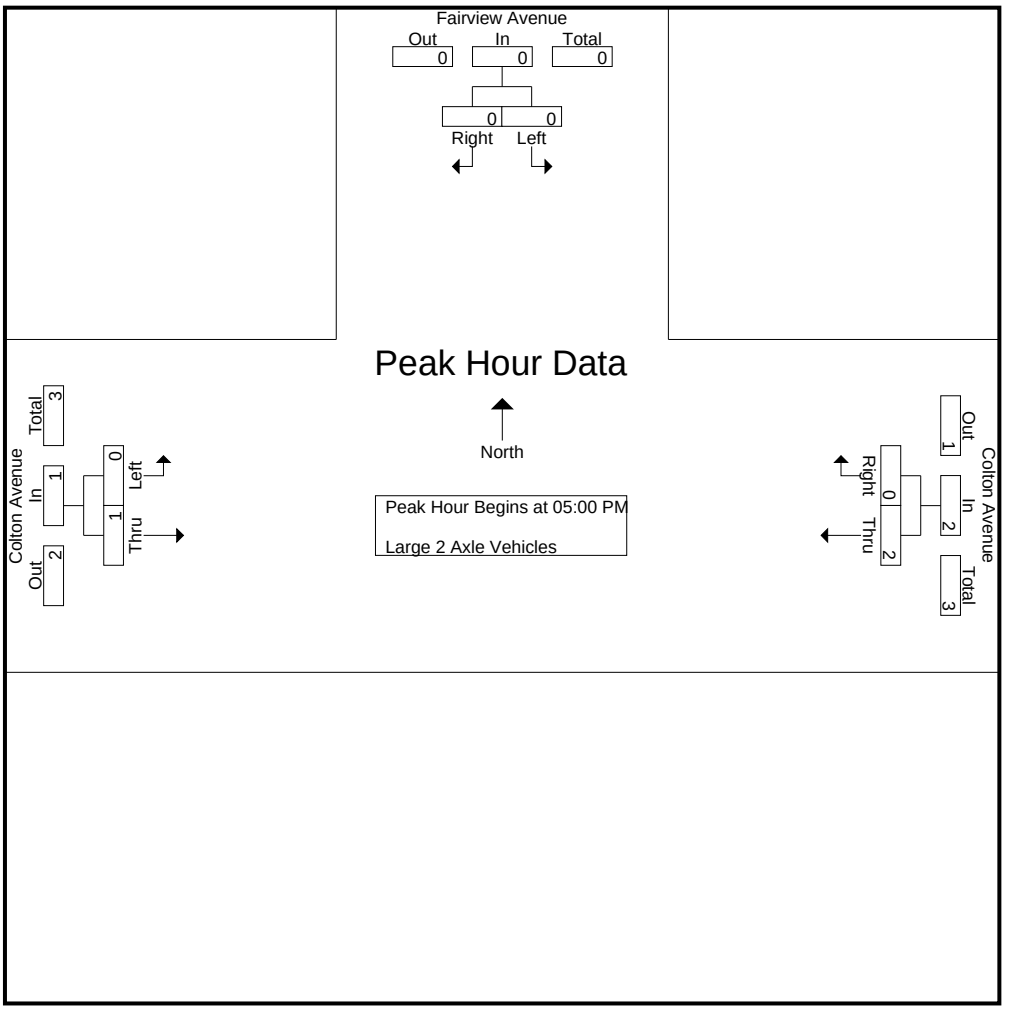
City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	**1**	0	**1**	0	0	0
+15 mins.	0	0	0	0	0	0	0	**1**	**1**
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	1	0	1	0	0	0
Total Volume	0	0	0	2	0	2	0	1	1
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.500	.000	.500	.000	.250	.250

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City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018

Groups Printed- 3 Axle Vehicles

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	0	0	1
05:00 PM	0	0	0	1	0	1	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	0	0	1
Grand Total	0	0	0	2	0	2	0	0	0	2
Apprch %	0	0		100	0		0	0		
Total %	0	0	0	100	0	100	0	0	0	

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	**1**	0	**1**	0	0	0	**1**
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	0	0	1
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000	.250

Counts Unlimited
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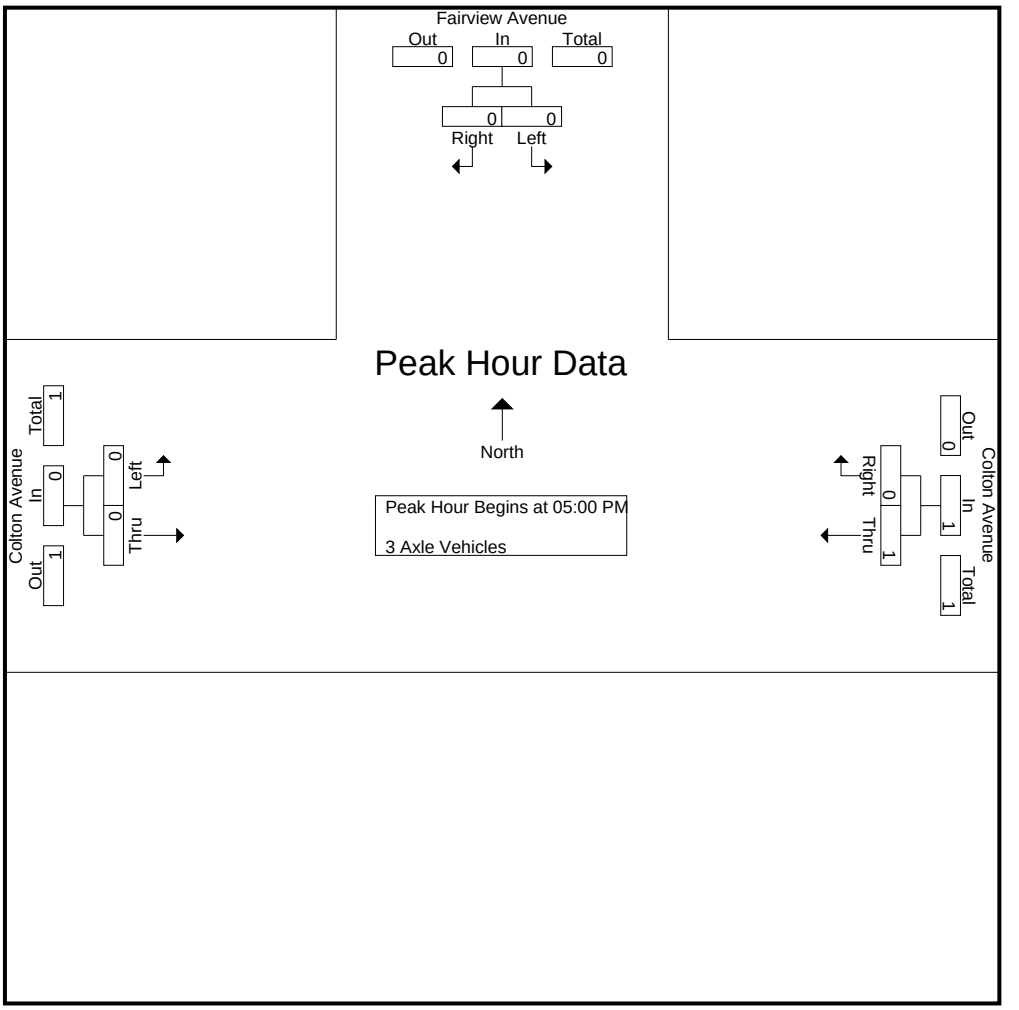
City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	**1**	0	**1**	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	0	0
% App. Total	0	0		100	0		0	0	
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000

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City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	1	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	1	0	1	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	1	0	1	0	1	1	2
Grand Total	0	0	0	1	0	1	0	2	2	3
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	33.3	0	33.3	0	66.7	66.7	

	Fairview Avenue Southbound			Colton Avenue Westbound			Colton Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	**1**	0	**1**	0	0	0	**1**
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	**1**	**1**	1
Total Volume	0	0	0	1	0	1	0	1	1	2
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.250	.000	.250	.000	.250	.250	.500

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City of San Bernardino
N/S: Fairview Avenue
E/W: Colton Avenue
Weather: Clear

File Name : 02_SBC_Fairview_Colton PM
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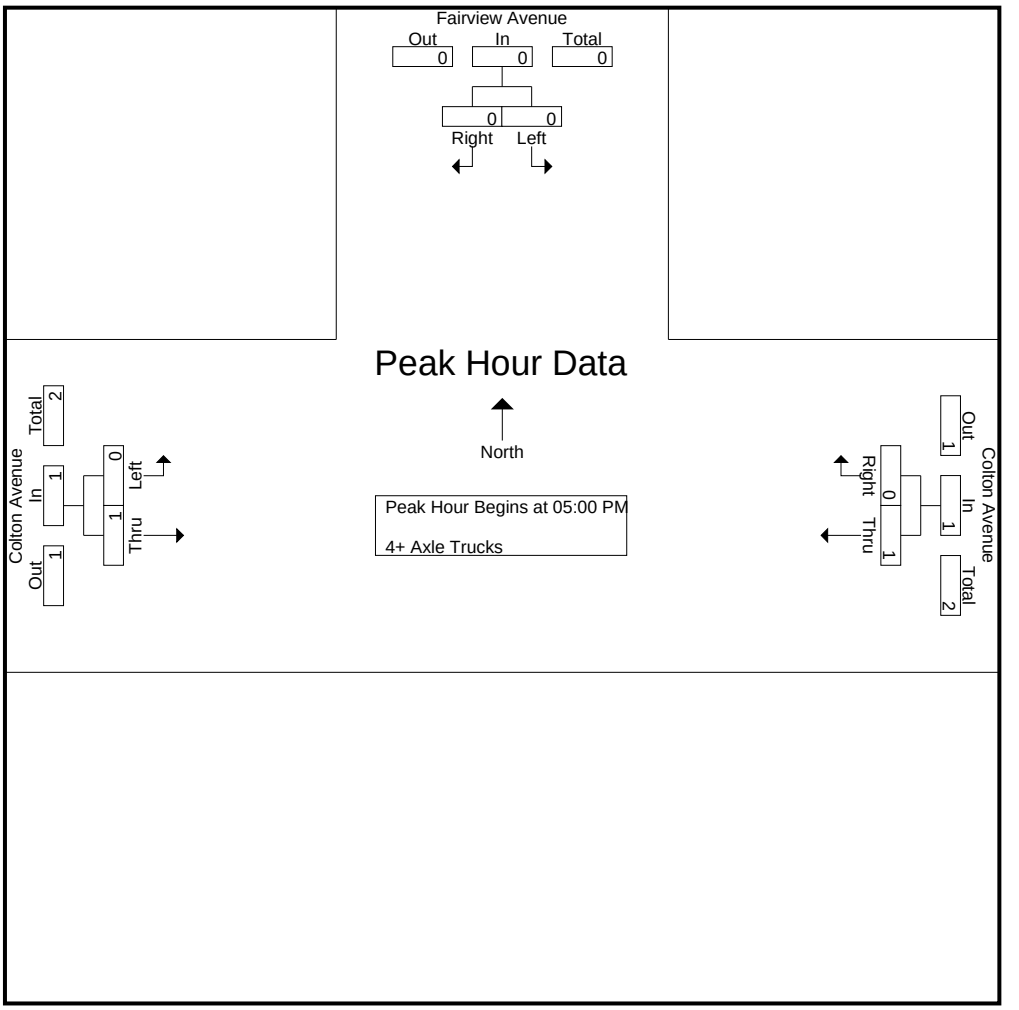

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	**1**	0	**1**	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	**1**	**1**
Total Volume	0	0	0	1	0	1	0	1	1
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.250	.000	.250	.000	.250	.250

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City of San Bernardino
N/S: I Street
E/W: Inland Center Drive
Weather: Clear

File Name : 03_SBC_I St_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	25	0	8	33	2	39	51	92	0	0	0	0	7	61	1	69	194
07:15 AM	43	0	6	49	1	61	62	124	1	0	0	1	9	54	1	64	238
07:30 AM	42	0	5	47	1	57	91	149	0	0	0	0	11	56	0	67	263
07:45 AM	63	0	6	69	0	57	147	204	0	0	0	0	18	81	0	99	372
Total	173	0	25	198	4	214	351	569	1	0	0	1	45	252	2	299	1067
08:00 AM	49	0	6	55	2	60	120	182	0	0	0	0	10	50	0	60	297
08:15 AM	45	0	7	52	0	43	80	123	0	0	1	1	14	45	0	59	235
08:30 AM	44	0	13	57	3	34	87	124	0	0	1	1	21	55	0	76	258
08:45 AM	51	0	19	70	0	46	107	153	0	0	2	2	18	52	0	70	295
Total	189	0	45	234	5	183	394	582	0	0	4	4	63	202	0	265	1085
Grand Total	362	0	70	432	9	397	745	1151	1	0	4	5	108	454	2	564	2152
Apprch %	83.8	0	16.2		0.8	34.5	64.7		20	0	80		19.1	80.5	0.4		
Total %	16.8	0	3.3	20.1	0.4	18.4	34.6	53.5	0	0	0.2	0.2	5	21.1	0.1	26.2	
Passenger Vehicles	351	0	67	418	7	384	739	1130	1	0	2	3	105	441	2	548	2099
% Passenger Vehicles	97	0	95.7	96.8	77.8	96.7	99.2	98.2	100	0	50	60	97.2	97.1	100	97.2	97.5
Large 2 Axle Vehicles	4	0	2	6	1	11	4	16	0	0	1	1	3	11	0	14	37
% Large 2 Axle Vehicles	1.1	0	2.9	1.4	11.1	2.8	0.5	1.4	0	0	25	20	2.8	2.4	0	2.5	1.7
3 Axle Vehicles	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
% 3 Axle Vehicles	0.3	0	0	0.2	0	0.3	0	0.1	0	0	0	0	0	0.2	0	0.2	0.1
4+ Axle Trucks	6	0	1	7	1	1	2	4	0	0	1	1	0	1	0	1	13
% 4+ Axle Trucks	1.7	0	1.4	1.6	11.1	0.3	0.3	0.3	0	0	25	20	0	0.2	0	0.2	0.6

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 07:15 AM																	
07:15 AM	43	0	**6**	49	1	**61**	62	124	**1**	0	0	**1**	9	54	**1**	64	238
07:30 AM	42	0	5	47	1	57	91	149	0	0	0	0	11	56	0	67	263
07:45 AM	**63**	0	6	**69**	0	57	**147**	**204**	0	0	0	0	**18**	**81**	0	**99**	**372**
08:00 AM	49	0	6	55	**2**	60	120	182	0	0	0	0	10	50	0	60	297
Total Volume	197	0	23	220	4	235	420	659	1	0	0	1	48	241	1	290	1170
% App. Total	89.5	0	10.5		0.6	35.7	63.7		100	0	0		16.6	83.1	0.3		
PHF	.782	.000	.958	.797	.500	.963	.714	.808	.250	.000	.000	.250	.667	.744	.250	.732	.786

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City of San Bernardino
N/S: I Street
E/W: Inland Center Drive
Weather: Clear

File Name : 03_SBC_I St_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
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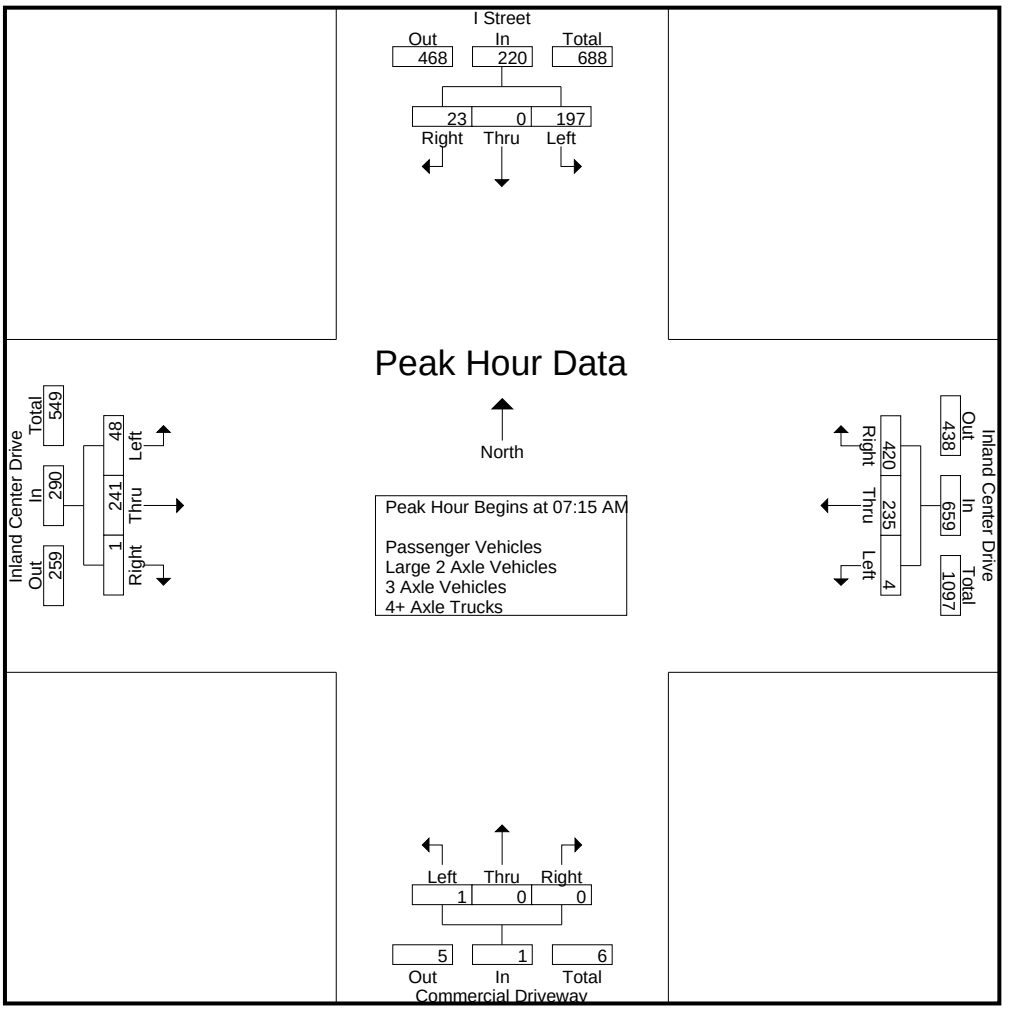

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:15 AM				08:00 AM				07:00 AM			
+0 mins.	49	0	6	55	1	**61**	62	124	0	0	0	0	7	61	**1**	69
+15 mins.	45	0	7	52	1	57	91	149	0	0	1	1	9	54	1	64
+30 mins.	44	0	13	57	0	57	**147**	**204**	0	0	1	1	11	56	0	67
+45 mins.	**51**	0	**19**	**70**	**2**	60	120	182	0	0	**2**	**2**	**18**	**81**	0	**99**
Total Volume	189	0	45	234	4	235	420	659	0	0	4	4	45	252	2	299
% App. Total	80.8	0	19.2		0.6	35.7	63.7		0	0	100		15.1	84.3	0.7	
PHF	.926	.000	.592	.836	.500	.963	.714	.808	.000	.000	.500	.500	.625	.778	.500	.755

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Groups Printed- Passenger Vehicles

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	25	0	8	33	2	38	51	91	0	0	0	0	6	58	1	65	189
07:15 AM	42	0	6	48	1	59	61	121	1	0	0	1	9	54	1	64	234
07:30 AM	42	0	5	47	1	54	91	146	0	0	0	0	9	56	0	65	258
07:45 AM	62	0	6	68	0	56	147	203	0	0	0	0	18	78	0	96	367
Total	171	0	25	196	4	207	350	561	1	0	0	1	42	246	2	290	1048
08:00 AM	47	0	5	52	2	58	119	179	0	0	0	0	10	47	0	57	288
08:15 AM	42	0	7	49	0	42	78	120	0	0	1	1	14	43	0	57	227
08:30 AM	41	0	13	54	1	32	85	118	0	0	0	0	21	55	0	76	248
08:45 AM	50	0	17	67	0	45	107	152	0	0	1	1	18	50	0	68	288
Total	180	0	42	222	3	177	389	569	0	0	2	2	63	195	0	258	1051
Grand Total	351	0	67	418	7	384	739	1130	1	0	2	3	105	441	2	548	2099
Apprch %	84	0	16		0.6	34	65.4		33.3	0	66.7		19.2	80.5	0.4		
Total %	16.7	0	3.2	19.9	0.3	18.3	35.2	53.8	0	0	0.1	0.1	5	21	0.1	26.1	

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	42	0	**6**	48	1	**59**	61	121	**1**	0	0	**1**	9	54	**1**	64	234
07:30 AM	42	0	5	47	1	54	91	146	0	0	0	0	9	56	0	65	258
07:45 AM	**62**	0	6	**68**	0	56	**147**	**203**	0	0	0	0	**18**	**78**	0	**96**	**367**
08:00 AM	47	0	5	52	**2**	58	119	179	0	0	0	0	10	47	0	57	288
Total Volume	193	0	22	215	4	227	418	649	1	0	0	1	46	235	1	282	1147
% App. Total	89.8	0	10.2		0.6	35	64.4		100	0	0		16.3	83.3	0.4		
PHF	.778	.000	.917	.790	.500	.962	.711	.799	.250	.000	.000	.250	.639	.753	.250	.734	.781

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Weather: Clear

File Name : 03_SBC_I St_Inland Center AM
Site Code : 10518598
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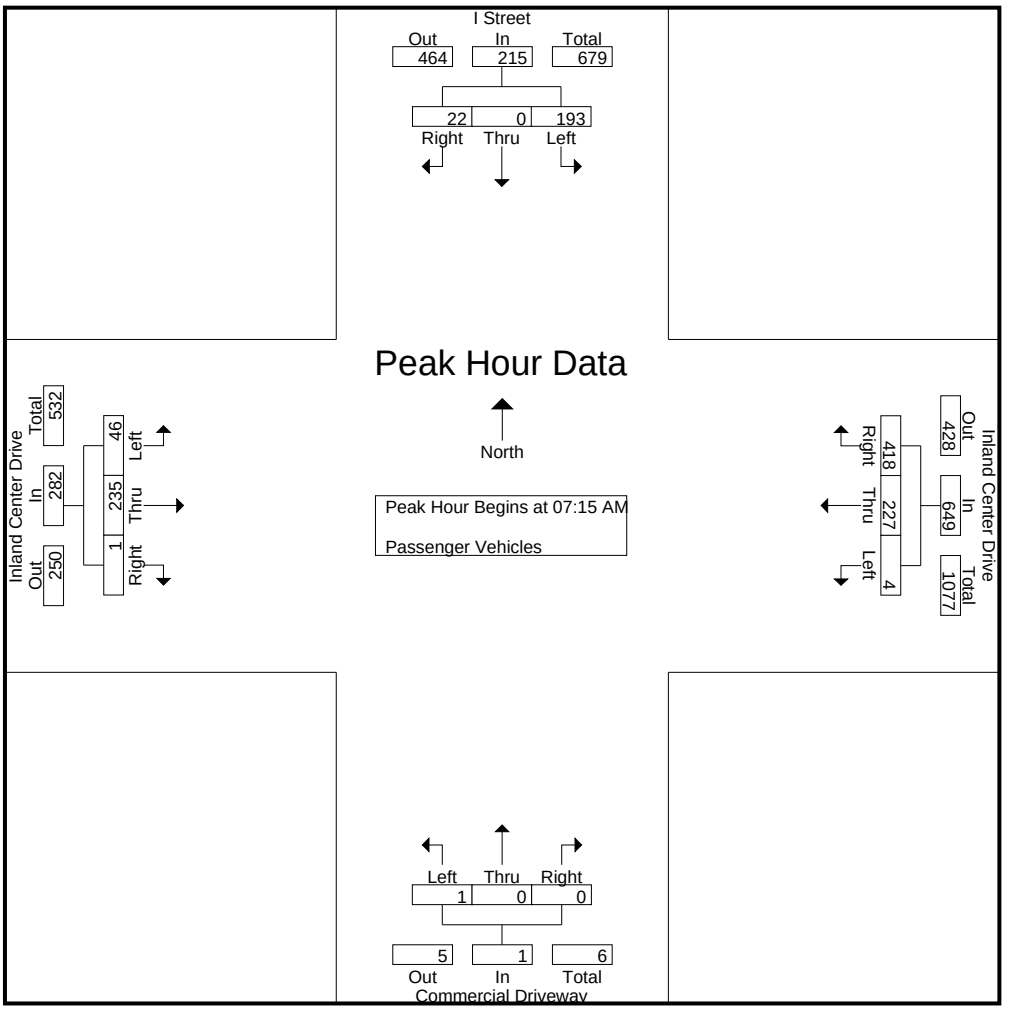

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	42	0	**6**	48	1	**59**	61	121	**1**	0	0	**1**	9	54	**1**	64
+15 mins.	42	0	5	47	1	54	91	146	0	0	0	0	9	56	0	65
+30 mins.	**62**	0	6	**68**	0	56	**147**	**203**	0	0	0	0	**18**	**78**	0	**96**
+45 mins.	47	0	5	52	**2**	58	119	179	0	0	0	0	10	47	0	57
Total Volume	193	0	22	215	4	227	418	649	1	0	0	1	46	235	1	282
% App. Total	89.8	0	10.2		0.6	35	64.4		100	0	0		16.3	83.3	0.4	
PHF	.778	.000	.917	.790	.500	.962	.711	.799	.250	.000	.000	.250	.639	.753	.250	.734

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Site Code : 10518598
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Groups Printed- Large 2 Axle Vehicles

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	0	0	0	0	0	1	0	1	0	0	0	0	1	2	0	3	4
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	2	0	0	2	5
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	6	0	6	0	0	0	0	3	4	0	7	13
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
08:15 AM	2	0	0	2	0	1	2	3	0	0	0	0	0	2	0	2	7
08:30 AM	1	0	0	1	1	1	2	4	0	0	1	1	0	0	0	0	6
08:45 AM	1	0	2	3	0	1	0	1	0	0	0	0	0	2	0	2	6
Total	4	0	2	6	1	5	4	10	0	0	1	1	0	7	0	7	24
Grand Total	4	0	2	6	1	11	4	16	0	0	1	1	3	11	0	14	37
Apprch %	66.7	0	33.3		6.2	68.8	25		0	0	100		21.4	78.6	0		
Total %	10.8	0	5.4	16.2	2.7	29.7	10.8	43.2	0	0	2.7	2.7	8.1	29.7	0	37.8	

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	**3**	0	**3**	0	0	0	0	**2**	0	0	2	**5**
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	**3**	0	**3**	5
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	2	5	0	7	14
% App. Total	0	0	0		0	100	0		0	0	0		28.6	71.4	0		
PHF	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.000	.000	.250	.417	.000	.583	.700

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City of San Bernardino
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File Name : 03_SBC_I St_Inland Center AM
Site Code : 10518598
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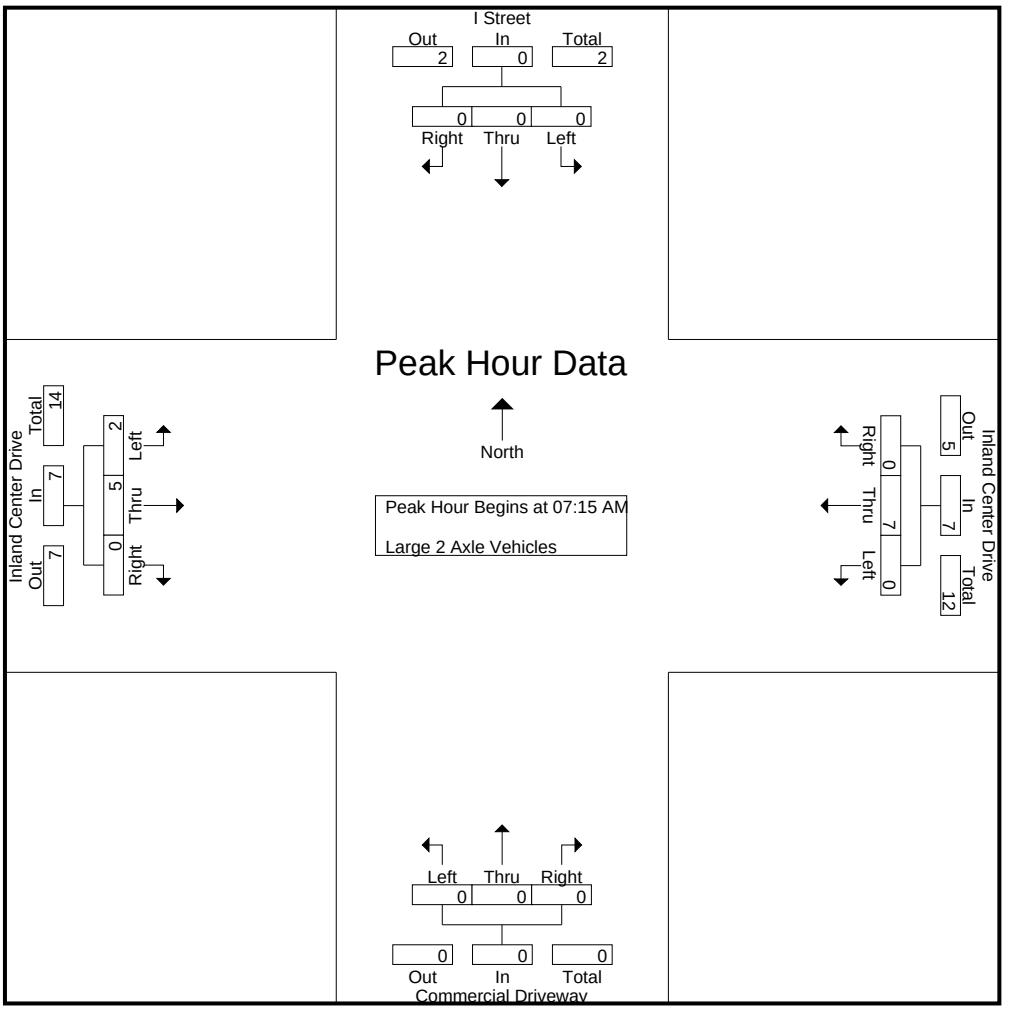

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	**3**	0	**3**	0	0	0	0	**2**	0	0	2
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	**3**	0	**3**
Total Volume	0	0	0	0	0	7	0	7	0	0	0	0	2	5	0	7
% App. Total	0	0	0		0	100	0		0	0	0		28.6	71.4	0	
PHF	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.000	.000	.250	.417	.000	.583

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City of San Bernardino
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E/W: Inland Center Drive
Weather: Clear

File Name : 03_SBC_I St_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Apprch %	100	0	0		0	100	0		0	0	0		0	100	0		
Total %	33.3	0	0	33.3	0	33.3	0	33.3	0	0	0	0	0	33.3	0	33.3	

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	100	0	0		0	0	0		0	0	0		0	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

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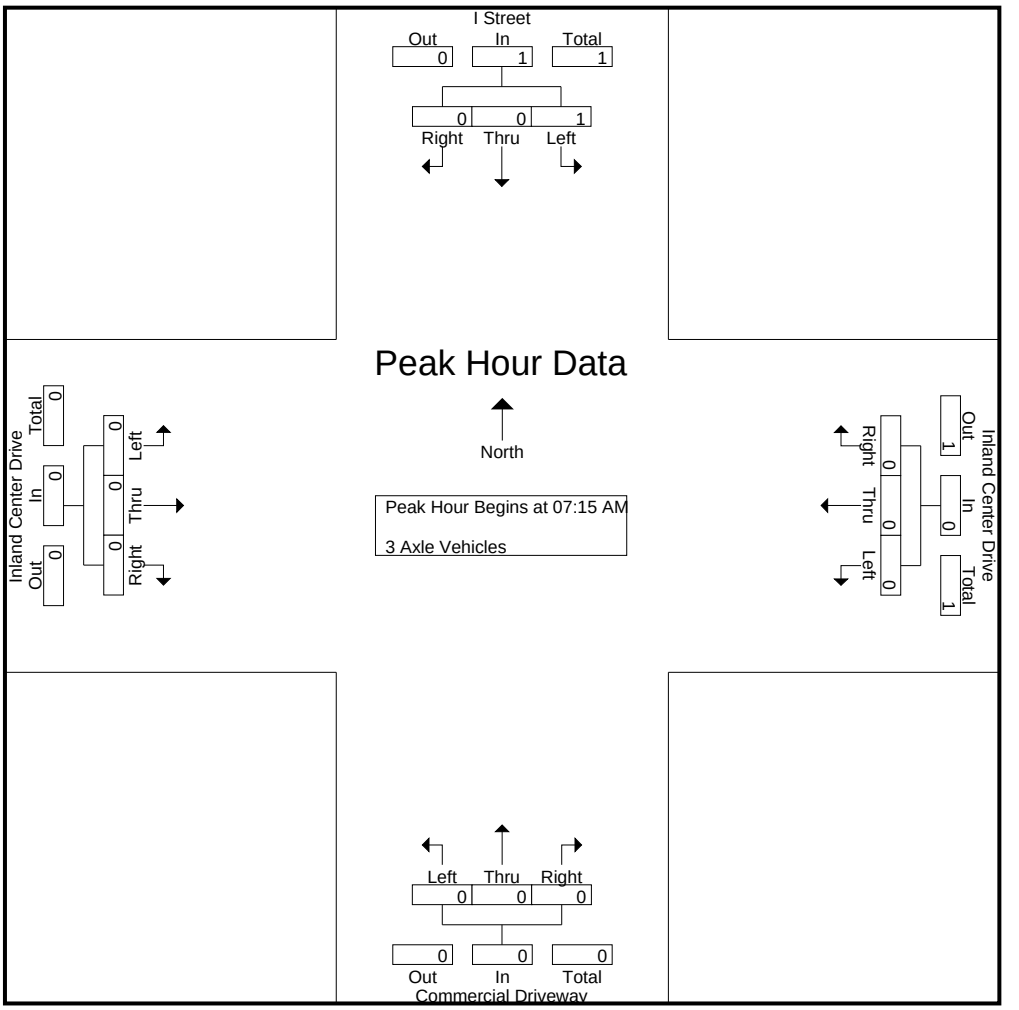

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	100	0	0		0	0	0		0	0	0		0	0	0	
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of San Bernardino
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Groups Printed- 4+ Axle Trucks

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	1	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	1	0	0	1	0	1	1	2	0	0	0	0	0	1	0	1	4
08:00 AM	2	0	1	3	0	0	1	1	0	0	0	0	0	0	0	0	4
08:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	2	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	5	0	1	6	1	0	1	2	0	0	1	1	0	0	0	0	9
Grand Total	6	0	1	7	1	1	2	4	0	0	1	1	0	1	0	1	13
Apprch %	85.7	0	14.3		25	25	50		0	0	100		0	100	0		
Total %	46.2	0	7.7	53.8	7.7	7.7	15.4	30.8	0	0	7.7	7.7	0	7.7	0	7.7	

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	0	1	0	**1**	**1**	**2**	0	0	0	0	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
08:00 AM	**2**	0	**1**	**3**	0	0	1	1	0	0	0	0	0	0	0	0	**4**
Total Volume	3	0	1	4	0	1	2	3	0	0	0	0	0	1	0	1	8
% App. Total	75	0	25		0	33.3	66.7		0	0	0		0	100	0		
PHF	.375	.000	.250	.333	.000	.250	.500	.375	.000	.000	.000	.000	.000	.250	.000	.250	.500

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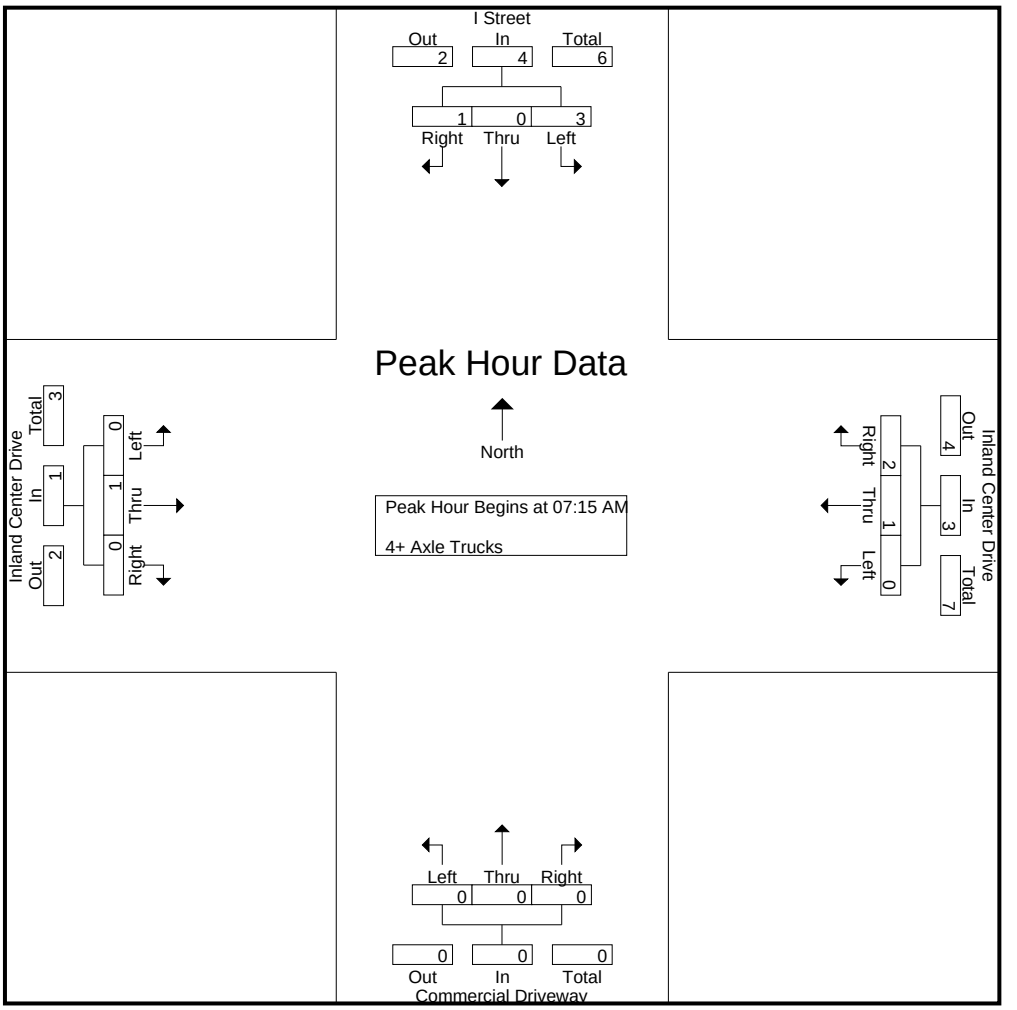

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	0	1	0	**1**	**1**	**2**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+45 mins.	**2**	0	**1**	**3**	0	0	1	1	0	0	0	0	0	0	0	0
Total Volume	3	0	1	4	0	1	2	3	0	0	0	0	0	1	0	1
% App. Total	75	0	25		0	33.3	66.7		0	0	0		0	100	0	
PHF	.375	.000	.250	.333	.000	.250	.500	.375	.000	.000	.000	.000	.000	.250	.000	.250

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City of San Bernardino
N/S: I Street
E/W: Inland Center Drive
Weather: Clear

File Name : 03_SBC_I St_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	94	0	9	103	0	118	64	182	0	0	4	4	10	85	0	95	384
04:15 PM	84	0	10	94	0	115	54	169	0	0	0	0	21	93	0	114	377
04:30 PM	73	0	6	79	1	102	55	158	0	0	3	3	9	85	0	94	334
04:45 PM	67	0	12	79	0	105	64	169	0	1	3	4	15	84	0	99	351
Total	318	0	37	355	1	440	237	678	0	1	10	11	55	347	0	402	1446
05:00 PM	73	0	14	87	0	109	70	179	0	0	1	1	13	98	0	111	378
05:15 PM	67	0	15	82	0	138	80	218	0	0	0	0	13	98	0	111	411
05:30 PM	64	0	9	73	0	90	67	157	0	0	0	0	13	76	0	89	319
05:45 PM	58	0	13	71	0	112	97	209	0	0	0	0	6	83	0	89	369
Total	262	0	51	313	0	449	314	763	0	0	1	1	45	355	0	400	1477
Grand Total	580	0	88	668	1	889	551	1441	0	1	11	12	100	702	0	802	2923
Apprch %	86.8	0	13.2		0.1	61.7	38.2		0	8.3	91.7		12.5	87.5	0		
Total %	19.8	0	3	22.9	0	30.4	18.9	49.3	0	0	0.4	0.4	3.4	24	0	27.4	
Passenger Vehicles	573	0	86	659	0	882	546	1428	0	1	9	10	97	695	0	792	2889
% Passenger Vehicles	98.8	0	97.7	98.7	0	99.2	99.1	99.1	0	100	81.8	83.3	97	99	0	98.8	98.8
Large 2 Axle Vehicles	6	0	0	6	1	7	3	11	0	0	1	1	3	3	0	6	24
% Large 2 Axle Vehicles	1	0	0	0.9	100	0.8	0.5	0.8	0	0	9.1	8.3	3	0.4	0	0.7	0.8
3 Axle Vehicles	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% 3 Axle Vehicles	0.2	0	1.1	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	0	1	1	0	0	2	2	0	0	1	1	0	4	0	4	8
% 4+ Axle Trucks	0	0	1.1	0.1	0	0	0.4	0.1	0	0	9.1	8.3	0	0.6	0	0.5	0.3

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 05:00 PM																	
05:00 PM	**73**	0	14	**87**	0	109	70	179	0	0	**1**	**1**	**13**	**98**	0	**111**	378
05:15 PM	67	0	**15**	82	0	**138**	80	**218**	0	0	0	0	13	98	0	111	**411**
05:30 PM	64	0	9	73	0	90	67	157	0	0	0	0	13	76	0	89	319
05:45 PM	58	0	13	71	0	112	**97**	209	0	0	0	0	6	83	0	89	369
Total Volume	262	0	51	313	0	449	314	763	0	0	1	1	45	355	0	400	1477
% App. Total	83.7	0	16.3		0	58.8	41.2		0	0	100		11.2	88.8	0		
PHF	.897	.000	.850	.899	.000	.813	.809	.875	.000	.000	.250	.250	.865	.906	.000	.901	.898

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Site Code : 10518598
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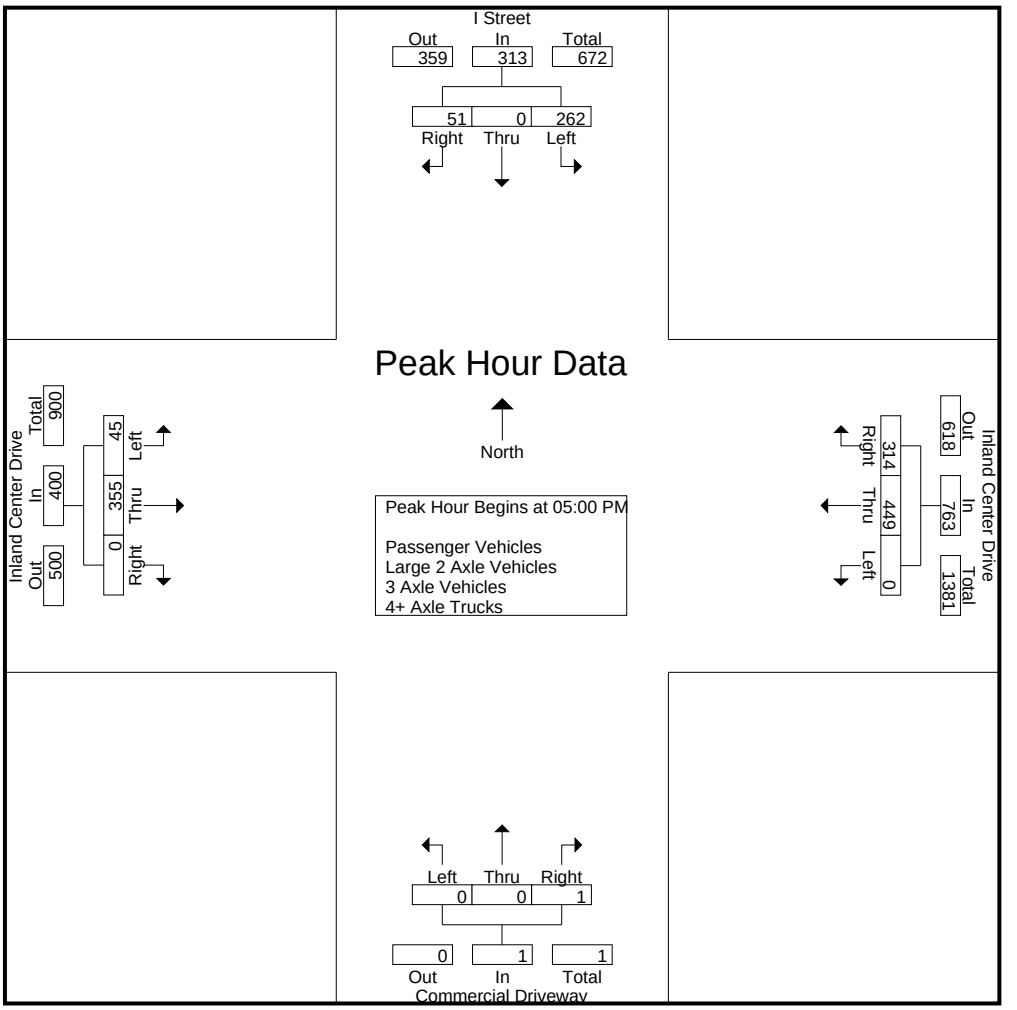

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:00 PM				04:15 PM			
+0 mins.	**94**	0	9	**103**	0	109	70	179	0	0	**4**	**4**	**21**	93	0	**114**
+15 mins.	84	0	10	94	0	**138**	80	**218**	0	0	0	0	9	85	0	94
+30 mins.	73	0	6	79	0	90	67	157	0	0	3	3	15	84	0	99
+45 mins.	67	0	**12**	79	0	112	**97**	209	0	**1**	3	4	13	**98**	0	111
Total Volume	318	0	37	355	0	449	314	763	0	1	10	11	58	360	0	418
% App. Total	89.6	0	10.4		0	58.8	41.2		0	9.1	90.9		13.9	86.1	0	
PHF	.846	.000	.771	.862	.000	.813	.809	.875	.000	.250	.625	.688	.690	.918	.000	.917

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Groups Printed- Passenger Vehicles

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	91	0	8	99	0	117	64	181	0	0	3	3	9	85	0	94	377
04:15 PM	83	0	10	93	0	115	53	168	0	0	0	0	20	91	0	111	372
04:30 PM	72	0	6	78	0	100	54	154	0	0	2	2	9	83	0	92	326
04:45 PM	67	0	12	79	0	104	63	167	0	1	3	4	15	83	0	98	348
Total	313	0	36	349	0	436	234	670	0	1	8	9	53	342	0	395	1423
05:00 PM	73	0	14	87	0	108	69	177	0	0	1	1	13	98	0	111	376
05:15 PM	67	0	15	82	0	136	80	216	0	0	0	0	12	96	0	108	406
05:30 PM	63	0	8	71	0	90	66	156	0	0	0	0	13	76	0	89	316
05:45 PM	57	0	13	70	0	112	97	209	0	0	0	0	6	83	0	89	368
Total	260	0	50	310	0	446	312	758	0	0	1	1	44	353	0	397	1466
Grand Total	573	0	86	659	0	882	546	1428	0	1	9	10	97	695	0	792	2889
Apprch %	86.9	0	13.1		0	61.8	38.2		0	10	90		12.2	87.8	0		
Total %	19.8	0	3	22.8	0	30.5	18.9	49.4	0	0	0.3	0.3	3.4	24.1	0	27.4	

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**73**	0	14	**87**	0	108	69	177	0	0	**1**	**1**	**13**	**98**	0	**111**	376
05:15 PM	67	0	**15**	82	0	**136**	80	**216**	0	0	0	0	12	96	0	108	**406**
05:30 PM	63	0	8	71	0	90	66	156	0	0	0	0	13	76	0	89	316
05:45 PM	57	0	13	70	0	112	**97**	209	0	0	0	0	6	83	0	89	368
Total Volume	260	0	50	310	0	446	312	758	0	0	1	1	44	353	0	397	1466
% App. Total	83.9	0	16.1		0	58.8	41.2		0	0	100		11.1	88.9	0		
PHF	.890	.000	.833	.891	.000	.820	.804	.877	.000	.000	.250	.250	.846	.901	.000	.894	.903

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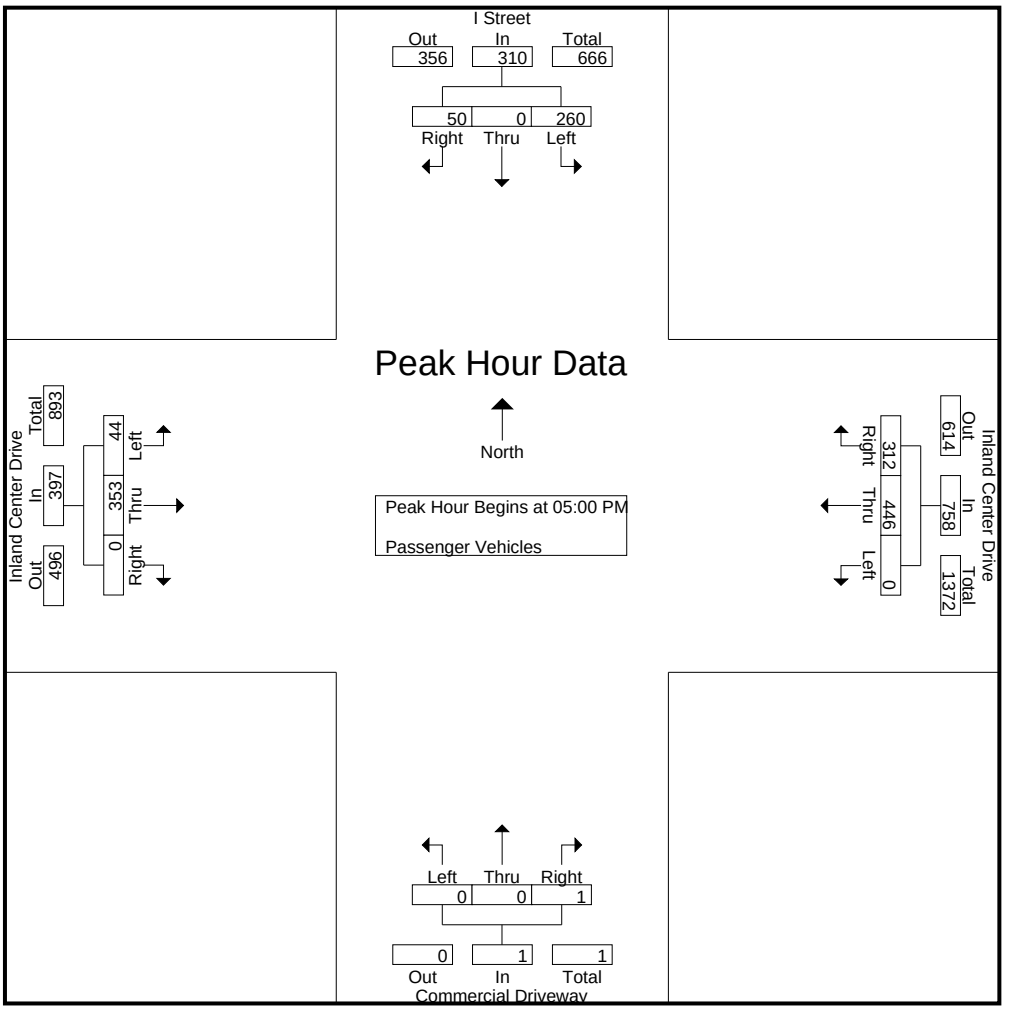

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**73**	0	14	**87**	0	108	69	177	0	0	**1**	**1**	**13**	**98**	0	**111**
+15 mins.	67	0	**15**	82	0	**136**	80	**216**	0	0	0	0	12	96	0	108
+30 mins.	63	0	8	71	0	90	66	156	0	0	0	0	13	76	0	89
+45 mins.	57	0	13	70	0	112	**97**	209	0	0	0	0	6	83	0	89
Total Volume	260	0	50	310	0	446	312	758	0	0	1	1	44	353	0	397
% App. Total	83.9	0	16.1		0	58.8	41.2		0	0	100		11.1	88.9	0	
PHF	.890	.000	.833	.891	.000	.820	.804	.877	.000	.000	.250	.250	.846	.901	.000	.894

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File Name : 03_SBC_I St_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018

Groups Printed- Large 2 Axle Vehicles

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	3	0	0	3	0	1	0	1	0	0	0	0	1	0	0	1	5
04:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
04:30 PM	0	0	0	0	1	2	1	4	0	0	1	1	0	1	0	1	6
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	4	0	0	4	1	4	1	6	0	0	1	1	2	1	0	3	14
05:00 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	1	2	0	3	5
05:30 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
05:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	3	2	5	0	0	0	0	1	2	0	3	10
Grand Total	6	0	0	6	1	7	3	11	0	0	1	1	3	3	0	6	24
Apprch %	100	0	0		9.1	63.6	27.3		0	0	100		50	50	0		
Total %	25	0	0	25	4.2	29.2	12.5	45.8	0	0	4.2	4.2	12.5	12.5	0	25	

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	1	**1**	**2**	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	**2**	0	2	0	0	0	0	**1**	**2**	0	**3**	**5**
05:30 PM	**1**	0	0	**1**	0	0	1	1	0	0	0	0	0	0	0	0	2
05:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	2	0	0	2	0	3	2	5	0	0	0	0	1	2	0	3	10
% App. Total	100	0	0		0	60	40		0	0	0		33.3	66.7	0		
PHF	.500	.000	.000	.500	.000	.375	.500	.625	.000	.000	.000	.000	.250	.250	.000	.250	.500

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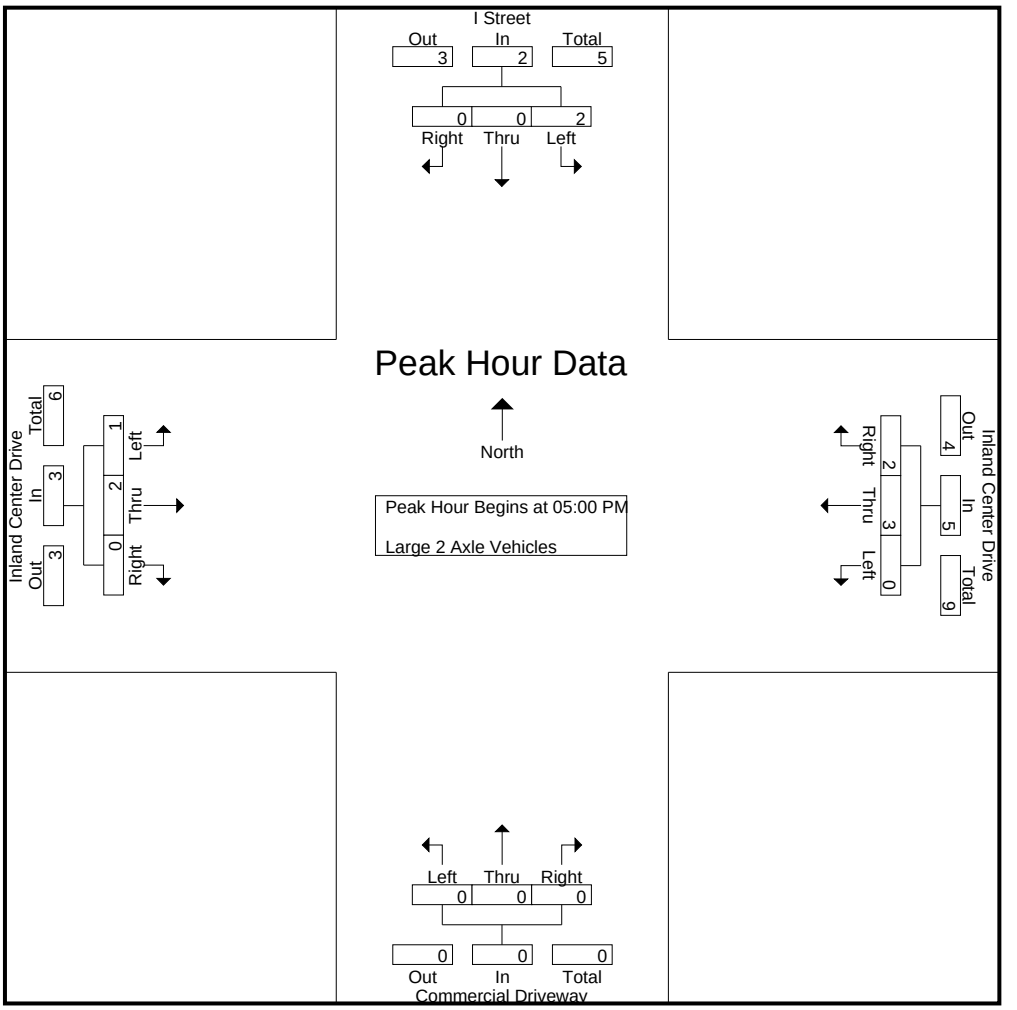

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	1	**1**	**2**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	**2**	0	2	0	0	0	0	**1**	**2**	0	**3**
+30 mins.	**1**	0	0	**1**	0	0	1	1	0	0	0	0	0	0	0	0
+45 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	2	0	0	2	0	3	2	5	0	0	0	0	1	2	0	3
% App. Total	100	0	0		0	60	40		0	0	0		33.3	66.7	0	
PHF	.500	.000	.000	.500	.000	.375	.500	.625	.000	.000	.000	.000	.250	.250	.000	.250

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Groups Printed- 3 Axle Vehicles

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	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	0	0
Grand Total	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Apprch %	50	0	50		0	0	0		0	0	0		0	0	0		
Total %	50	0	50	100	0	0	0	0	0	0	0	0	0	0	0	0	

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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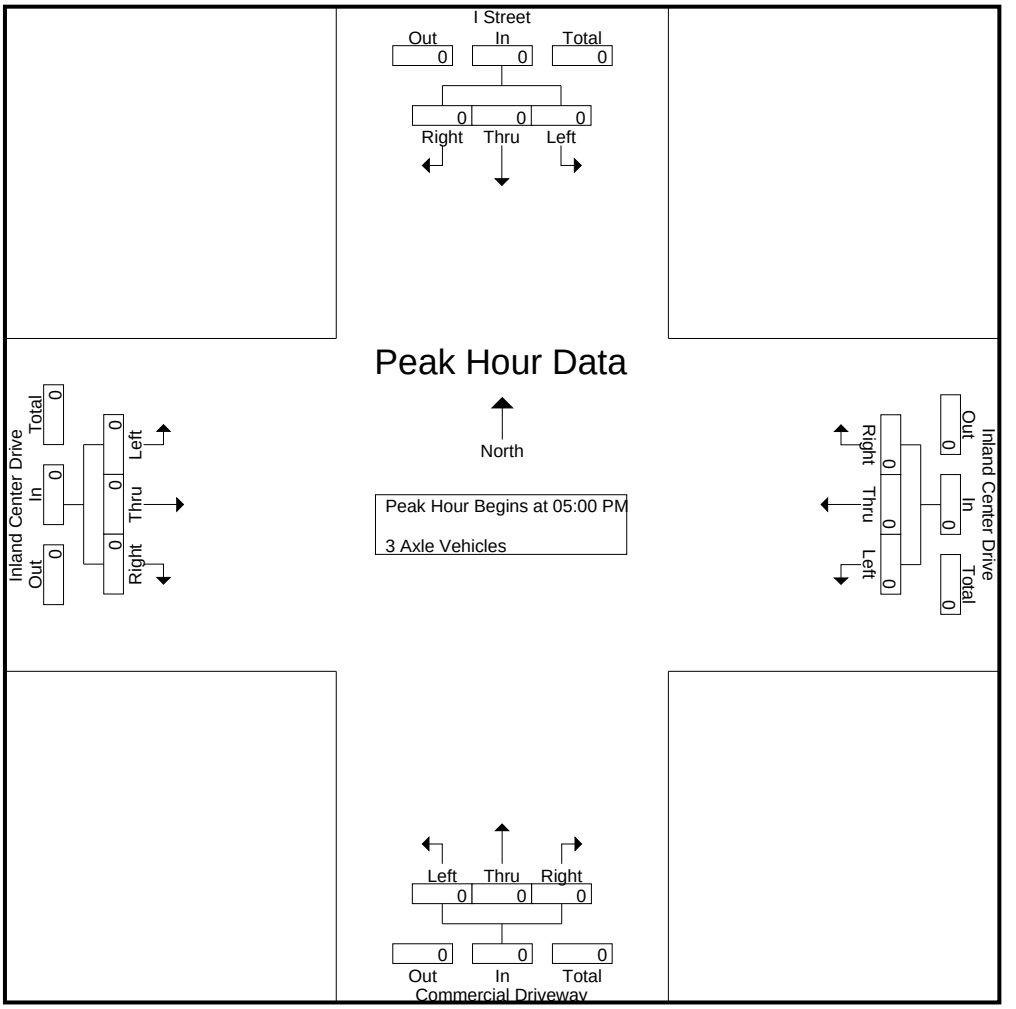

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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File Name : 03_SBC_I St_Inland Center PM
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Start Date : 8/16/2018

Groups Printed- 4+ Axle Trucks

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	0	2	2	0	0	1	1	0	4	0	4	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	1	1	0	0	2	2	0	0	1	1	0	4	0	4	8
Apprch %	0	0	100		0	0	100		0	0	100		0	100	0		
Total %	0	0	12.5	12.5	0	0	25	25	0	0	12.5	12.5	0	50	0	50	

	I Street Southbound				Inland Center Drive Westbound				Commercial Driveway Northbound				Inland Center 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

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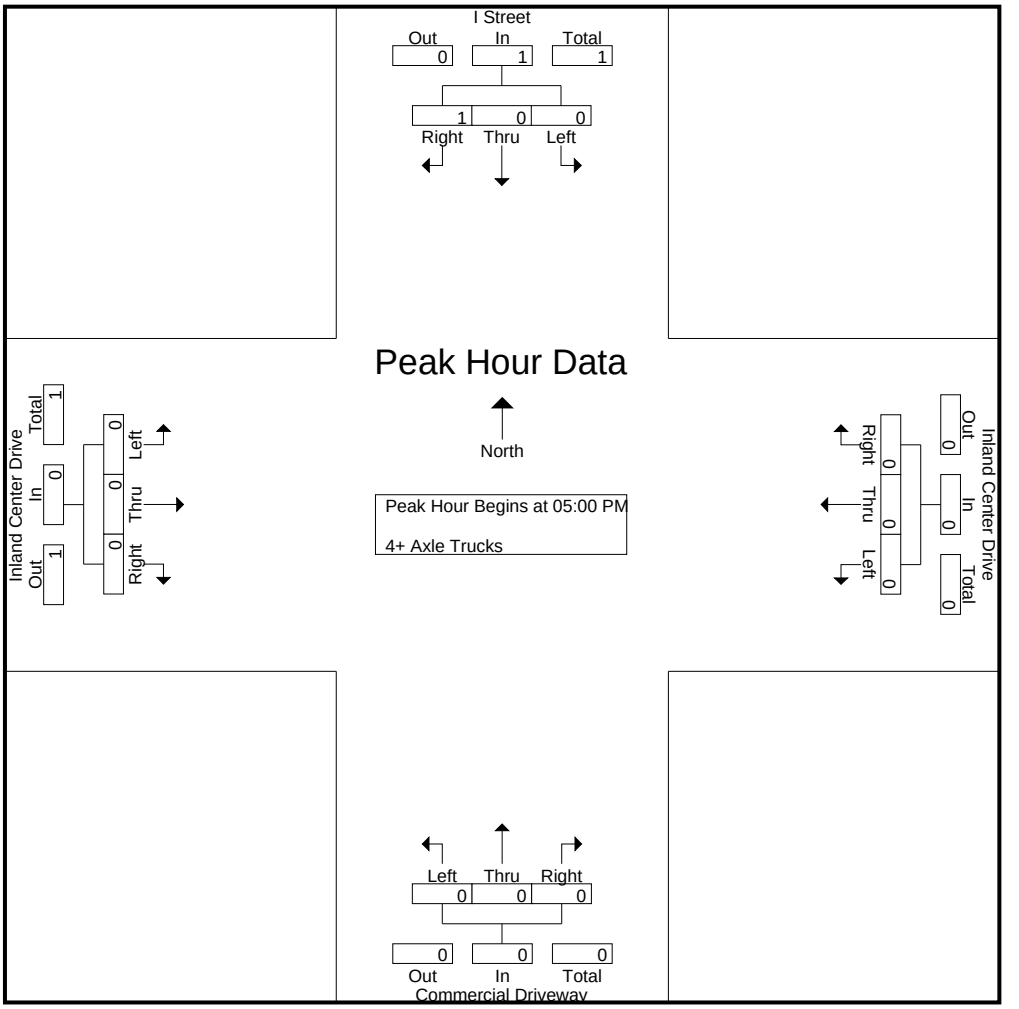
City of San Bernardino
N/S: I Street
E/W: Inland Center Drive
Weather: Clear

File Name : 03_SBC_I St_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of San Bernardino
N/S: Scenic Drive
E/W: Inland Center Drive
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	25	0	0	25	3	103	16	122	12	1	4	17	1	88	0	89	253
07:15 AM	23	0	3	26	4	131	15	150	0	1	5	6	6	86	2	94	276
07:30 AM	18	0	1	19	7	159	19	185	4	0	3	7	9	109	3	121	332
07:45 AM	24	0	7	31	1	214	13	228	1	1	12	14	3	125	2	130	403
Total	90	0	11	101	15	607	63	685	17	3	24	44	19	408	7	434	1264
08:00 AM	15	0	5	20	1	155	11	167	0	1	5	6	4	83	1	88	281
08:15 AM	15	0	5	20	0	133	13	146	2	1	3	6	2	85	2	89	261
08:30 AM	15	1	4	20	3	125	12	140	2	1	4	7	5	106	1	112	279
08:45 AM	17	1	1	19	4	141	16	161	3	0	9	12	3	80	4	87	279
Total	62	2	15	79	8	554	52	614	7	3	21	31	14	354	8	376	1100
Grand Total	152	2	26	180	23	1161	115	1299	24	6	45	75	33	762	15	810	2364
Apprch %	84.4	1.1	14.4		1.8	89.4	8.9		32	8	60		4.1	94.1	1.9		
Total %	6.4	0.1	1.1	7.6	1	49.1	4.9	54.9	1	0.3	1.9	3.2	1.4	32.2	0.6	34.3	
Passenger Vehicles	144	2	25	171	19	1139	109	1267	24	6	39	69	32	739	15	786	2293
% Passenger Vehicles	94.7	100	96.2	95	82.6	98.1	94.8	97.5	100	100	86.7	92	97	97	100	97	97
Large 2 Axle Vehicles	8	0	1	9	4	17	5	26	0	0	6	6	1	14	0	15	56
% Large 2 Axle Vehicles	5.3	0	3.8	5	17.4	1.5	4.3	2	0	0	13.3	8	3	1.8	0	1.9	2.4
3 Axle Vehicles	0	0	0	0	0	1	1	2	0	0	0	0	0	2	0	2	4
% 3 Axle Vehicles	0	0	0	0	0	0.1	0.9	0.2	0	0	0	0	0	0.3	0	0.2	0.2
4+ Axle Trucks	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
% 4+ Axle Trucks	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0	0.9	0	0.9	0.5

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 07:15 AM																	
07:15 AM	23	0	3	26	4	131	15	150	0	**1**	5	6	6	86	2	94	276
07:30 AM	18	0	1	19	**7**	159	**19**	185	**4**	0	3	7	**9**	109	**3**	121	332
07:45 AM	**24**	0	**7**	**31**	1	**214**	13	**228**	1	1	**12**	**14**	3	**125**	2	**130**	**403**
08:00 AM	15	0	5	20	1	155	11	167	0	1	5	6	4	83	1	88	281
Total Volume	80	0	16	96	13	659	58	730	5	3	25	33	22	403	8	433	1292
% App. Total	83.3	0	16.7		1.8	90.3	7.9		15.2	9.1	75.8		5.1	93.1	1.8		
PHF	.833	.000	.571	.774	.464	.770	.763	.800	.313	.750	.521	.589	.611	.806	.667	.833	.801

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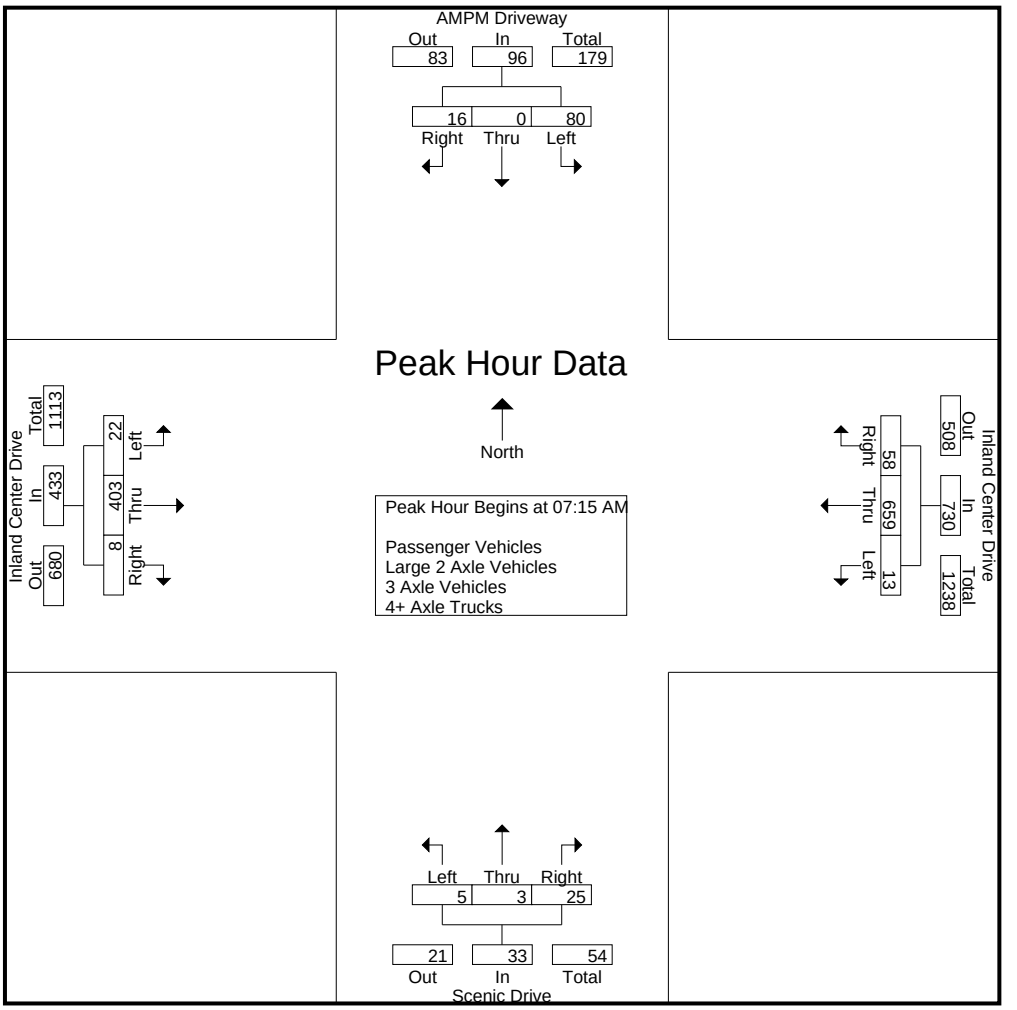
City of San Bernardino
N/S: Scenic Drive
E/W: Inland Center Drive
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:00 AM				07:00 AM			
+0 mins.	**25**	0	0	25	4	131	15	150	**12**	**1**	4	**17**	1	88	0	89
+15 mins.	23	0	3	26	**7**	159	**19**	185	0	1	5	6	6	86	2	94
+30 mins.	18	0	1	19	1	**214**	13	**228**	4	0	3	7	**9**	109	**3**	121
+45 mins.	24	0	**7**	**31**	1	155	11	167	1	1	**12**	14	3	**125**	2	**130**
Total Volume	90	0	11	101	13	659	58	730	17	3	24	44	19	408	7	434
% App. Total	89.1	0	10.9		1.8	90.3	7.9		38.6	6.8	54.5		4.4	94	1.6	
PHF	.900	.000	.393	.815	.464	.770	.763	.800	.354	.750	.500	.647	.528	.816	.583	.835

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City of San Bernardino
N/S: Scenic Drive
E/W: Inland Center Drive
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	25	0	0	25	2	102	16	120	12	1	3	16	1	86	0	87	248
07:15 AM	23	0	3	26	4	127	15	146	0	1	3	4	6	85	2	93	269
07:30 AM	18	0	1	19	5	157	19	181	4	0	3	7	9	108	3	120	327
07:45 AM	24	0	6	30	1	211	12	224	1	1	12	14	3	122	2	127	395
Total	90	0	10	100	12	597	62	671	17	3	21	41	19	401	7	427	1239
08:00 AM	15	0	5	20	1	154	9	164	0	1	4	5	4	79	1	84	273
08:15 AM	13	0	5	18	0	128	13	141	2	1	3	6	2	80	2	84	249
08:30 AM	11	1	4	16	2	120	10	132	2	1	2	5	5	102	1	108	261
08:45 AM	15	1	1	17	4	140	15	159	3	0	9	12	2	77	4	83	271
Total	54	2	15	71	7	542	47	596	7	3	18	28	13	338	8	359	1054
Grand Total	144	2	25	171	19	1139	109	1267	24	6	39	69	32	739	15	786	2293
Apprch %	84.2	1.2	14.6		1.5	89.9	8.6		34.8	8.7	56.5		4.1	94	1.9		
Total %	6.3	0.1	1.1	7.5	0.8	49.7	4.8	55.3	1	0.3	1.7	3	1.4	32.2	0.7	34.3	

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	23	0	3	26	4	127	15	146	0	**1**	3	4	6	85	2	93	269
07:30 AM	18	0	1	19	**5**	157	**19**	181	**4**	0	3	7	**9**	108	**3**	120	327
07:45 AM	**24**	0	**6**	**30**	1	**211**	12	**224**	1	1	**12**	**14**	3	**122**	2	**127**	**395**
08:00 AM	15	0	5	20	1	154	9	164	0	1	4	5	4	79	1	84	273
Total Volume	80	0	15	95	11	649	55	715	5	3	22	30	22	394	8	424	1264
% App. Total	84.2	0	15.8		1.5	90.8	7.7		16.7	10	73.3		5.2	92.9	1.9		
PHF	.833	.000	.625	.792	.550	.769	.724	.798	.313	.750	.458	.536	.611	.807	.667	.835	.800

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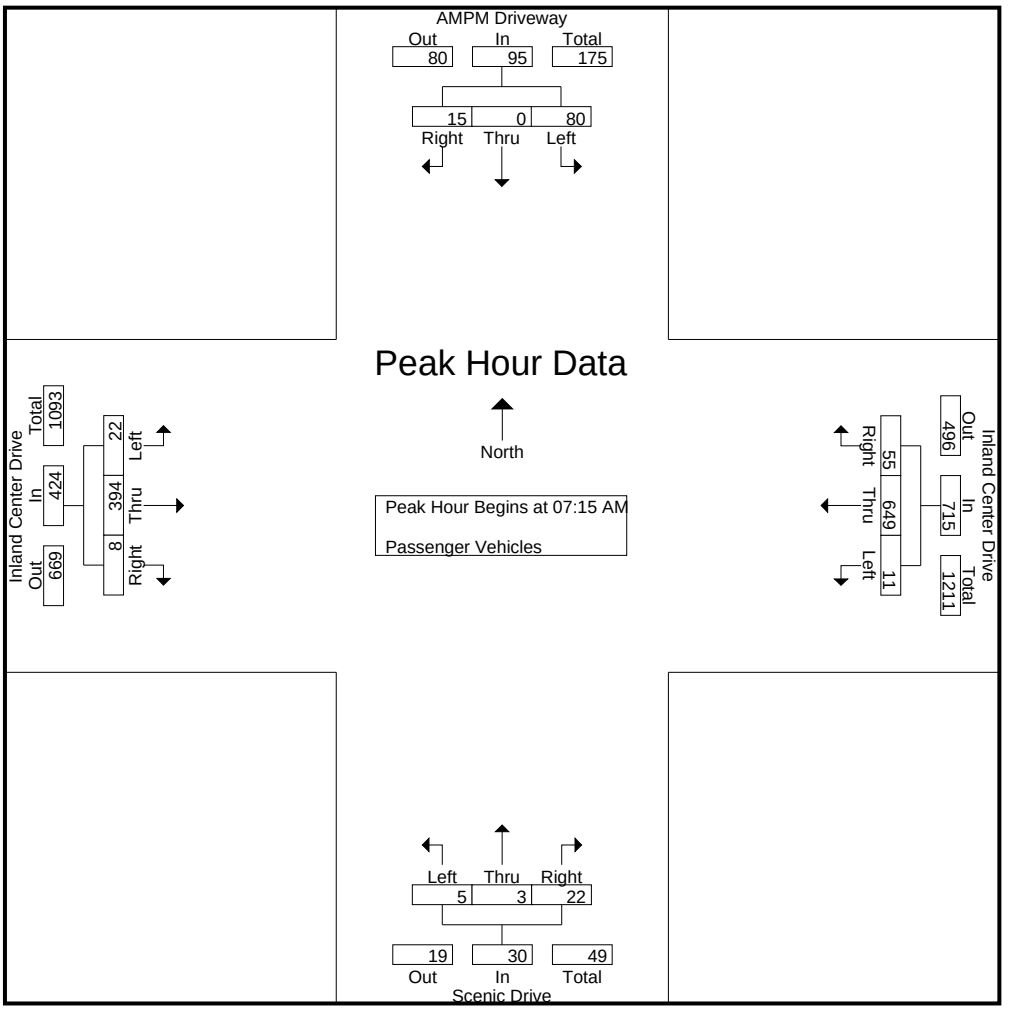
City of San Bernardino
N/S: Scenic Drive
E/W: Inland Center Drive
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	23	0	3	26	4	127	15	146	0	**1**	3	4	6	85	2	93
+15 mins.	18	0	1	19	**5**	157	**19**	181	**4**	0	3	7	**9**	108	**3**	120
+30 mins.	**24**	0	**6**	**30**	1	**211**	12	**224**	1	1	**12**	**14**	3	**122**	2	**127**
+45 mins.	15	0	5	20	1	154	9	164	0	1	4	5	4	79	1	84
Total Volume	80	0	15	95	11	649	55	715	5	3	22	30	22	394	8	424
% App. Total	84.2	0	15.8		1.5	90.8	7.7		16.7	10	73.3		5.2	92.9	1.9	
PHF	.833	.000	.625	.792	.550	.769	.724	.798	.313	.750	.458	.536	.611	.807	.667	.835

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City of San Bernardino
N/S: Scenic Drive
E/W: Inland Center Drive
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	0	0	0	0	1	1	0	2	0	0	1	1	0	1	0	1	4
07:15 AM	0	0	0	0	0	2	0	2	0	0	2	2	0	0	0	0	4
07:30 AM	0	0	0	0	2	2	0	4	0	0	0	0	0	0	0	0	4
07:45 AM	0	0	1	1	0	3	1	4	0	0	0	0	0	3	0	3	8
Total	0	0	1	1	3	8	1	12	0	0	3	3	0	4	0	4	20
08:00 AM	0	0	0	0	0	0	2	2	0	0	1	1	0	2	0	2	5
08:15 AM	2	0	0	2	0	4	0	4	0	0	0	0	0	3	0	3	9
08:30 AM	4	0	0	4	1	4	2	7	0	0	2	2	0	3	0	3	16
08:45 AM	2	0	0	2	0	1	0	1	0	0	0	0	1	2	0	3	6
Total	8	0	0	8	1	9	4	14	0	0	3	3	1	10	0	11	36
Grand Total	8	0	1	9	4	17	5	26	0	0	6	6	1	14	0	15	56
Apprch %	88.9	0	11.1		15.4	65.4	19.2		0	0	100		6.7	93.3	0		
Total %	14.3	0	1.8	16.1	7.1	30.4	8.9	46.4	0	0	10.7	10.7	1.8	25	0	26.8	

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	2	0	2	0	0	**2**	**2**	0	0	0	0	4
07:30 AM	0	0	0	0	**2**	2	0	**4**	0	0	0	0	0	0	0	0	4
07:45 AM	0	0	**1**	**1**	0	**3**	1	4	0	0	0	0	0	**3**	0	**3**	**8**
08:00 AM	0	0	0	0	0	0	**2**	2	0	0	1	1	0	2	0	2	5
Total Volume	0	0	1	1	2	7	3	12	0	0	3	3	0	5	0	5	21
% App. Total	0	0	100		16.7	58.3	25		0	0	100		0	100	0		
PHF	.000	.000	.250	.250	.250	.583	.375	.750	.000	.000	.375	.375	.000	.417	.000	.417	.656

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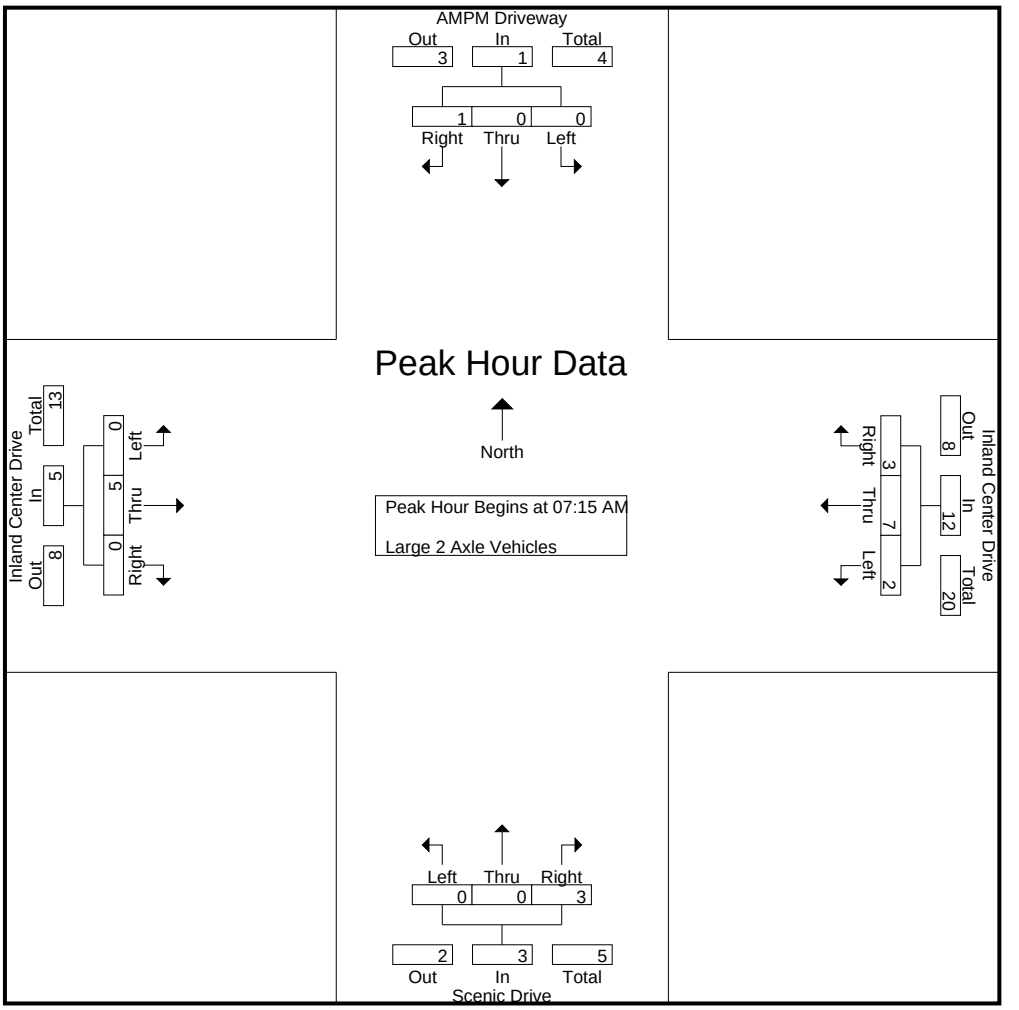
City of San Bernardino
N/S: Scenic Drive
E/W: Inland Center Drive
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	**2**	**2**	0	0	0	0
+15 mins.	0	0	0	0	**2**	2	0	**4**	0	0	0	0	0	0	0	0
+30 mins.	0	0	**1**	**1**	0	**3**	1	4	0	0	0	0	0	**3**	0	**3**
+45 mins.	0	0	0	0	0	0	**2**	2	0	0	1	1	0	2	0	2
Total Volume	0	0	1	1	2	7	3	12	0	0	3	3	0	5	0	5
% App. Total	0	0	100		16.7	58.3	25		0	0	100		0	100	0	
PHF	.000	.000	.250	.250	.250	.583	.375	.750	.000	.000	.375	.375	.000	.417	.000	.417

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City of San Bernardino
N/S: Scenic Drive
E/W: Inland Center Drive
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018

Groups Printed- 3 Axle Vehicles

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	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	2	0	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
Grand Total	0	0	0	0	0	1	1	2	0	0	0	0	0	2	0	2	4
Apprch %	0	0	0		0	50	50		0	0	0		0	100	0		
Total %	0	0	0	0	0	25	25	50	0	0	0	0	0	50	0	50	

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**1**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

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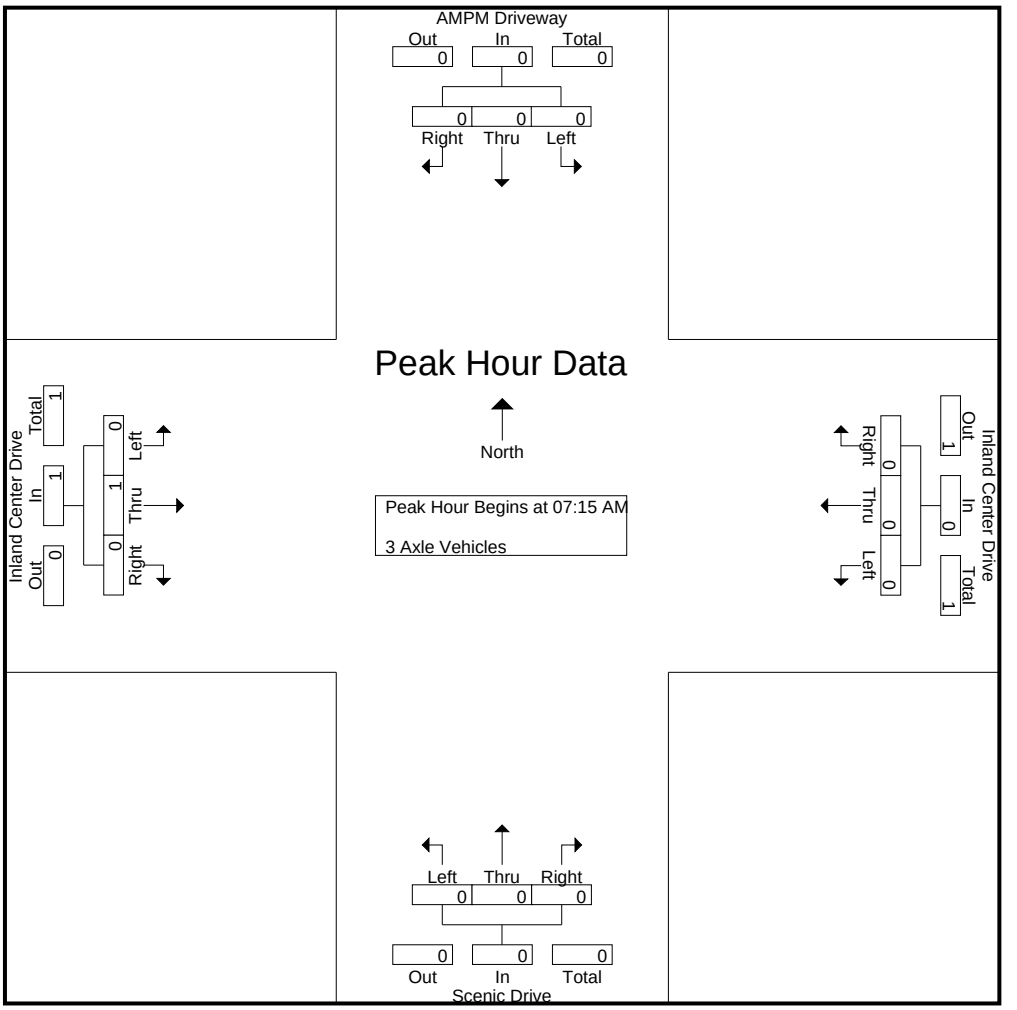
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250

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Groups Printed- 4+ Axle Trucks

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
Grand Total	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	36.4	0	36.4	0	0	0	0	0	63.6	0	63.6	

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	1	0	1	**3**
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	0	**2**	3
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.375	.000	.375	.500

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Site Code : 10518598
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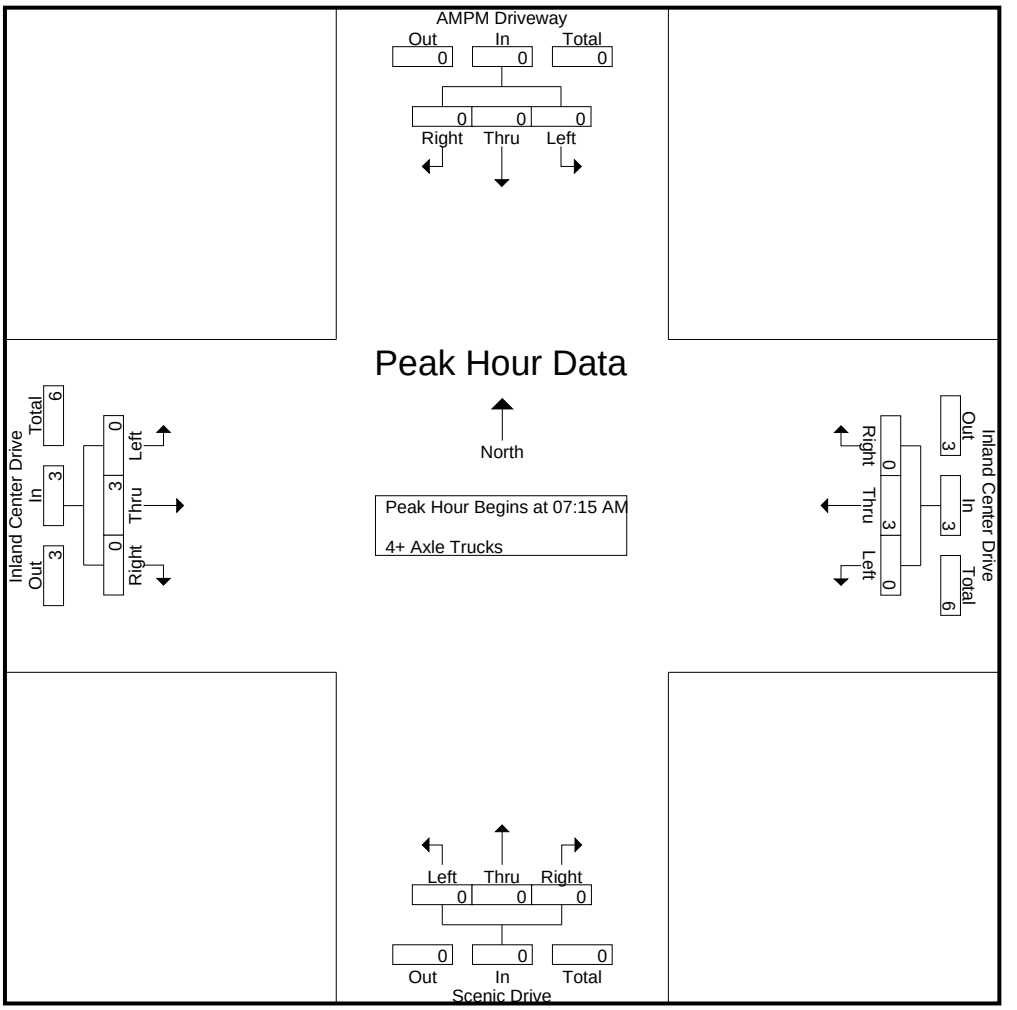

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	0	**2**
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.375	.000	.375

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File Name : 04_SBC_Scenic_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	26	0	10	36	11	171	21	203	0	0	14	14	7	193	0	200	453
04:15 PM	24	0	6	30	7	141	11	159	1	0	5	6	6	148	0	154	349
04:30 PM	11	1	7	19	8	160	18	186	1	2	5	8	5	173	4	182	395
04:45 PM	19	1	9	29	6	163	25	194	2	1	10	13	3	141	6	150	386
Total	80	2	32	114	32	635	75	742	4	3	34	41	21	655	10	686	1583
05:00 PM	22	0	4	26	7	191	34	232	4	2	4	10	4	157	6	167	435
05:15 PM	25	2	11	38	4	179	24	207	1	0	8	9	3	146	3	152	406
05:30 PM	17	0	5	22	8	155	13	176	0	0	5	5	5	144	1	150	353
05:45 PM	13	0	8	21	6	205	21	232	1	0	6	7	5	142	1	148	408
Total	77	2	28	107	25	730	92	847	6	2	23	31	17	589	11	617	1602
Grand Total	157	4	60	221	57	1365	167	1589	10	5	57	72	38	1244	21	1303	3185
Apprch %	71	1.8	27.1		3.6	85.9	10.5		13.9	6.9	79.2		2.9	95.5	1.6		
Total %	4.9	0.1	1.9	6.9	1.8	42.9	5.2	49.9	0.3	0.2	1.8	2.3	1.2	39.1	0.7	40.9	
Passenger Vehicles	154	4	60	218	55	1350	165	1570	10	5	55	70	38	1229	21	1288	3146
% Passenger Vehicles	98.1	100	100	98.6	96.5	98.9	98.8	98.8	100	100	96.5	97.2	100	98.8	100	98.8	98.8
Large 2 Axle Vehicles	2	0	0	2	1	13	2	16	0	0	1	1	0	9	0	9	28
% Large 2 Axle Vehicles	1.3	0	0	0.9	1.8	1	1.2	1	0	0	1.8	1.4	0	0.7	0	0.7	0.9
3 Axle Vehicles	1	0	0	1	1	0	0	1	0	0	1	1	0	1	0	1	4
% 3 Axle Vehicles	0.6	0	0	0.5	1.8	0	0	0.1	0	0	1.8	1.4	0	0.1	0	0.1	0.1
4+ Axle Trucks	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
% 4+ Axle Trucks	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0.4	0	0.4	0.2

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	11	1	7	19	**8**	160	18	186	1	**2**	5	8	**5**	**173**	4	**182**	395
04:45 PM	19	1	9	29	6	163	25	194	2	1	**10**	**13**	3	141	**6**	150	386
05:00 PM	22	0	4	26	7	**191**	**34**	**232**	**4**	2	4	10	4	157	6	167	**435**
05:15 PM	**25**	**2**	**11**	**38**	4	179	24	207	1	0	8	9	3	146	3	152	406
Total Volume	77	4	31	112	25	693	101	819	8	5	27	40	15	617	19	651	1622
% App. Total	68.8	3.6	27.7		3.1	84.6	12.3		20	12.5	67.5		2.3	94.8	2.9		
PHF	.770	.500	.705	.737	.781	.907	.743	.883	.500	.625	.675	.769	.750	.892	.792	.894	.932

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Weather: Clear

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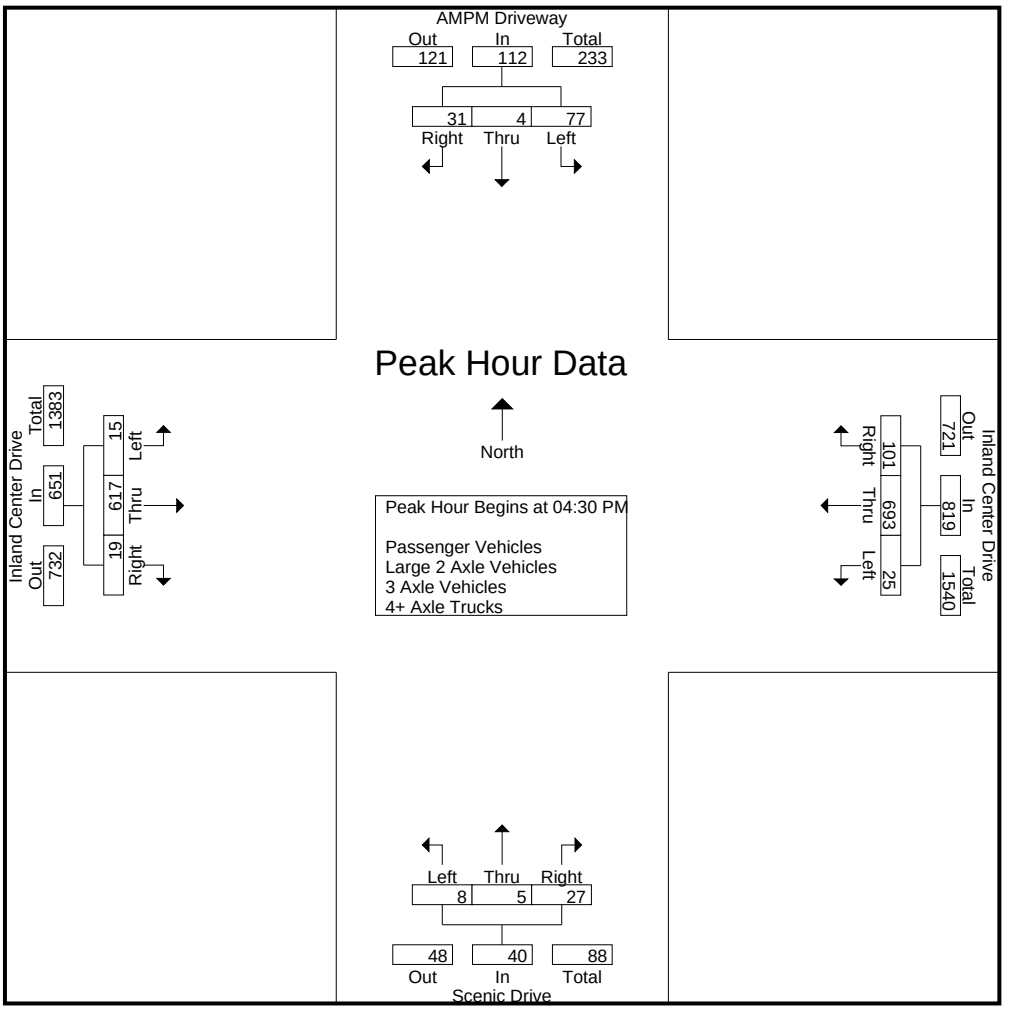
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				04:00 PM				04:00 PM			
+0 mins.	19	1	9	29	7	191	**34**	**232**	0	0	**14**	**14**	**7**	**193**	0	**200**
+15 mins.	22	0	4	26	4	179	24	207	1	0	5	6	6	148	0	154
+30 mins.	**25**	**2**	**11**	**38**	**8**	155	13	176	1	**2**	5	8	5	173	4	182
+45 mins.	17	0	5	22	6	**205**	21	232	**2**	1	10	13	3	141	**6**	150
Total Volume	83	3	29	115	25	730	92	847	4	3	34	41	21	655	10	686
% App. Total	72.2	2.6	25.2		3	86.2	10.9		9.8	7.3	82.9		3.1	95.5	1.5	
PHF	.830	.375	.659	.757	.781	.890	.676	.913	.500	.375	.607	.732	.750	.848	.417	.858

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Site Code : 10518598
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Groups Printed- Passenger Vehicles

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	26	0	10	36	11	171	21	203	0	0	14	14	7	190	0	197	450
04:15 PM	24	0	6	30	6	138	11	155	1	0	4	5	6	143	0	149	339
04:30 PM	11	1	7	19	8	155	18	181	1	2	5	8	5	171	4	180	388
04:45 PM	19	1	9	29	6	163	25	194	2	1	10	13	3	140	6	149	385
Total	80	2	32	114	31	627	75	733	4	3	33	40	21	644	10	675	1562
05:00 PM	21	0	4	25	7	187	32	226	4	2	4	10	4	157	6	167	428
05:15 PM	23	2	11	36	3	179	24	206	1	0	7	8	3	144	3	150	400
05:30 PM	17	0	5	22	8	154	13	175	0	0	5	5	5	143	1	149	351
05:45 PM	13	0	8	21	6	203	21	230	1	0	6	7	5	141	1	147	405
Total	74	2	28	104	24	723	90	837	6	2	22	30	17	585	11	613	1584
Grand Total	154	4	60	218	55	1350	165	1570	10	5	55	70	38	1229	21	1288	3146
Apprch %	70.6	1.8	27.5		3.5	86	10.5		14.3	7.1	78.6		3	95.4	1.6		
Total %	4.9	0.1	1.9	6.9	1.7	42.9	5.2	49.9	0.3	0.2	1.7	2.2	1.2	39.1	0.7	40.9	

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	11	1	7	19	**8**	155	18	181	1	**2**	5	8	**5**	**171**	4	**180**	388
04:45 PM	19	1	9	29	6	163	25	194	2	1	**10**	**13**	3	140	**6**	149	385
05:00 PM	21	0	4	25	7	**187**	**32**	**226**	**4**	2	4	10	4	157	6	167	**428**
05:15 PM	**23**	**2**	**11**	**36**	3	179	24	206	1	0	7	8	3	144	3	150	400
Total Volume	74	4	31	109	24	684	99	807	8	5	26	39	15	612	19	646	1601
% App. Total	67.9	3.7	28.4		3	84.8	12.3		20.5	12.8	66.7		2.3	94.7	2.9		
PHF	.804	.500	.705	.757	.750	.914	.773	.893	.500	.625	.650	.750	.750	.895	.792	.897	.935

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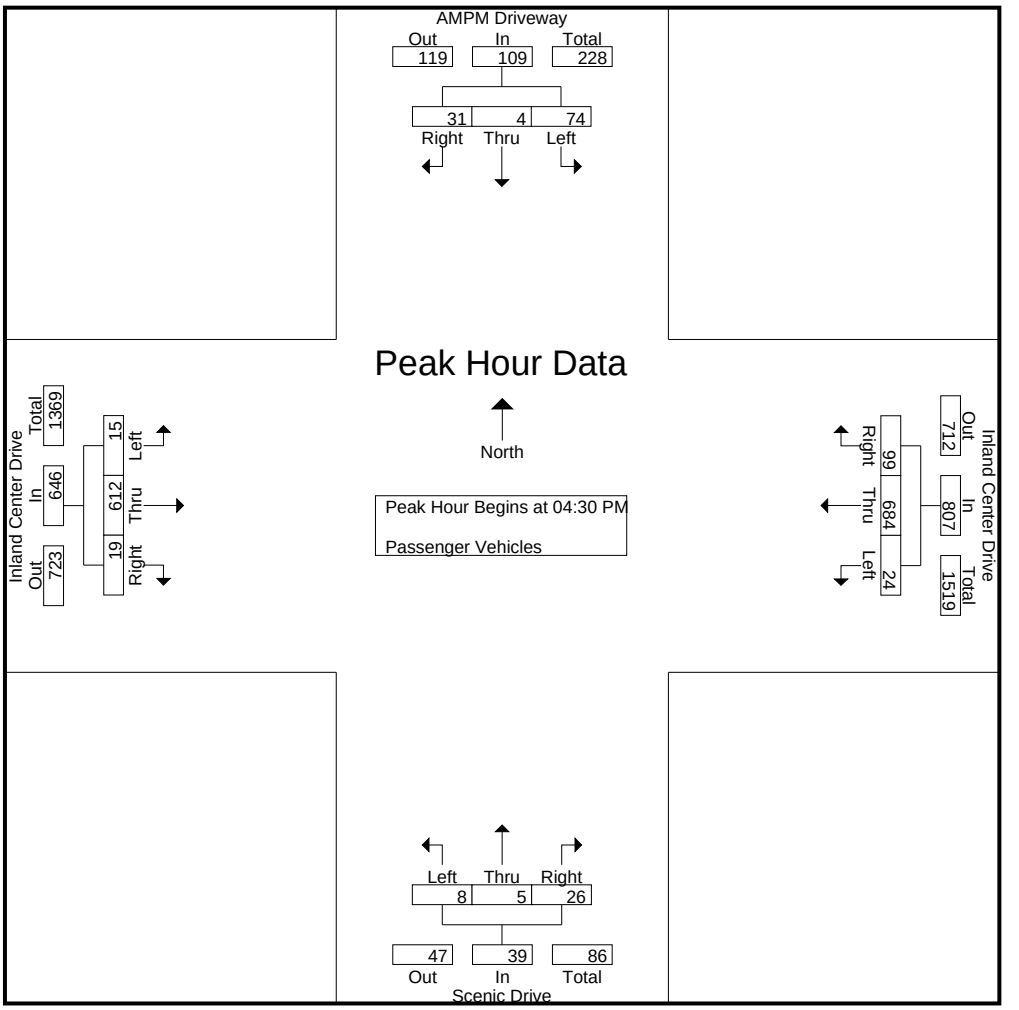

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	11	1	7	19	**8**	155	18	181	1	**2**	5	8	**5**	**171**	4	**180**
+15 mins.	19	1	9	29	6	163	25	194	2	1	**10**	**13**	3	140	**6**	149
+30 mins.	21	0	4	25	7	**187**	**32**	**226**	**4**	2	4	10	4	157	6	167
+45 mins.	**23**	**2**	**11**	**36**	3	179	24	206	1	0	7	8	3	144	3	150
Total Volume	74	4	31	109	24	684	99	807	8	5	26	39	15	612	19	646
% App. Total	67.9	3.7	28.4		3	84.8	12.3		20.5	12.8	66.7		2.3	94.7	2.9	
PHF	.804	.500	.705	.757	.750	.914	.773	.893	.500	.625	.650	.750	.750	.895	.792	.897

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Groups Printed- Large 2 Axle Vehicles

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	0	0	0	1	2	0	3	0	0	1	1	0	1	0	1	5
04:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	6	0	7	0	0	1	1	0	5	0	5	13
05:00 PM	0	0	0	0	0	4	2	6	0	0	0	0	0	0	0	0	6
05:15 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	2	0	2	4
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	2	0	0	2	0	7	2	9	0	0	0	0	0	4	0	4	15
Grand Total	2	0	0	2	1	13	2	16	0	0	1	1	0	9	0	9	28
Apprch %	100	0	0		6.2	81.2	12.5		0	0	100		0	100	0		
Total %	7.1	0	0	7.1	3.6	46.4	7.1	57.1	0	0	3.6	3.6	0	32.1	0	32.1	

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	**4**	0	4	0	0	0	0	0	**2**	0	**2**	**6**
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	4	**2**	**6**	0	0	0	0	0	0	0	0	6
05:15 PM	**2**	0	0	**2**	0	0	0	0	0	0	0	0	0	2	0	2	4
Total Volume	2	0	0	2	0	8	2	10	0	0	0	0	0	4	0	4	16
% App. Total	100	0	0		0	80	20		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.500	.250	.417	.000	.000	.000	.000	.000	.500	.000	.500	.667

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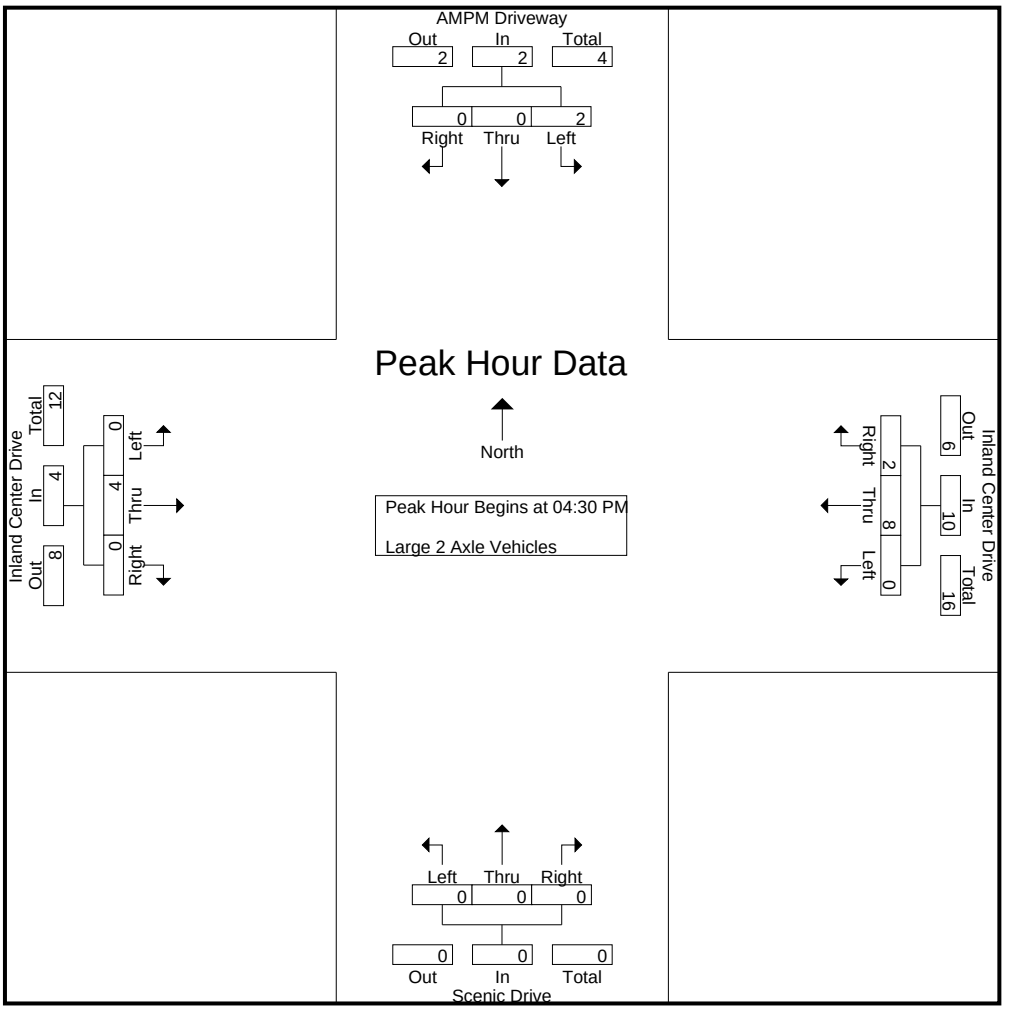
Start Date : 8/16/2018



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	**4**	0	4	0	0	0	0	0	**2**	0	**2**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	4	**2**	**6**	0	0	0	0	0	0	0	0
+45 mins.	**2**	0	0	**2**	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	2	0	0	2	0	8	2	10	0	0	0	0	0	4	0	4
% App. Total	100	0	0		0	80	20		0	0	0		0	100	0	
PHF	.250	.000	.000	.250	.000	.500	.250	.417	.000	.000	.000	.000	.000	.500	.000	.500

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City of San Bernardino
N/S: Scenic Drive
E/W: Inland Center Drive
Weather: Clear

File Name : 04_SBC_Scenic_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	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	1	0	1	1
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
Grand Total	1	0	0	1	1	0	0	1	0	0	1	1	0	1	0	1	4
Apprch %	100	0	0		100	0	0		0	0	100		0	100	0		
Total %	25	0	0	25	25	0	0	25	0	0	25	25	0	25	0	25	

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	**1**	0	0	**1**	0	0	**1**	**1**	0	0	0	0	**2**
Total Volume	1	0	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
% App. Total	100	0	0		100	0	0		0	0	100		0	0	0		
PHF	.250	.000	.000	.250	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000	.375

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N/S: Scenic Drive
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File Name : 04_SBC_Scenic_Inland Center PM
Site Code : 10518598
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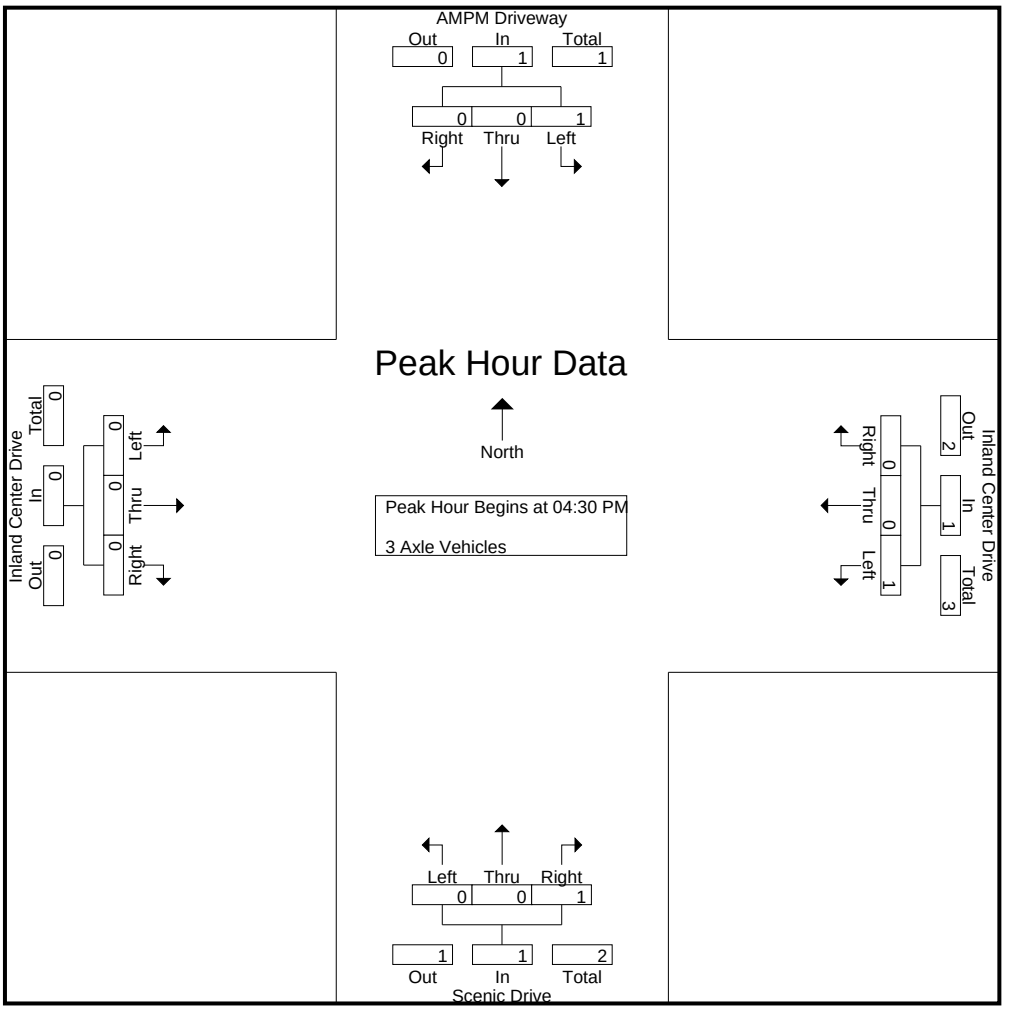

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**1**	0	0	**1**	0	0	**1**	**1**	0	0	0	0
Total Volume	1	0	0	1	1	0	0	1	0	0	1	1	0	0	0	0
% App. Total	100	0	0		100	0	0		0	0	100		0	0	0	
PHF	.250	.000	.000	.250	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000

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City of San Bernardino
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File Name : 04_SBC_Scenic_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	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	0	0
Grand Total	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5	7
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	28.6	0	28.6	0	0	0	0	0	71.4	0	71.4	

	AMPM Driveway Southbound				Inland Center Drive Westbound				Scenic Drive Northbound				Inland Center 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	**1**
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500

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City of San Bernardino
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Weather: Clear

File Name : 04_SBC_Scenic_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
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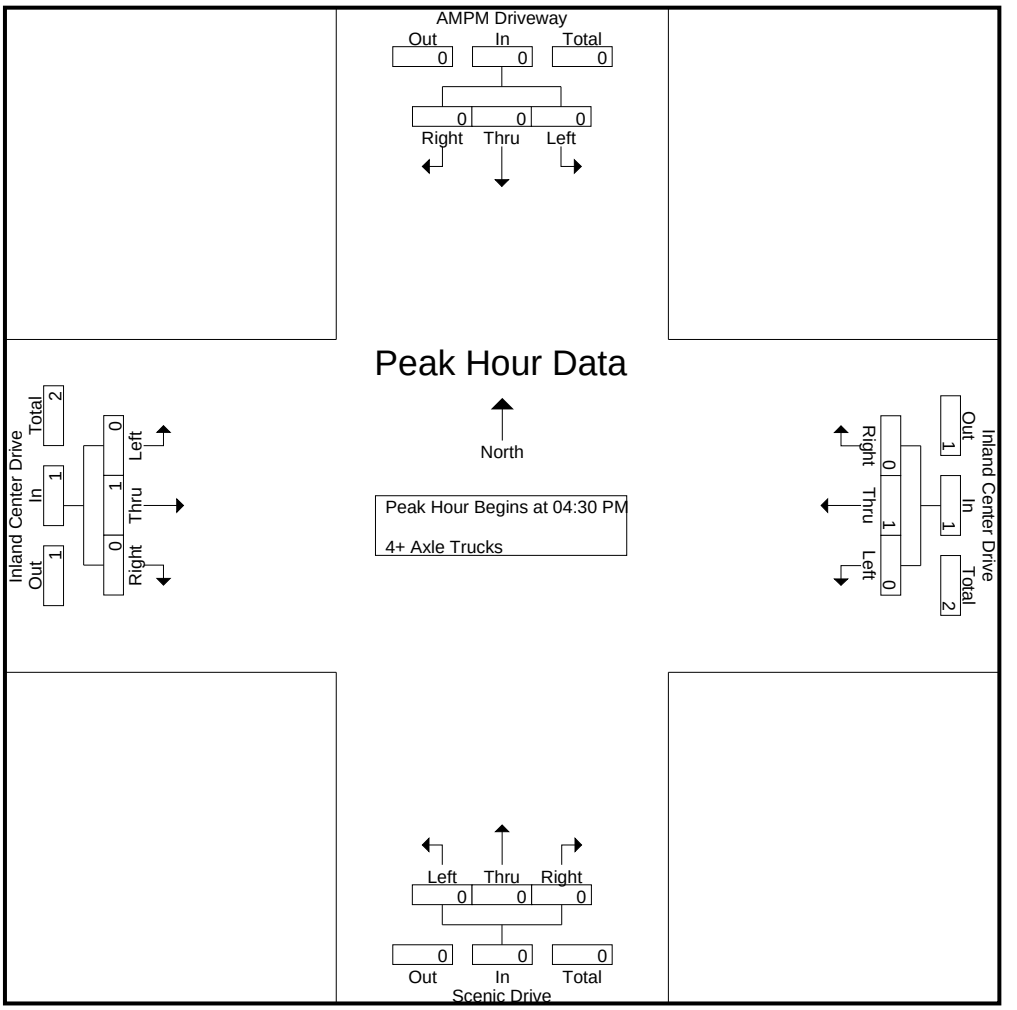

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	29	60	39	128	27	75	0	102	0	0	0	0	0	65	62	127	357
07:15 AM	17	61	64	142	20	96	0	116	0	0	0	0	0	55	53	108	366
07:30 AM	21	79	63	163	22	131	0	153	0	0	0	0	0	80	58	138	454
07:45 AM	52	66	68	186	20	152	0	172	0	0	0	0	0	84	65	149	507
Total	119	266	234	619	89	454	0	543	0	0	0	0	0	284	238	522	1684
08:00 AM	29	50	49	128	25	104	0	129	0	0	0	0	0	60	45	105	362
08:15 AM	26	55	44	125	26	102	0	128	0	0	0	0	0	56	49	105	358
08:30 AM	29	73	54	156	24	91	0	115	0	0	0	0	0	67	61	128	399
08:45 AM	39	76	62	177	27	97	0	124	0	0	0	0	0	55	50	105	406
Total	123	254	209	586	102	394	0	496	0	0	0	0	0	238	205	443	1525
Grand Total	242	520	443	1205	191	848	0	1039	0	0	0	0	0	522	443	965	3209
Apprch %	20.1	43.2	36.8		18.4	81.6	0		0	0	0		0	54.1	45.9		
Total %	7.5	16.2	13.8	37.6	6	26.4	0	32.4	0	0	0	0	0	16.3	13.8	30.1	
Passenger Vehicles	234	471	432	1137	143	824	0	967	0	0	0	0	0	509	417	926	3030
% Passenger Vehicles	96.7	90.6	97.5	94.4	74.9	97.2	0	93.1	0	0	0	0	0	97.5	94.1	96	94.4
Large 2 Axle Vehicles	6	25	11	42	28	17	0	45	0	0	0	0	0	12	17	29	116
% Large 2 Axle Vehicles	2.5	4.8	2.5	3.5	14.7	2	0	4.3	0	0	0	0	0	2.3	3.8	3	3.6
3 Axle Vehicles	2	3	0	5	4	2	0	6	0	0	0	0	0	1	1	2	13
% 3 Axle Vehicles	0.8	0.6	0	0.4	2.1	0.2	0	0.6	0	0	0	0	0	0.2	0.2	0.2	0.4
4+ Axle Trucks	0	21	0	21	16	5	0	21	0	0	0	0	0	0	8	8	50
% 4+ Axle Trucks	0	4	0	1.7	8.4	0.6	0	2	0	0	0	0	0	0	1.8	0.8	1.6

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 07:15 AM																	
07:15 AM	17	61	64	142	20	96	0	116	0	0	0	0	0	55	53	108	366
07:30 AM	21	**79**	63	163	22	131	0	153	0	0	0	0	0	80	58	138	454
07:45 AM	**52**	66	**68**	**186**	20	**152**	0	**172**	0	0	0	0	0	**84**	**65**	**149**	**507**
08:00 AM	29	50	49	128	**25**	104	0	129	0	0	0	0	0	60	45	105	362
Total Volume	119	256	244	619	87	483	0	570	0	0	0	0	0	279	221	500	1689
% App. Total	19.2	41.4	39.4		15.3	84.7	0		0	0	0		0	55.8	44.2		
PHF	.572	.810	.897	.832	.870	.794	.000	.828	.000	.000	.000	.000	.000	.830	.850	.839	.833

Counts Unlimited
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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
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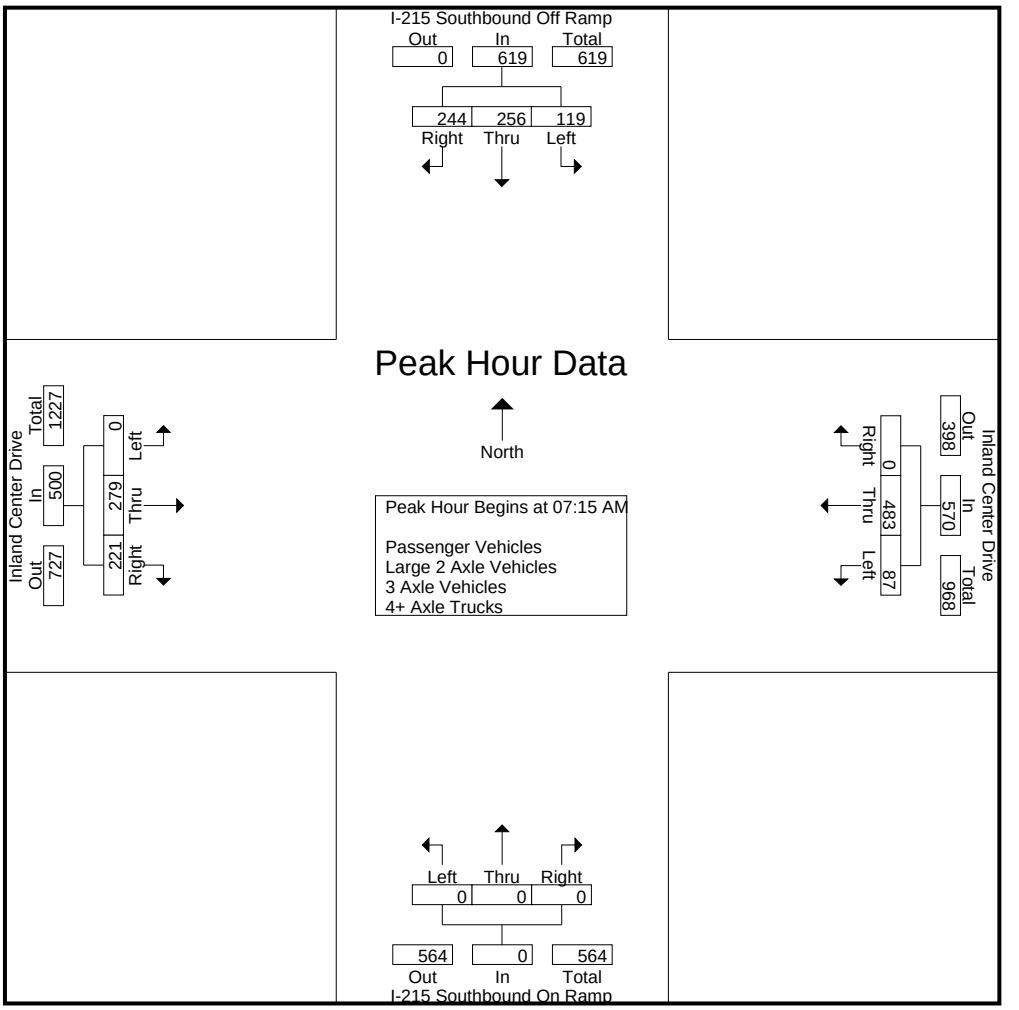

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:00 AM				07:00 AM			
+0 mins.	29	60	39	128	22	131	0	153	0	0	0	0	0	65	62	127
+15 mins.	17	61	64	142	20	**152**	0	**172**	0	0	0	0	0	55	53	108
+30 mins.	21	**79**	63	163	25	104	0	129	0	0	0	0	0	80	58	138
+45 mins.	**52**	66	**68**	**186**	**26**	102	0	128	0	0	0	0	0	**84**	**65**	**149**
Total Volume	119	266	234	619	93	489	0	582	0	0	0	0	0	284	238	522
% App. Total	19.2	43	37.8		16	84	0		0	0	0		0	54.4	45.6	
PHF	.572	.842	.860	.832	.894	.804	.000	.846	.000	.000	.000	.000	.000	.845	.915	.876

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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
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Groups Printed- Passenger Vehicles

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	28	53	38	119	18	73	0	91	0	0	0	0	0	64	60	124	334
07:15 AM	17	55	63	135	13	92	0	105	0	0	0	0	0	53	52	105	345
07:30 AM	21	70	62	153	16	127	0	143	0	0	0	0	0	80	56	136	432
07:45 AM	51	60	68	179	14	149	0	163	0	0	0	0	0	82	63	145	487
Total	117	238	231	586	61	441	0	502	0	0	0	0	0	279	231	510	1598
08:00 AM	29	47	48	124	23	102	0	125	0	0	0	0	0	58	42	100	349
08:15 AM	24	50	41	115	21	98	0	119	0	0	0	0	0	53	44	97	331
08:30 AM	25	67	50	142	16	88	0	104	0	0	0	0	0	65	54	119	365
08:45 AM	39	69	62	170	22	95	0	117	0	0	0	0	0	54	46	100	387
Total	117	233	201	551	82	383	0	465	0	0	0	0	0	230	186	416	1432
Grand Total	234	471	432	1137	143	824	0	967	0	0	0	0	0	509	417	926	3030
Apprch %	20.6	41.4	38		14.8	85.2	0		0	0	0		0	55	45		
Total %	7.7	15.5	14.3	37.5	4.7	27.2	0	31.9	0	0	0	0	0	16.8	13.8	30.6	

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	55	63	135	13	92	0	105	0	0	0	0	0	53	52	105	345
07:30 AM	21	**70**	62	153	16	127	0	143	0	0	0	0	0	80	56	136	432
07:45 AM	**51**	60	**68**	**179**	14	**149**	0	**163**	0	0	0	0	0	**82**	**63**	**145**	**487**
08:00 AM	29	47	48	124	**23**	102	0	125	0	0	0	0	0	58	42	100	349
Total Volume	118	232	241	591	66	470	0	536	0	0	0	0	0	273	213	486	1613
% App. Total	20	39.3	40.8		12.3	87.7	0		0	0	0		0	56.2	43.8		
PHF	.578	.829	.886	.825	.717	.789	.000	.822	.000	.000	.000	.000	.000	.832	.845	.838	.828

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City of San Bernardino
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File Name : 05_SBC_215S_Inland Center AM
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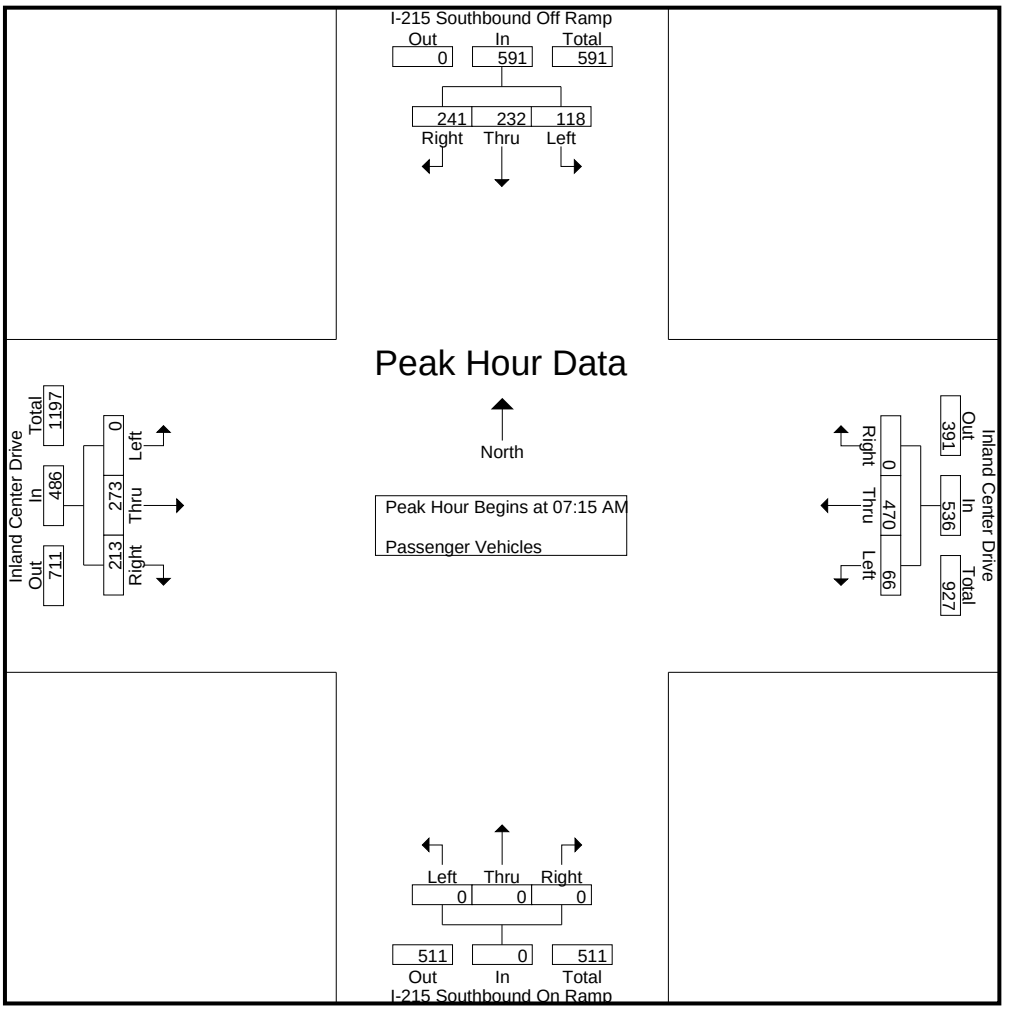

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	17	55	63	135	13	92	0	105	0	0	0	0	0	53	52	105
+15 mins.	21	**70**	62	153	16	127	0	143	0	0	0	0	0	80	56	136
+30 mins.	**51**	60	**68**	**179**	14	**149**	0	**163**	0	0	0	0	0	**82**	**63**	**145**
+45 mins.	29	47	48	124	**23**	102	0	125	0	0	0	0	0	58	42	100
Total Volume	118	232	241	591	66	470	0	536	0	0	0	0	0	273	213	486
% App. Total	20	39.3	40.8		12.3	87.7	0		0	0	0		0	56.2	43.8	
PHF	.578	.829	.886	.825	.717	.789	.000	.822	.000	.000	.000	.000	.000	.832	.845	.838

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City of San Bernardino
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File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	1	3	1	5	2	2	0	4	0	0	0	0	0	0	1	1	10
07:15 AM	0	2	1	3	4	1	0	5	0	0	0	0	0	2	0	2	10
07:30 AM	0	6	1	7	4	4	0	8	0	0	0	0	0	0	1	1	16
07:45 AM	0	1	0	1	4	3	0	7	0	0	0	0	0	2	1	3	11
Total	1	12	3	16	14	10	0	24	0	0	0	0	0	4	3	7	47
08:00 AM	0	1	1	2	1	1	0	2	0	0	0	0	0	2	2	4	8
08:15 AM	1	3	3	7	3	3	0	6	0	0	0	0	0	3	3	6	19
08:30 AM	4	6	4	14	7	2	0	9	0	0	0	0	0	2	6	8	31
08:45 AM	0	3	0	3	3	1	0	4	0	0	0	0	0	1	3	4	11
Total	5	13	8	26	14	7	0	21	0	0	0	0	0	8	14	22	69
Grand Total	6	25	11	42	28	17	0	45	0	0	0	0	0	12	17	29	116
Apprch %	14.3	59.5	26.2		62.2	37.8	0		0	0	0		0	41.4	58.6		
Total %	5.2	21.6	9.5	36.2	24.1	14.7	0	38.8	0	0	0	0	0	10.3	14.7	25	

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	2	**1**	3	**4**	1	0	5	0	0	0	0	0	**2**	0	2	10
07:30 AM	0	**6**	1	**7**	4	**4**	0	**8**	0	0	0	0	0	0	1	1	**16**
07:45 AM	0	1	0	1	4	3	0	7	0	0	0	0	0	2	1	3	11
08:00 AM	0	1	1	2	1	1	0	2	0	0	0	0	0	2	**2**	**4**	8
Total Volume	0	10	3	13	13	9	0	22	0	0	0	0	0	6	4	10	45
% App. Total	0	76.9	23.1		59.1	40.9	0		0	0	0		0	60	40		
PHF	.000	.417	.750	.464	.813	.563	.000	.688	.000	.000	.000	.000	.000	.750	.500	.625	.703

Counts Unlimited
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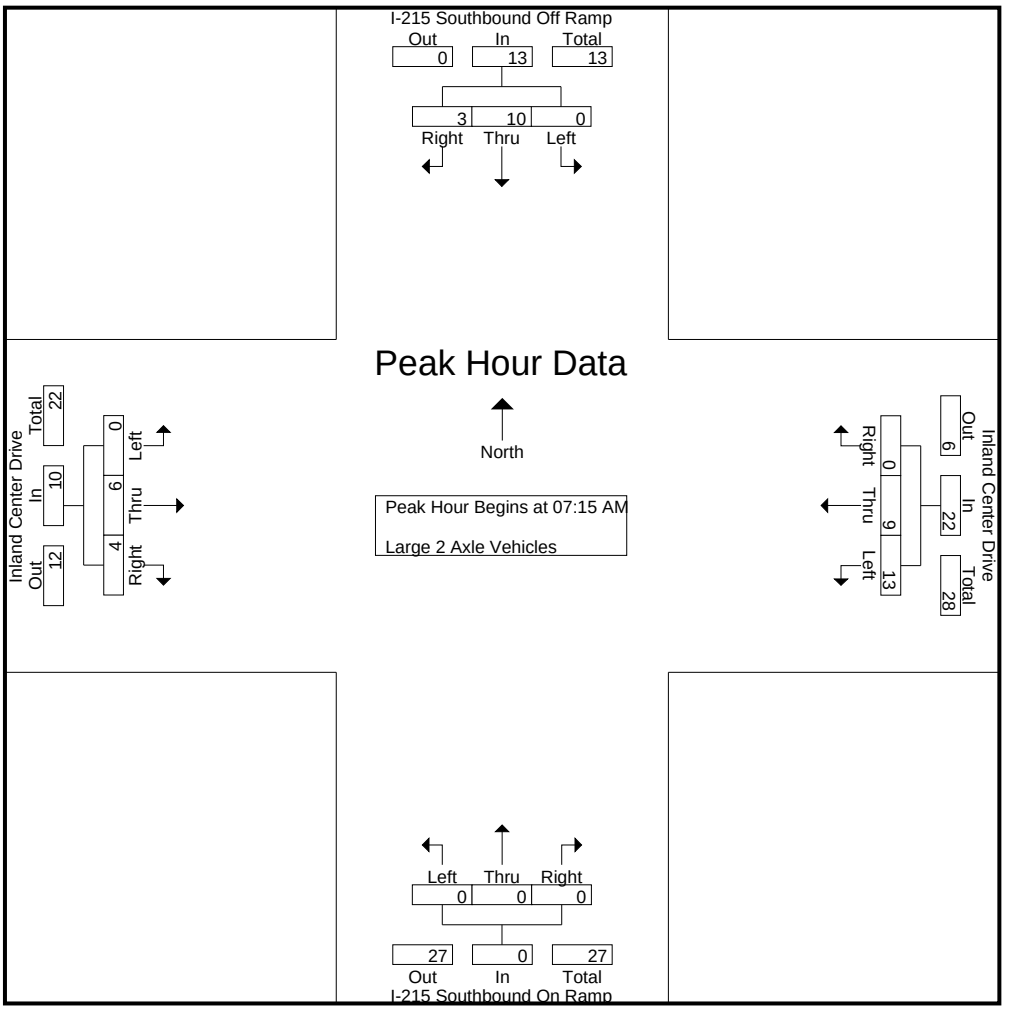
City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	2	**1**	3	**4**	1	0	5	0	0	0	0	0	**2**	0	2
+15 mins.	0	**6**	1	**7**	4	**4**	0	**8**	0	0	0	0	0	0	1	1
+30 mins.	0	1	0	1	4	3	0	7	0	0	0	0	0	2	1	3
+45 mins.	0	1	1	2	1	1	0	2	0	0	0	0	0	2	**2**	**4**
Total Volume	0	10	3	13	13	9	0	22	0	0	0	0	0	6	4	10
% App. Total	0	76.9	23.1		59.1	40.9	0		0	0	0		0	60	40	
PHF	.000	.417	.750	.464	.813	.563	.000	.688	.000	.000	.000	.000	.000	.750	.500	.625

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City of San Bernardino
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E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	1	3
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:45 AM	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	1	3	0	4	2	0	0	2	0	0	0	0	0	1	1	2	8
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
Total	1	0	0	1	2	2	0	4	0	0	0	0	0	0	0	0	5
Grand Total	2	3	0	5	4	2	0	6	0	0	0	0	0	1	1	2	13
Apprch %	40	60	0		66.7	33.3	0		0	0	0		0	50	50		
Total %	15.4	23.1	0	38.5	30.8	15.4	0	46.2	0	0	0	0	0	7.7	7.7	15.4	

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	1
07:45 AM	**1**	**2**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0	**3**
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	3	0	4	0	0	0	0	0	0	0	0	0	0	1	1	5
% App. Total	25	75	0		0	0	0		0	0	0		0	0	100		
PHF	.250	.375	.000	.333	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.417

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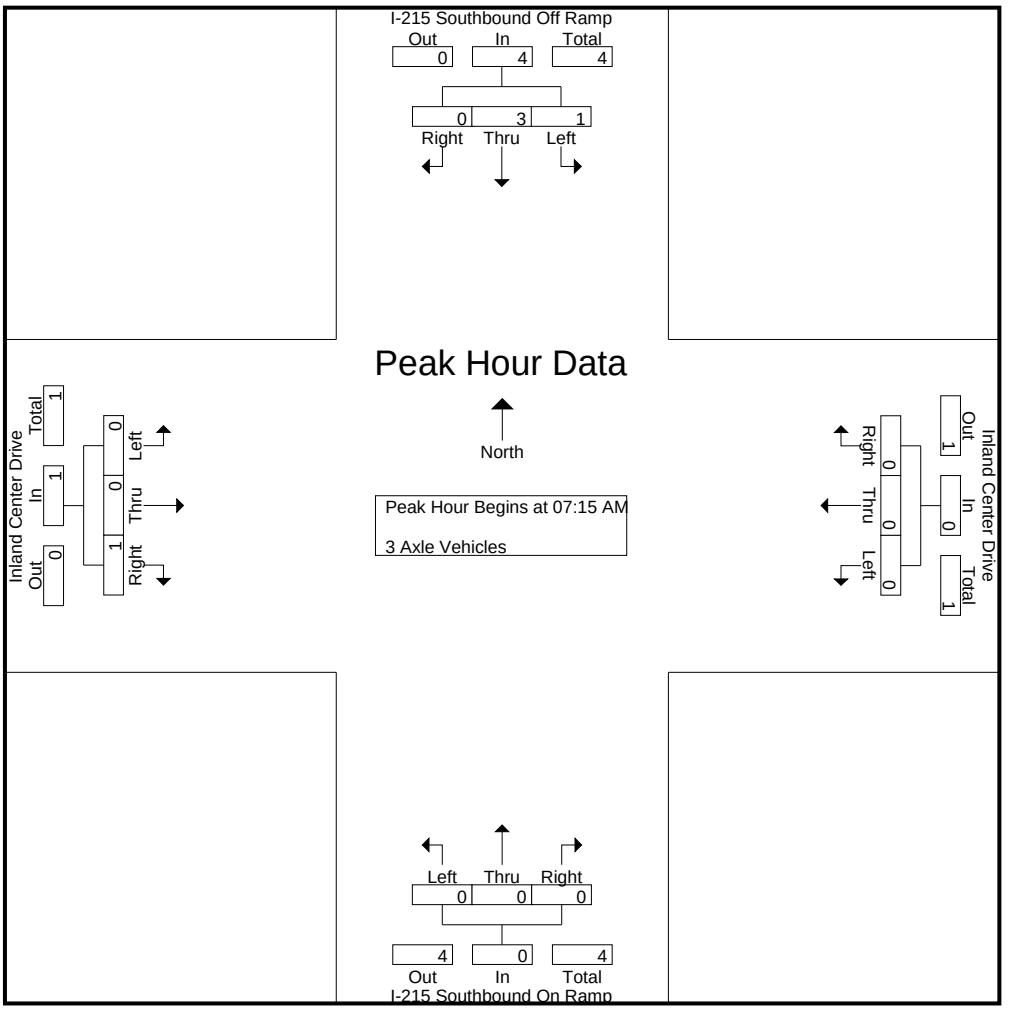
City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**
+30 mins.	**1**	**2**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	3	0	4	0	0	0	0	0	0	0	0	0	0	1	1
% App. Total	25	75	0		0	0	0		0	0	0		0	0	100	
PHF	.250	.375	.000	.333	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250

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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	0	4	0	4	5	0	0	5	0	0	0	0	0	0	1	1	10
07:15 AM	0	3	0	3	3	3	0	6	0	0	0	0	0	0	1	1	10
07:30 AM	0	3	0	3	2	0	0	2	0	0	0	0	0	0	0	0	5
07:45 AM	0	3	0	3	2	0	0	2	0	0	0	0	0	0	1	1	6
Total	0	13	0	13	12	3	0	15	0	0	0	0	0	0	3	3	31
08:00 AM	0	2	0	2	1	1	0	2	0	0	0	0	0	0	1	1	5
08:15 AM	0	2	0	2	1	1	0	2	0	0	0	0	0	0	2	2	6
08:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2
08:45 AM	0	4	0	4	1	0	0	1	0	0	0	0	0	0	1	1	6
Total	0	8	0	8	4	2	0	6	0	0	0	0	0	0	5	5	19
Grand Total	0	21	0	21	16	5	0	21	0	0	0	0	0	0	8	8	50
Apprch %	0	100	0		76.2	23.8	0		0	0	0		0	0	100		
Total %	0	42	0	42	32	10	0	42	0	0	0	0	0	0	16	16	

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**3**	0	**3**	**3**	**3**	0	**6**	0	0	0	0	0	0	**1**	**1**	**10**
07:30 AM	0	3	0	3	2	0	0	2	0	0	0	0	0	0	0	0	5
07:45 AM	0	3	0	3	2	0	0	2	0	0	0	0	0	0	1	1	6
08:00 AM	0	2	0	2	1	1	0	2	0	0	0	0	0	0	1	1	5
Total Volume	0	11	0	11	8	4	0	12	0	0	0	0	0	0	3	3	26
% App. Total	0	100	0		66.7	33.3	0		0	0	0		0	0	100		
PHF	.000	.917	.000	.917	.667	.333	.000	.500	.000	.000	.000	.000	.000	.000	.750	.750	.650

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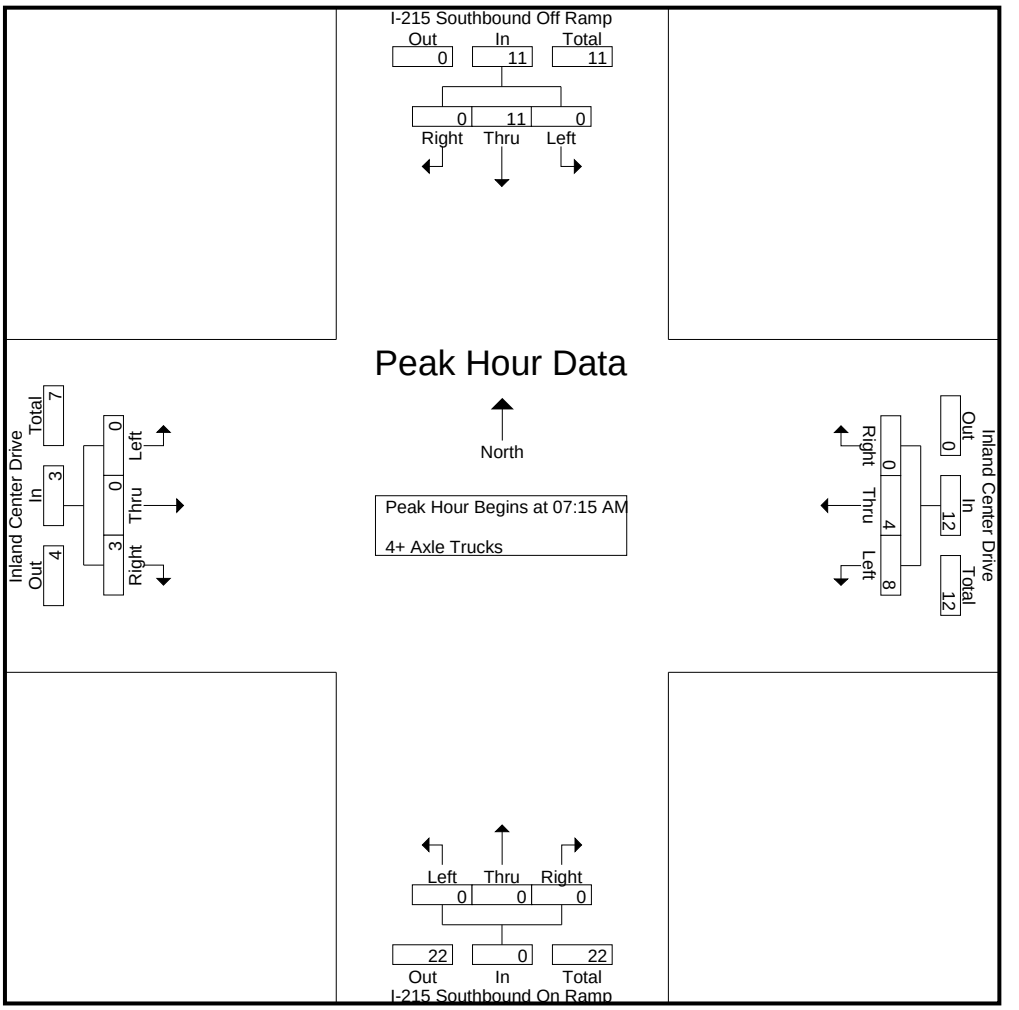
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**3**	0	**3**	**3**	**3**	0	**6**	0	0	0	0	0	0	**1**	**1**
+15 mins.	0	3	0	3	2	0	0	2	0	0	0	0	0	0	0	0
+30 mins.	0	3	0	3	2	0	0	2	0	0	0	0	0	0	1	1
+45 mins.	0	2	0	2	1	1	0	2	0	0	0	0	0	0	1	1
Total Volume	0	11	0	11	8	4	0	12	0	0	0	0	0	0	3	3
% App. Total	0	100	0		66.7	33.3	0		0	0	0		0	0	100	
PHF	.000	.917	.000	.917	.667	.333	.000	.500	.000	.000	.000	.000	.000	.000	.750	.750

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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	65	81	68	214	103	128	0	231	0	0	0	0	0	153	79	232	677
04:15 PM	76	81	64	221	54	96	0	150	0	0	0	0	0	113	58	171	542
04:30 PM	59	81	63	203	70	118	0	188	0	0	0	0	0	118	72	190	581
04:45 PM	44	56	83	183	65	122	0	187	0	0	0	0	0	109	58	167	537
Total	244	299	278	821	292	464	0	756	0	0	0	0	0	493	267	760	2337
05:00 PM	45	111	84	240	97	139	0	236	0	0	0	0	0	115	77	192	668
05:15 PM	64	79	77	220	68	124	0	192	0	0	0	0	0	102	68	170	582
05:30 PM	51	83	75	209	57	118	0	175	0	0	0	0	0	110	54	164	548
05:45 PM	74	65	93	232	67	135	0	202	0	0	0	0	0	111	59	170	604
Total	234	338	329	901	289	516	0	805	0	0	0	0	0	438	258	696	2402
Grand Total	478	637	607	1722	581	980	0	1561	0	0	0	0	0	931	525	1456	4739
Apprch %	27.8	37	35.2		37.2	62.8	0		0	0	0		0	63.9	36.1		
Total %	10.1	13.4	12.8	36.3	12.3	20.7	0	32.9	0	0	0	0	0	19.6	11.1	30.7	
Passenger Vehicles	470	605	598	1673	550	968	0	1518	0	0	0	0	0	916	520	1436	4627
% Passenger Vehicles	98.3	95	98.5	97.2	94.7	98.8	0	97.2	0	0	0	0	0	98.4	99	98.6	97.6
Large 2 Axle Vehicles	8	17	9	34	11	8	0	19	0	0	0	0	0	10	2	12	65
% Large 2 Axle Vehicles	1.7	2.7	1.5	2	1.9	0.8	0	1.2	0	0	0	0	0	1.1	0.4	0.8	1.4
3 Axle Vehicles	0	5	0	5	5	2	0	7	0	0	0	0	0	3	0	3	15
% 3 Axle Vehicles	0	0.8	0	0.3	0.9	0.2	0	0.4	0	0	0	0	0	0.3	0	0.2	0.3
4+ Axle Trucks	0	10	0	10	15	2	0	17	0	0	0	0	0	2	3	5	32
% 4+ Axle Trucks	0	1.6	0	0.6	2.6	0.2	0	1.1	0	0	0	0	0	0.2	0.6	0.3	0.7

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 05:00 PM																	
05:00 PM	45	**111**	84	**240**	**97**	**139**	0	**236**	0	0	0	0	0	**115**	**77**	**192**	**668**
05:15 PM	64	79	77	220	68	124	0	192	0	0	0	0	0	102	68	170	582
05:30 PM	51	83	75	209	57	118	0	175	0	0	0	0	0	110	54	164	548
05:45 PM	**74**	65	**93**	232	67	135	0	202	0	0	0	0	0	111	59	170	604
Total Volume	234	338	329	901	289	516	0	805	0	0	0	0	0	438	258	696	2402
% App. Total	26	37.5	36.5		35.9	64.1	0		0	0	0		0	62.9	37.1		
PHF	.791	.761	.884	.939	.745	.928	.000	.853	.000	.000	.000	.000	.000	.952	.838	.906	.899

Counts Unlimited
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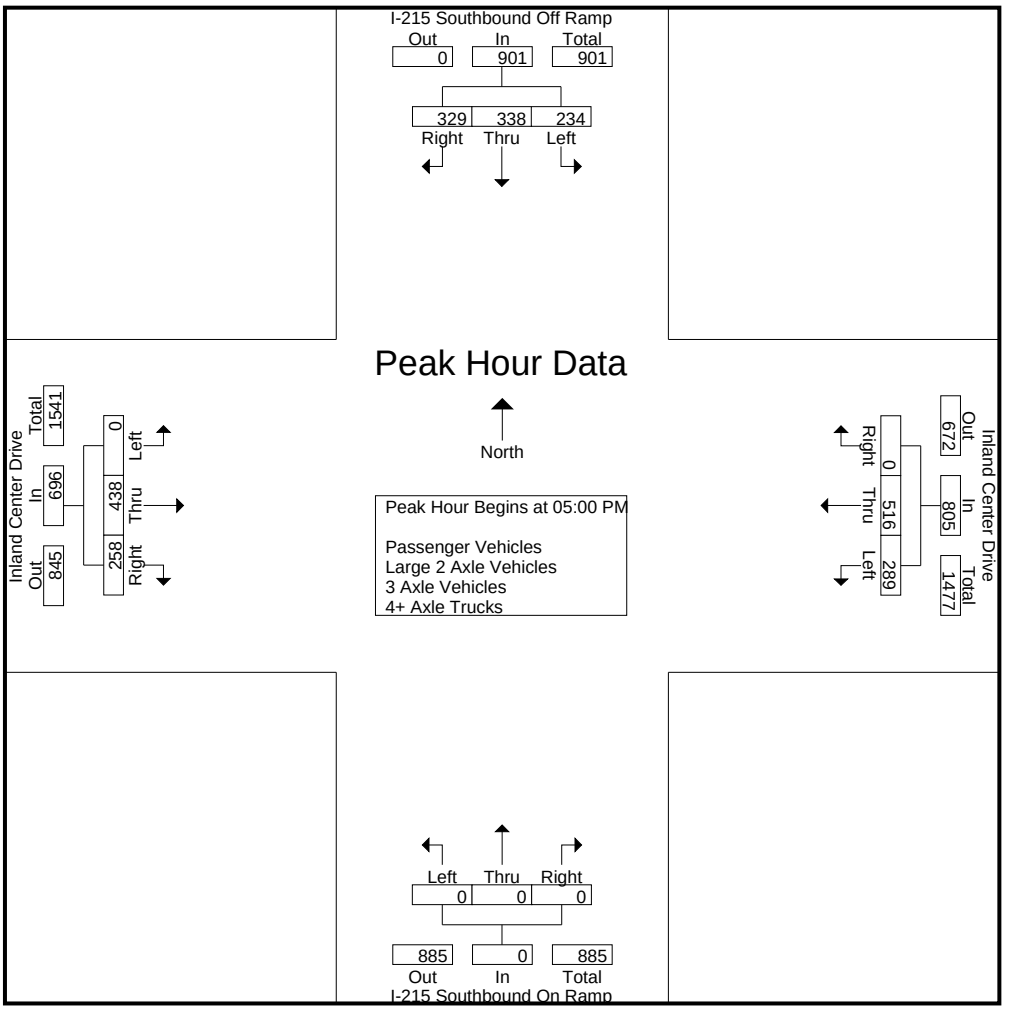
City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				04:00 PM				04:00 PM			
+0 mins.	45	**111**	84	**240**	**97**	**139**	0	**236**	0	0	0	0	0	**153**	**79**	**232**
+15 mins.	64	79	77	220	68	124	0	192	0	0	0	0	0	113	58	171
+30 mins.	51	83	75	209	57	118	0	175	0	0	0	0	0	118	72	190
+45 mins.	**74**	65	**93**	232	67	135	0	202	0	0	0	0	0	109	58	167
Total Volume	234	338	329	901	289	516	0	805	0	0	0	0	0	493	267	760
% App. Total	26	37.5	36.5		35.9	64.1	0		0	0	0		0	64.9	35.1	
PHF	.791	.761	.884	.939	.745	.928	.000	.853	.000	.000	.000	.000	.000	.806	.845	.819

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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018

Groups Printed- Passenger Vehicles

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	62	73	68	203	100	128	0	228	0	0	0	0	0	151	78	229	660
04:15 PM	73	75	61	209	51	95	0	146	0	0	0	0	0	108	57	165	520
04:30 PM	59	77	61	197	68	115	0	183	0	0	0	0	0	116	72	188	568
04:45 PM	44	51	83	178	62	122	0	184	0	0	0	0	0	109	57	166	528
Total	238	276	273	787	281	460	0	741	0	0	0	0	0	484	264	748	2276
05:00 PM	44	110	83	237	89	133	0	222	0	0	0	0	0	114	77	191	650
05:15 PM	64	75	76	215	63	123	0	186	0	0	0	0	0	98	67	165	566
05:30 PM	51	82	75	208	52	118	0	170	0	0	0	0	0	110	53	163	541
05:45 PM	73	62	91	226	65	134	0	199	0	0	0	0	0	110	59	169	594
Total	232	329	325	886	269	508	0	777	0	0	0	0	0	432	256	688	2351
Grand Total	470	605	598	1673	550	968	0	1518	0	0	0	0	0	916	520	1436	4627
Apprch %	28.1	36.2	35.7		36.2	63.8	0		0	0	0		0	63.8	36.2		
Total %	10.2	13.1	12.9	36.2	11.9	20.9	0	32.8	0	0	0	0	0	19.8	11.2	31	

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	44	**110**	83	**237**	**89**	133	0	**222**	0	0	0	0	0	**114**	**77**	**191**	**650**
05:15 PM	64	75	76	215	63	123	0	186	0	0	0	0	0	98	67	165	566
05:30 PM	51	82	75	208	52	118	0	170	0	0	0	0	0	110	53	163	541
05:45 PM	**73**	62	**91**	226	65	**134**	0	199	0	0	0	0	0	110	59	169	594
Total Volume	232	329	325	886	269	508	0	777	0	0	0	0	0	432	256	688	2351
% App. Total	26.2	37.1	36.7		34.6	65.4	0		0	0	0		0	62.8	37.2		
PHF	.795	.748	.893	.935	.756	.948	.000	.875	.000	.000	.000	.000	.000	.947	.831	.901	.904

Counts Unlimited
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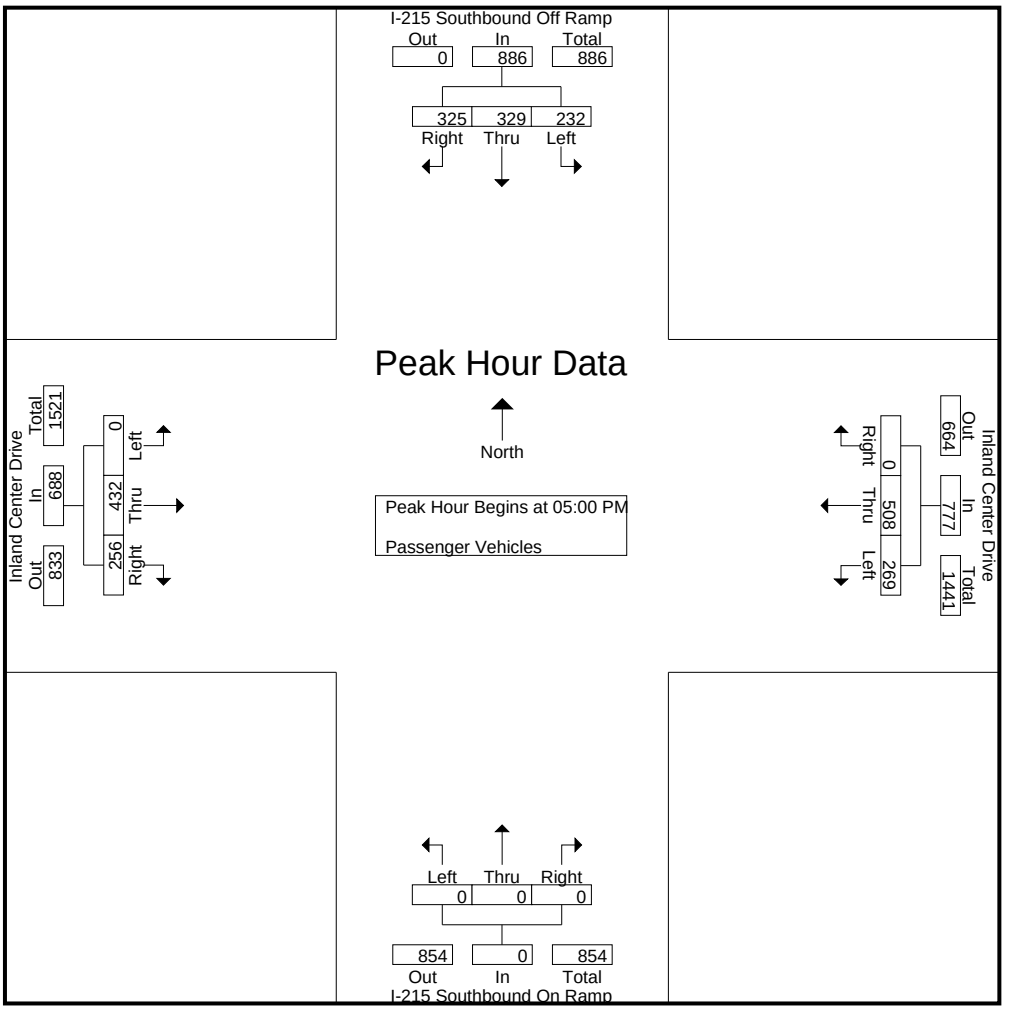
City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	44	**110**	83	**237**	**89**	133	0	**222**	0	0	0	0	0	**114**	**77**	**191**
+15 mins.	64	75	76	215	63	123	0	186	0	0	0	0	0	98	67	165
+30 mins.	51	82	75	208	52	118	0	170	0	0	0	0	0	110	53	163
+45 mins.	**73**	62	**91**	226	65	**134**	0	199	0	0	0	0	0	110	59	169
Total Volume	232	329	325	886	269	508	0	777	0	0	0	0	0	432	256	688
% App. Total	26.2	37.1	36.7		34.6	65.4	0		0	0	0		0	62.8	37.2	
PHF	.795	.748	.893	.935	.756	.948	.000	.875	.000	.000	.000	.000	.000	.947	.831	.901

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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	3	5	0	8	0	0	0	0	0	0	0	0	0	2	0	2	10
04:15 PM	3	3	3	9	2	0	0	2	0	0	0	0	0	2	0	2	13
04:30 PM	0	2	2	4	1	2	0	3	0	0	0	0	0	2	0	2	9
04:45 PM	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
Total	6	11	5	22	5	2	0	7	0	0	0	0	0	6	0	6	35
05:00 PM	1	0	1	2	2	5	0	7	0	0	0	0	0	0	0	0	9
05:15 PM	0	4	1	5	2	0	0	2	0	0	0	0	0	3	1	4	11
05:30 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	1	3
05:45 PM	1	2	2	5	0	1	0	1	0	0	0	0	0	1	0	1	7
Total	2	6	4	12	6	6	0	12	0	0	0	0	0	4	2	6	30
Grand Total	8	17	9	34	11	8	0	19	0	0	0	0	0	10	2	12	65
Apprch %	23.5	50	26.5		57.9	42.1	0		0	0	0		0	83.3	16.7		
Total %	12.3	26.2	13.8	52.3	16.9	12.3	0	29.2	0	0	0	0	0	15.4	3.1	18.5	

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**1**	0	1	2	**2**	**5**	0	**7**	0	0	0	0	0	0	0	0	9
05:15 PM	0	**4**	1	**5**	2	0	0	2	0	0	0	0	0	**3**	**1**	**4**	**11**
05:30 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	1	3
05:45 PM	1	2	**2**	5	0	1	0	1	0	0	0	0	0	1	0	1	7
Total Volume	2	6	4	12	6	6	0	12	0	0	0	0	0	4	2	6	30
% App. Total	16.7	50	33.3		50	50	0		0	0	0		0	66.7	33.3		
PHF	.500	.375	.500	.600	.750	.300	.000	.429	.000	.000	.000	.000	.000	.333	.500	.375	.682

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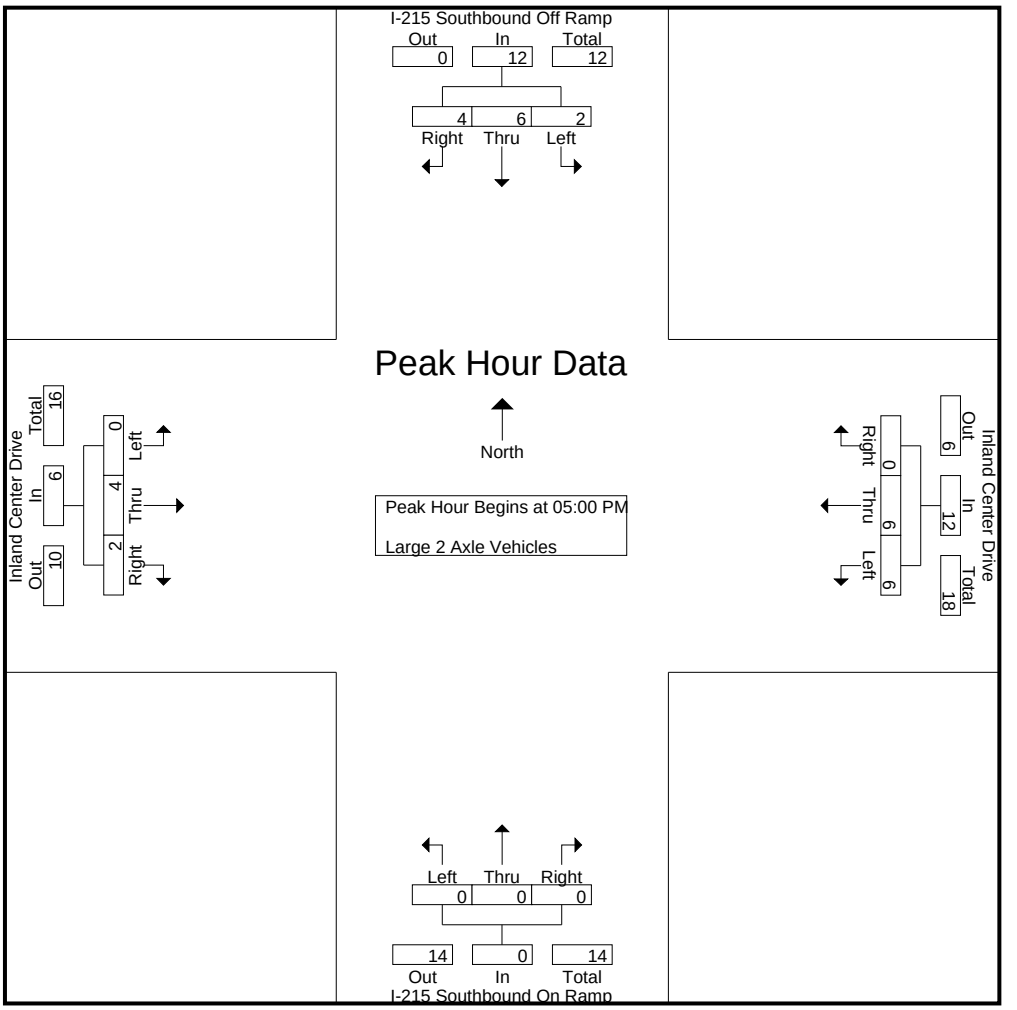
City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	**1**	0	1	2	**2**	**5**	0	**7**	0	0	0	0	0	0	0	0
+15 mins.	0	**4**	1	**5**	2	0	0	2	0	0	0	0	0	**3**	**1**	**4**
+30 mins.	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	1
+45 mins.	1	2	**2**	5	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	2	6	4	12	6	6	0	12	0	0	0	0	0	4	2	6
% App. Total	16.7	50	33.3		50	50	0		0	0	0		0	66.7	33.3	
PHF	.500	.375	.500	.600	.750	.300	.000	.429	.000	.000	.000	.000	.000	.333	.500	.375

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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
04:30 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	4	3	0	0	3	0	0	0	0	0	1	0	1	8
05:00 PM	0	0	0	0	1	1	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	2	2	0	4	0	0	0	0	0	2	0	2	7
Grand Total	0	5	0	5	5	2	0	7	0	0	0	0	0	3	0	3	15
Apprch %	0	100	0		71.4	28.6	0		0	0	0		0	100	0		
Total %	0	33.3	0	33.3	33.3	13.3	0	46.7	0	0	0	0	0	20	0	20	

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	**1**	**1**	0	**2**	0	0	0	0	0	**1**	0	**1**	**3**
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	2	2	0	4	0	0	0	0	0	2	0	2	7
% App. Total	0	100	0		50	50	0		0	0	0		0	100	0		
PHF	.000	.250	.000	.250	.500	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.583

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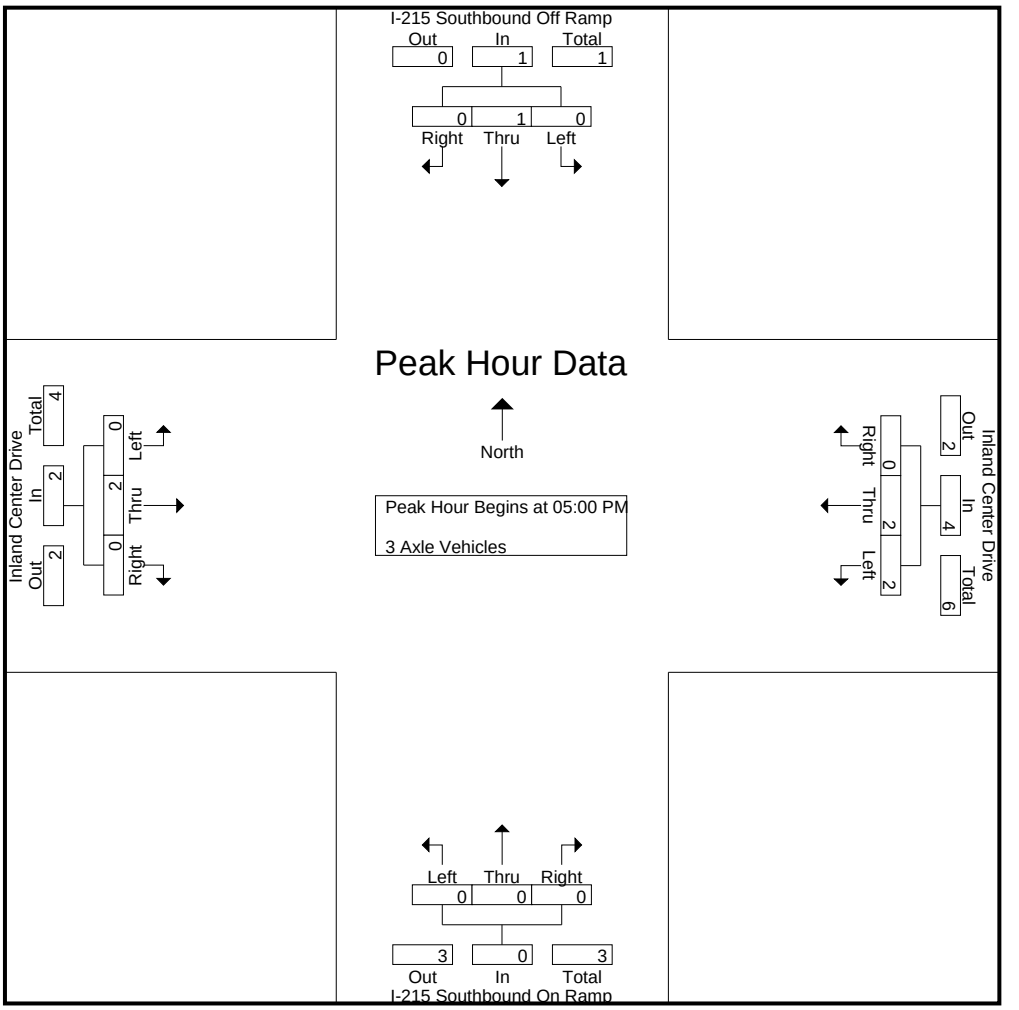
City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	**1**	**1**	0	**2**	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	2	2	0	4	0	0	0	0	0	2	0	2
% App. Total	0	100	0		50	50	0		0	0	0		0	100	0	
PHF	.000	.250	.000	.250	.500	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500

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City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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	0	2	0	2	1	0	0	1	0	0	0	0	0	0	1	1	4
04:15 PM	0	2	0	2	1	1	0	2	0	0	0	0	0	2	1	3	7
04:30 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
04:45 PM	0	3	0	3	1	0	0	1	0	0	0	0	0	0	1	1	5
Total	0	8	0	8	3	2	0	5	0	0	0	0	0	2	3	5	18
05:00 PM	0	1	0	1	5	0	0	5	0	0	0	0	0	0	0	0	6
05:15 PM	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3
05:30 PM	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	0	2	0	2	12	0	0	12	0	0	0	0	0	0	0	0	14
Grand Total	0	10	0	10	15	2	0	17	0	0	0	0	0	2	3	5	32
Apprch %	0	100	0		88.2	11.8	0		0	0	0		0	40	60		
Total %	0	31.2	0	31.2	46.9	6.2	0	53.1	0	0	0	0	0	6.2	9.4	15.6	

	I-215 Southbound Off Ramp Southbound				Inland Center Drive Westbound				I-215 Southbound On Ramp Northbound				Inland Center 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 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**1**	0	**1**	**5**	0	0	**5**	0	0	0	0	0	0	0	0	**6**
05:15 PM	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3
05:30 PM	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
05:45 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
Total Volume	0	2	0	2	12	0	0	12	0	0	0	0	0	0	0	0	14
% App. Total	0	100	0		100	0	0		0	0	0		0	0	0		
PHF	.000	.500	.000	.500	.600	.000	.000	.600	.000	.000	.000	.000	.000	.000	.000	.000	.583

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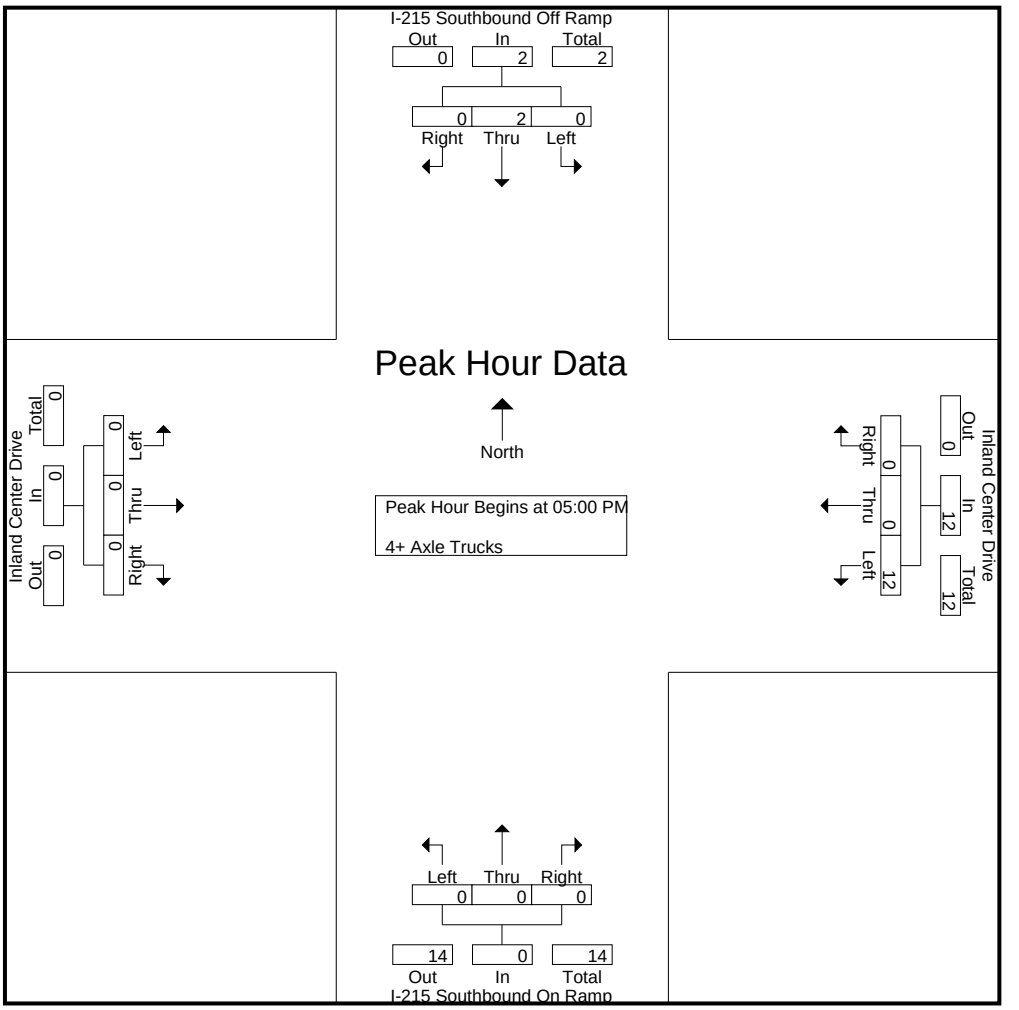
City of San Bernardino
N/S: I-215 Southbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 05_SBC_215S_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**1**	0	**1**	**5**	0	0	**5**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	12	0	0	12	0	0	0	0	0	0	0	0
% App. Total	0	100	0		100	0	0		0	0	0		0	0	0	
PHF	.000	.500	.000	.500	.600	.000	.000	.600	.000	.000	.000	.000	.000	.000	.000	.000

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	37	2	39	68	56	75	199	45	53	0	98	336
07:15 AM	0	0	0	0	0	47	2	49	69	72	87	228	31	34	0	65	342
07:30 AM	0	0	0	0	0	53	2	55	92	63	74	229	50	50	0	100	384
07:45 AM	0	0	0	0	0	52	3	55	129	93	120	342	55	75	0	130	527
Total	0	0	0	0	0	189	9	198	358	284	356	998	181	212	0	393	1589
08:00 AM	0	0	0	0	0	41	6	47	83	87	94	264	32	67	0	99	410
08:15 AM	0	0	0	0	0	56	6	62	72	60	74	206	36	53	0	89	357
08:30 AM	0	0	0	0	0	45	8	53	74	65	83	222	36	55	0	91	366
08:45 AM	0	0	0	0	0	47	7	54	77	55	58	190	29	64	0	93	337
Total	0	0	0	0	0	189	27	216	306	267	309	882	133	239	0	372	1470
Grand Total	0	0	0	0	0	378	36	414	664	551	665	1880	314	451	0	765	3059
Apprch %	0	0	0		0	91.3	8.7		35.3	29.3	35.4		41	59	0		
Total %	0	0	0	0	0	12.4	1.2	13.5	21.7	18	21.7	61.5	10.3	14.7	0	25	
Passenger Vehicles	0	0	0	0	0	320	34	354	652	520	630	1802	304	440	0	744	2900
% Passenger Vehicles	0	0	0	0	0	84.7	94.4	85.5	98.2	94.4	94.7	95.9	96.8	97.6	0	97.3	94.8
Large 2 Axle Vehicles	0	0	0	0	0	34	2	36	8	10	17	35	9	9	0	18	89
% Large 2 Axle Vehicles	0	0	0	0	0	9	5.6	8.7	1.2	1.8	2.6	1.9	2.9	2	0	2.4	2.9
3 Axle Vehicles	0	0	0	0	0	7	0	7	0	6	3	9	1	1	0	2	18
% 3 Axle Vehicles	0	0	0	0	0	1.9	0	1.7	0	1.1	0.5	0.5	0.3	0.2	0	0.3	0.6
4+ Axle Trucks	0	0	0	0	0	17	0	17	4	15	15	34	0	1	0	1	52
% 4+ Axle Trucks	0	0	0	0	0	4.5	0	4.1	0.6	2.7	2.3	1.8	0	0.2	0	0.1	1.7

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 07:30 AM																	
07:30 AM	0	0	0	0	0	53	2	55	92	63	74	229	50	50	0	100	384
07:45 AM	0	0	0	0	0	52	3	55	**129**	**93**	**120**	**342**	**55**	**75**	0	**130**	**527**
08:00 AM	0	0	0	0	0	41	**6**	47	83	87	94	264	32	67	0	99	410
08:15 AM	0	0	0	0	0	**56**	6	**62**	72	60	74	206	36	53	0	89	357
Total Volume	0	0	0	0	0	202	17	219	376	303	362	1041	173	245	0	418	1678
% App. Total	0	0	0		0	92.2	7.8		36.1	29.1	34.8		41.4	58.6	0		
PHF	.000	.000	.000	.000	.000	.902	.708	.883	.729	.815	.754	.761	.786	.817	.000	.804	.796

Counts Unlimited
PO Box 1178
Corona, CA 92878
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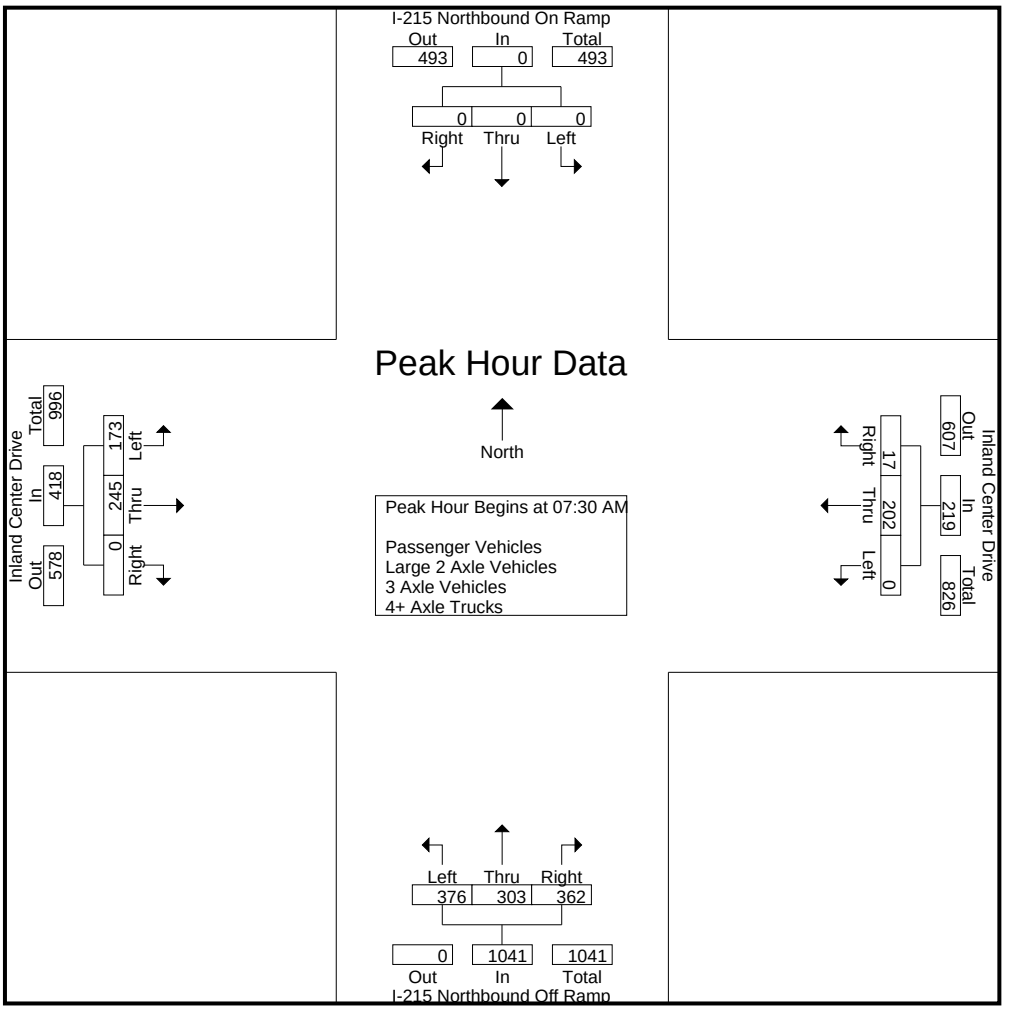
City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:15 AM				07:30 AM			
+0 mins.	0	0	0	0	0	53	2	55	69	72	87	228	50	50	0	100
+15 mins.	0	0	0	0	0	52	3	55	92	63	74	229	**55**	**75**	0	**130**
+30 mins.	0	0	0	0	0	41	**6**	47	**129**	**93**	**120**	**342**	32	67	0	99
+45 mins.	0	0	0	0	0	**56**	6	**62**	83	87	94	264	36	53	0	89
Total Volume	0	0	0	0	0	202	17	219	373	315	375	1063	173	245	0	418
% App. Total	0	0	0		0	92.2	7.8		35.1	29.6	35.3		41.4	58.6	0	
PHF	.000	.000	.000	.000	.000	.902	.708	.883	.723	.847	.781	.777	.786	.817	.000	.804

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	28	2	30	67	52	75	194	43	52	0	95	319
07:15 AM	0	0	0	0	0	37	2	39	68	71	84	223	29	34	0	63	325
07:30 AM	0	0	0	0	0	44	2	46	91	58	69	218	50	49	0	99	363
07:45 AM	0	0	0	0	0	45	3	48	127	92	116	335	54	74	0	128	511
Total	0	0	0	0	0	154	9	163	353	273	344	970	176	209	0	385	1518
08:00 AM	0	0	0	0	0	39	6	45	81	81	88	250	32	66	0	98	393
08:15 AM	0	0	0	0	0	51	6	57	70	54	69	193	33	51	0	84	334
08:30 AM	0	0	0	0	0	36	7	43	72	62	76	210	35	51	0	86	339
08:45 AM	0	0	0	0	0	40	6	46	76	50	53	179	28	63	0	91	316
Total	0	0	0	0	0	166	25	191	299	247	286	832	128	231	0	359	1382
Grand Total	0	0	0	0	0	320	34	354	652	520	630	1802	304	440	0	744	2900
Apprch %	0	0	0		0	90.4	9.6		36.2	28.9	35		40.9	59.1	0		
Total %	0	0	0	0	0	11	1.2	12.2	22.5	17.9	21.7	62.1	10.5	15.2	0	25.7	

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	44	2	46	91	58	69	218	50	49	0	99	363
07:45 AM	0	0	0	0	0	45	3	48	**127**	**92**	**116**	**335**	**54**	**74**	0	**128**	**511**
08:00 AM	0	0	0	0	0	39	**6**	45	81	81	88	250	32	66	0	98	393
08:15 AM	0	0	0	0	0	**51**	6	**57**	70	54	69	193	33	51	0	84	334
Total Volume	0	0	0	0	0	179	17	196	369	285	342	996	169	240	0	409	1601
% App. Total	0	0	0		0	91.3	8.7		37	28.6	34.3		41.3	58.7	0		
PHF	.000	.000	.000	.000	.000	.877	.708	.860	.726	.774	.737	.743	.782	.811	.000	.799	.783

Counts Unlimited
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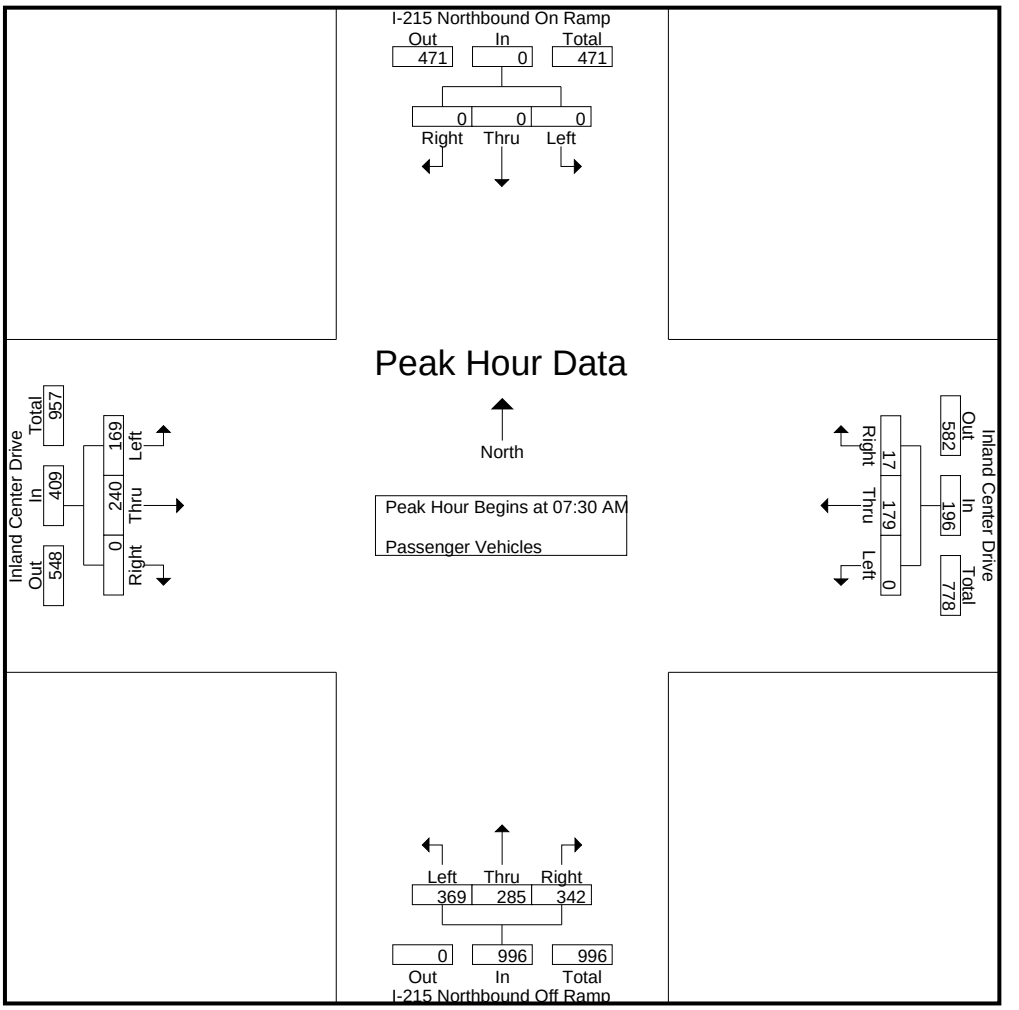
City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	44	2	46	91	58	69	218	50	49	0	99
+15 mins.	0	0	0	0	0	45	3	48	**127**	**92**	**116**	**335**	**54**	**74**	0	**128**
+30 mins.	0	0	0	0	0	39	**6**	45	81	81	88	250	32	66	0	98
+45 mins.	0	0	0	0	0	**51**	6	**57**	70	54	69	193	33	51	0	84
Total Volume	0	0	0	0	0	179	17	196	369	285	342	996	169	240	0	409
% App. Total	0	0	0		0	91.3	8.7		37	28.6	34.3		41.3	58.7	0	
PHF	.000	.000	.000	.000	.000	.877	.708	.860	.726	.774	.737	.743	.782	.811	.000	.799

Counts Unlimited
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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	3	0	3	0	1	0	1	1	1	0	2	6
07:15 AM	0	0	0	0	0	5	0	5	0	0	1	1	2	0	0	2	8
07:30 AM	0	0	0	0	0	7	0	7	1	1	1	3	0	0	0	0	10
07:45 AM	0	0	0	0	0	5	0	5	2	1	2	5	1	1	0	2	12
Total	0	0	0	0	0	20	0	20	3	3	4	10	4	2	0	6	36
08:00 AM	0	0	0	0	0	1	0	1	1	3	4	8	0	1	0	1	10
08:15 AM	0	0	0	0	0	2	0	2	1	3	4	8	3	1	0	4	14
08:30 AM	0	0	0	0	0	7	1	8	2	1	4	7	1	4	0	5	20
08:45 AM	0	0	0	0	0	4	1	5	1	0	1	2	1	1	0	2	9
Total	0	0	0	0	0	14	2	16	5	7	13	25	5	7	0	12	53
Grand Total	0	0	0	0	0	34	2	36	8	10	17	35	9	9	0	18	89
Apprch %	0	0	0		0	94.4	5.6		22.9	28.6	48.6		50	50	0		
Total %	0	0	0	0	0	38.2	2.2	40.4	9	11.2	19.1	39.3	10.1	10.1	0	20.2	

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	**7**	0	**7**	1	1	1	3	0	0	0	0	10
07:45 AM	0	0	0	0	0	5	0	5	**2**	1	2	5	1	**1**	0	2	12
08:00 AM	0	0	0	0	0	1	0	1	1	**3**	**4**	**8**	0	1	0	1	10
08:15 AM	0	0	0	0	0	2	0	2	1	3	4	8	**3**	1	0	**4**	**14**
Total Volume	0	0	0	0	0	15	0	15	5	8	11	24	4	3	0	7	46
% App. Total	0	0	0		0	100	0		20.8	33.3	45.8		57.1	42.9	0		
PHF	.000	.000	.000	.000	.000	.536	.000	.536	.625	.667	.688	.750	.333	.750	.000	.438	.821

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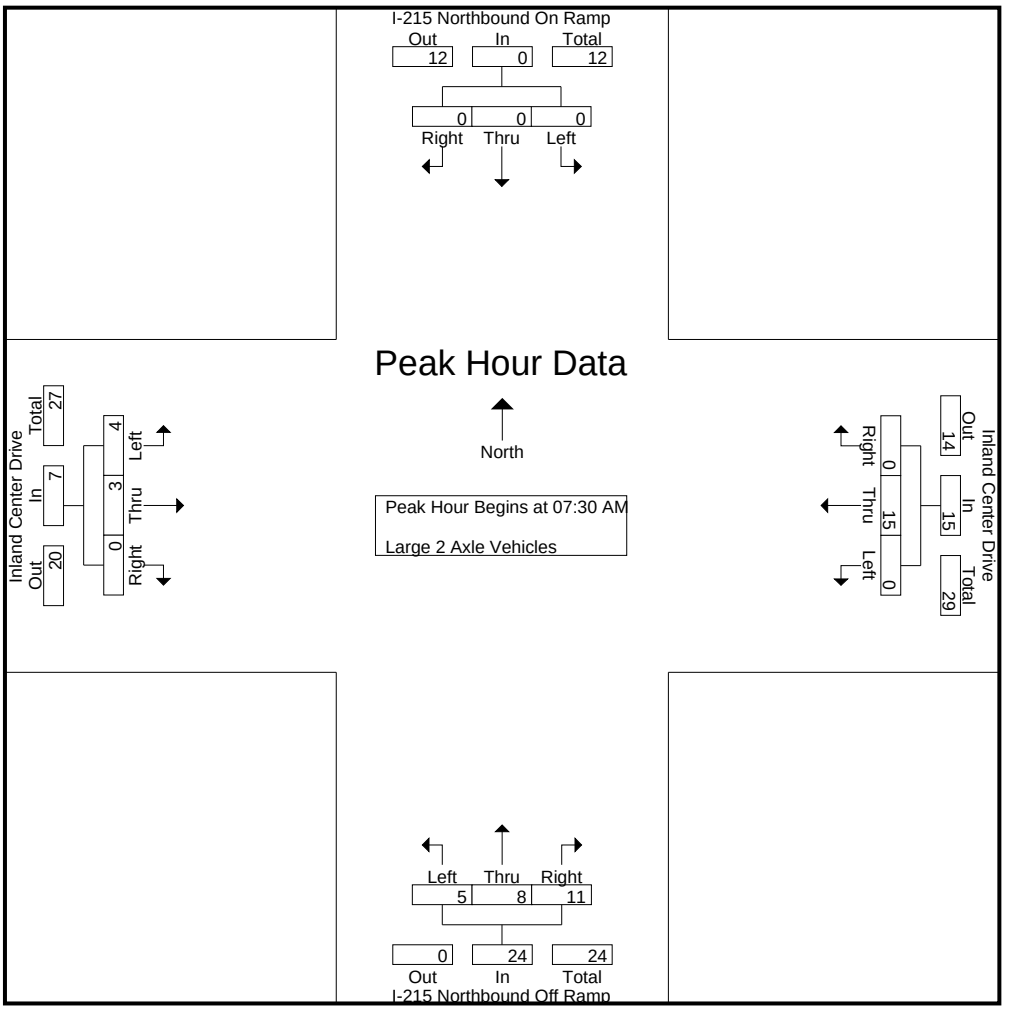
City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	**7**	0	**7**	1	1	1	3	0	0	0	0
+15 mins.	0	0	0	0	0	5	0	5	**2**	1	2	5	1	**1**	0	2
+30 mins.	0	0	0	0	0	1	0	1	1	**3**	**4**	**8**	0	1	0	1
+45 mins.	0	0	0	0	0	2	0	2	1	3	4	8	**3**	1	0	**4**
Total Volume	0	0	0	0	0	15	0	15	5	8	11	24	4	3	0	7
% App. Total	0	0	0		0	100	0		20.8	33.3	45.8		57.1	42.9	0	
PHF	.000	.000	.000	.000	.000	.536	.000	.536	.625	.667	.688	.750	.333	.750	.000	.438

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	1	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	3	2	5	0	0	0	0	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	3	3	6	1	0	0	1	9
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	2	0	2	0	2	0	2	0	1	0	1	5
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	2	0	2	0	1	0	1	0	0	0	0	3
Total	0	0	0	0	0	5	0	5	0	3	0	3	0	1	0	1	9
Grand Total	0	0	0	0	0	7	0	7	0	6	3	9	1	1	0	2	18
Apprch %	0	0	0		0	100	0		0	66.7	33.3		50	50	0		
Total %	0	0	0	0	0	38.9	0	38.9	0	33.3	16.7	50	5.6	5.6	0	11.1	

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	**3**	**2**	**5**	0	0	0	0	**5**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	**2**	0	**2**	0	2	0	2	0	**1**	0	**1**	5
Total Volume	0	0	0	0	0	2	0	2	0	5	2	7	0	1	0	1	10
% App. Total	0	0	0		0	100	0		0	71.4	28.6		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.417	.250	.350	.000	.250	.000	.250	.500

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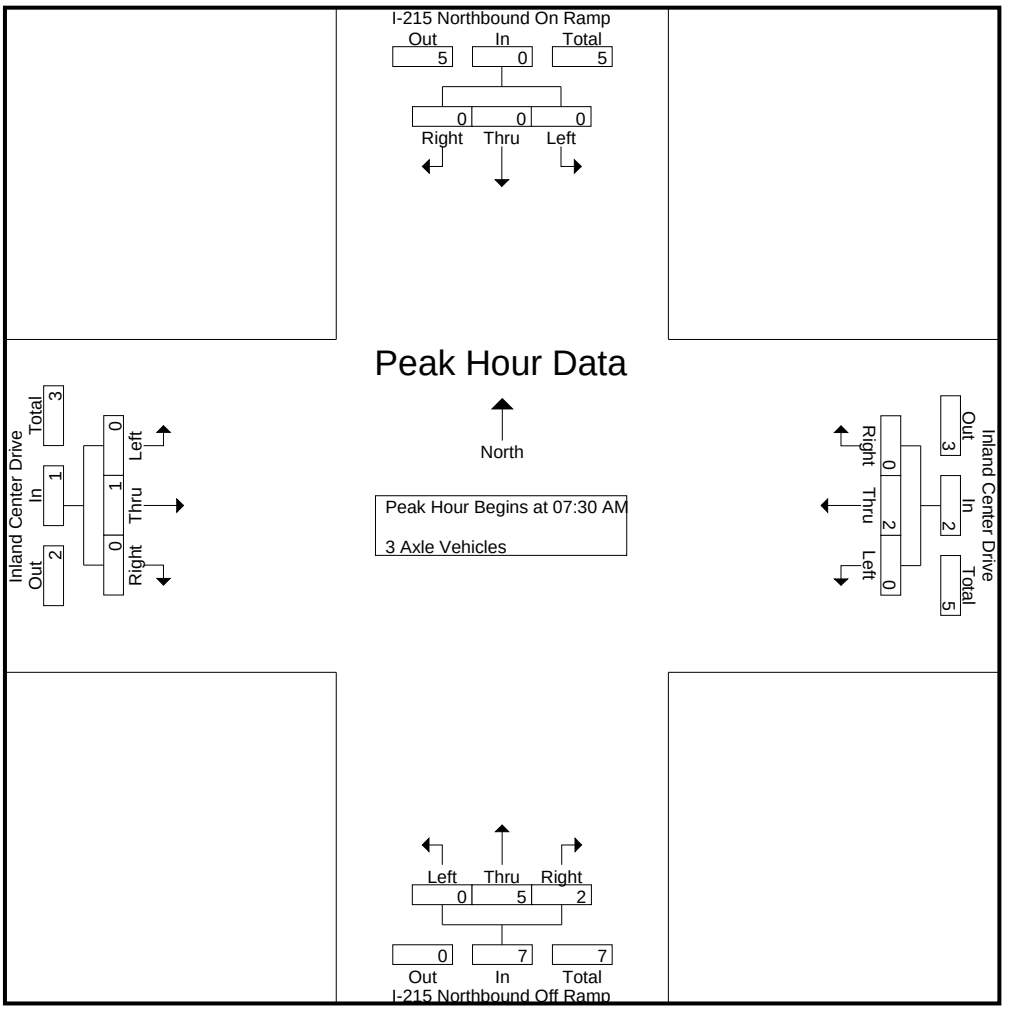
City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**3**	**2**	**5**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	**2**	0	**2**	0	2	0	2	0	**1**	0	**1**
Total Volume	0	0	0	0	0	2	0	2	0	5	2	7	0	1	0	1
% App. Total	0	0	0		0	100	0		0	71.4	28.6		0	100	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.417	.250	.350	.000	.250	.000	.250

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	4	0	4	1	3	0	4	0	0	0	0	8
07:15 AM	0	0	0	0	0	5	0	5	1	1	1	3	0	0	0	0	8
07:30 AM	0	0	0	0	0	2	0	2	0	1	2	3	0	1	0	1	6
07:45 AM	0	0	0	0	0	2	0	2	0	0	2	2	0	0	0	0	4
Total	0	0	0	0	0	13	0	13	2	5	5	12	0	1	0	1	26
08:00 AM	0	0	0	0	0	1	0	1	1	3	2	6	0	0	0	0	7
08:15 AM	0	0	0	0	0	1	0	1	1	1	1	3	0	0	0	0	4
08:30 AM	0	0	0	0	0	1	0	1	0	2	3	5	0	0	0	0	6
08:45 AM	0	0	0	0	0	1	0	1	0	4	4	8	0	0	0	0	9
Total	0	0	0	0	0	4	0	4	2	10	10	22	0	0	0	0	26
Grand Total	0	0	0	0	0	17	0	17	4	15	15	34	0	1	0	1	52
Apprch %	0	0	0		0	100	0		11.8	44.1	44.1		0	100	0		
Total %	0	0	0	0	0	32.7	0	32.7	7.7	28.8	28.8	65.4	0	1.9	0	1.9	

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	**2**	0	**2**	0	1	**2**	3	0	**1**	0	**1**	6
07:45 AM	0	0	0	0	0	2	0	2	0	0	2	2	0	0	0	0	4
08:00 AM	0	0	0	0	0	1	0	1	**1**	**3**	2	**6**	0	0	0	0	**7**
08:15 AM	0	0	0	0	0	1	0	1	1	1	1	3	0	0	0	0	4
Total Volume	0	0	0	0	0	6	0	6	2	5	7	14	0	1	0	1	21
% App. Total	0	0	0		0	100	0		14.3	35.7	50		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.500	.417	.875	.583	.000	.250	.000	.250	.750

Counts Unlimited
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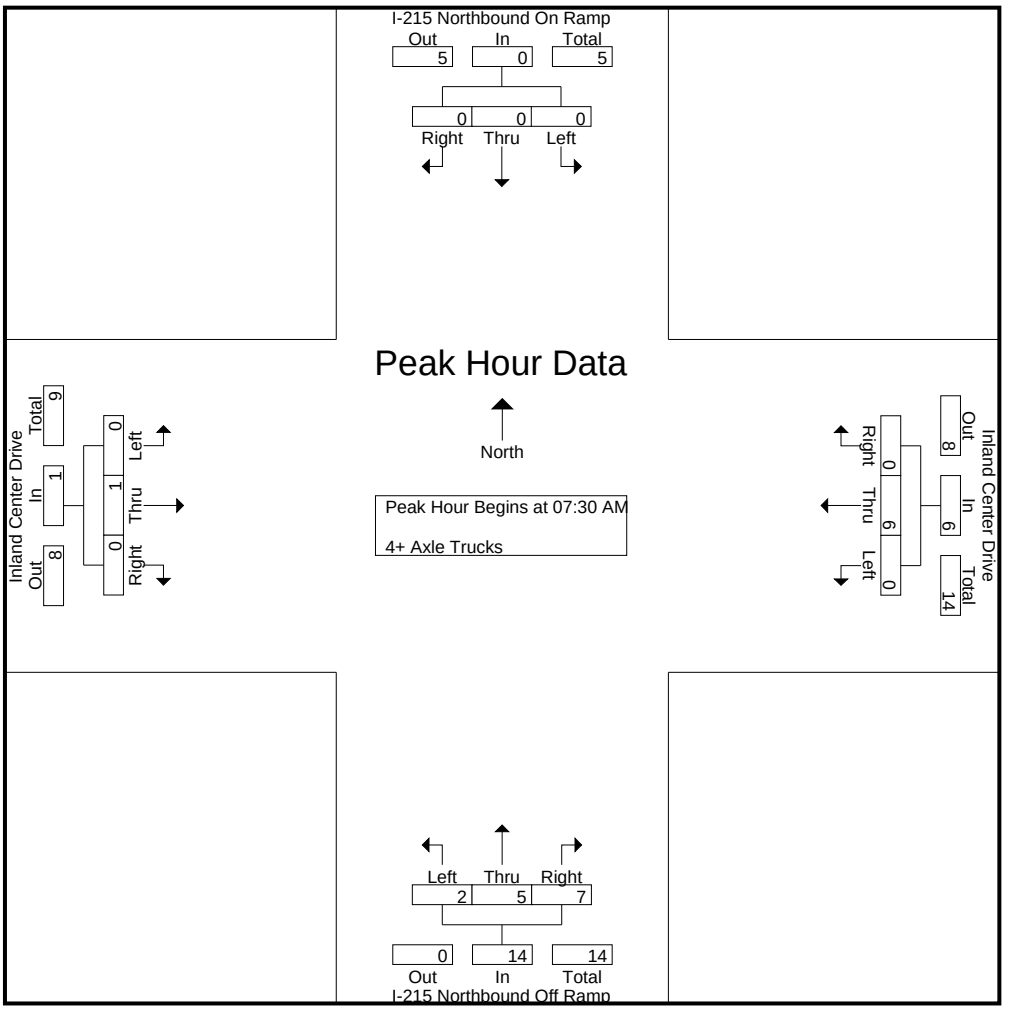
City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center AM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	**2**	0	**2**	0	1	**2**	3	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	2	0	2	0	0	2	2	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	**1**	**3**	2	**6**	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	1	1	1	3	0	0	0	0
Total Volume	0	0	0	0	0	6	0	6	2	5	7	14	0	1	0	1
% App. Total	0	0	0		0	100	0		14.3	35.7	50		0	100	0	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.500	.417	.875	.583	.000	.250	.000	.250

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	163	53	216	72	47	77	196	78	152	0	230	642
04:15 PM	0	0	0	0	0	105	49	154	51	67	84	202	65	127	0	192	548
04:30 PM	0	0	0	0	0	123	48	171	67	58	77	202	57	114	0	171	544
04:45 PM	0	0	0	0	0	117	58	175	66	57	81	204	49	110	0	159	538
Total	0	0	0	0	0	508	208	716	256	229	319	804	249	503	0	752	2272
05:00 PM	0	0	0	0	0	169	84	253	70	71	91	232	56	114	0	170	655
05:15 PM	0	0	0	0	0	138	56	194	50	62	78	190	53	115	0	168	552
05:30 PM	0	0	0	0	0	94	46	140	66	70	89	225	43	116	0	159	524
05:45 PM	0	0	0	0	0	122	47	169	85	62	67	214	48	118	0	166	549
Total	0	0	0	0	0	523	233	756	271	265	325	861	200	463	0	663	2280
Grand Total	0	0	0	0	0	1031	441	1472	527	494	644	1665	449	966	0	1415	4552
Apprch %	0	0	0		0	70	30		31.7	29.7	38.7		31.7	68.3	0		
Total %	0	0	0	0	0	22.6	9.7	32.3	11.6	10.9	14.1	36.6	9.9	21.2	0	31.1	
Passenger Vehicles	0	0	0	0	0	1000	439	1439	519	460	615	1594	444	946	0	1390	4423
% Passenger Vehicles	0	0	0	0	0	97	99.5	97.8	98.5	93.1	95.5	95.7	98.9	97.9	0	98.2	97.2
Large 2 Axle Vehicles	0	0	0	0	0	9	2	11	5	18	11	34	4	16	0	20	65
% Large 2 Axle Vehicles	0	0	0	0	0	0.9	0.5	0.7	0.9	3.6	1.7	2	0.9	1.7	0	1.4	1.4
3 Axle Vehicles	0	0	0	0	0	6	0	6	1	5	3	9	0	2	0	2	17
% 3 Axle Vehicles	0	0	0	0	0	0.6	0	0.4	0.2	1	0.5	0.5	0	0.2	0	0.1	0.4
4+ Axle Trucks	0	0	0	0	0	16	0	16	2	11	15	28	1	2	0	3	47
% 4+ Axle Trucks	0	0	0	0	0	1.6	0	1.1	0.4	2.2	2.3	1.7	0.2	0.2	0	0.2	1

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	123	48	171	67	58	77	202	**57**	114	0	**171**	544
04:45 PM	0	0	0	0	0	117	58	175	66	57	81	204	49	110	0	159	538
05:00 PM	0	0	0	0	0	**169**	**84**	**253**	**70**	**71**	**91**	**232**	56	114	0	170	**655**
05:15 PM	0	0	0	0	0	138	56	194	50	62	78	190	53	**115**	0	168	552
Total Volume	0	0	0	0	0	547	246	793	253	248	327	828	215	453	0	668	2289
% App. Total	0	0	0		0	69	31		30.6	30	39.5		32.2	67.8	0		
PHF	.000	.000	.000	.000	.000	.809	.732	.784	.904	.873	.898	.892	.943	.985	.000	.977	.874

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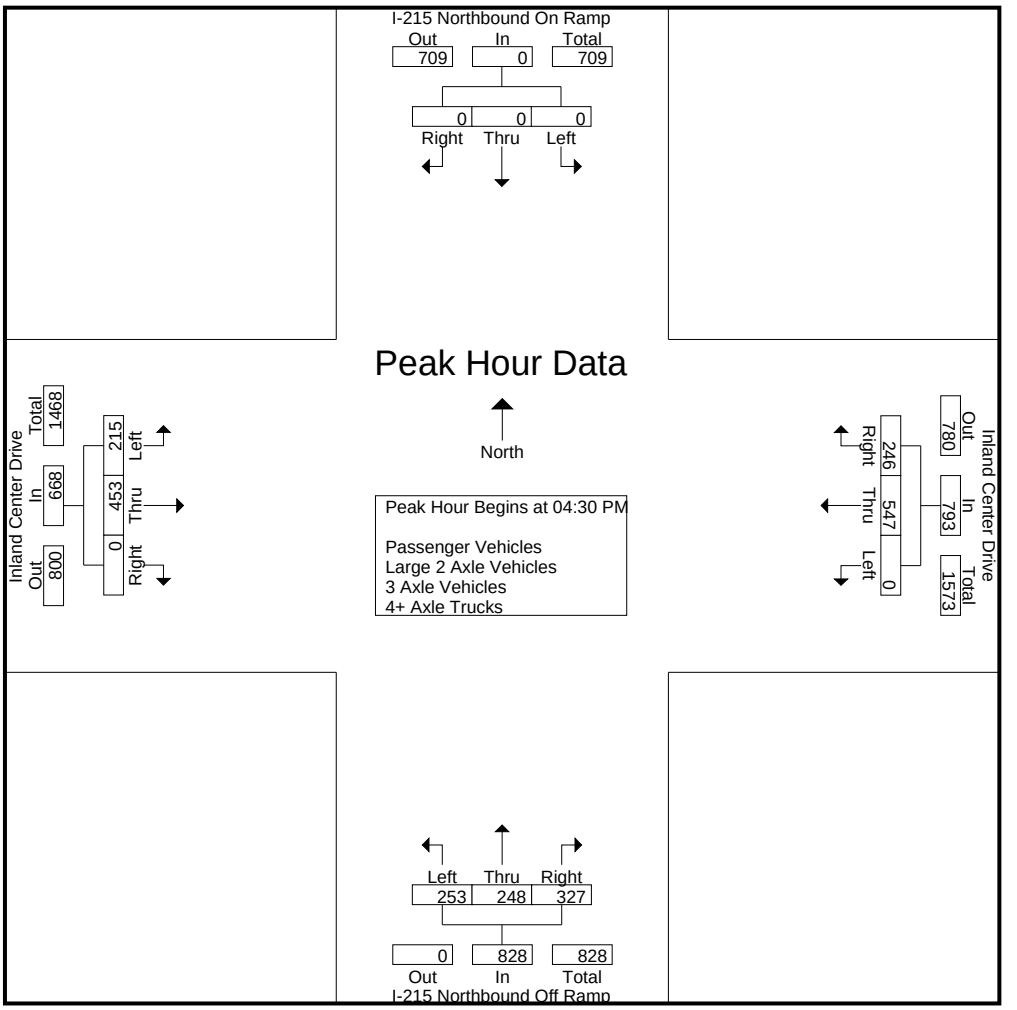
City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				05:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	123	48	171	70	**71**	**91**	**232**	**78**	**152**	0	**230**
+15 mins.	0	0	0	0	0	117	58	175	50	62	78	190	65	127	0	192
+30 mins.	0	0	0	0	0	**169**	**84**	**253**	66	70	89	225	57	114	0	171
+45 mins.	0	0	0	0	0	138	56	194	**85**	62	67	214	49	110	0	159
Total Volume	0	0	0	0	0	547	246	793	271	265	325	861	249	503	0	752
% App. Total	0	0	0		0	69	31		31.5	30.8	37.7		33.1	66.9	0	
PHF	.000	.000	.000	.000	.000	.809	.732	.784	.797	.933	.893	.928	.798	.827	.000	.817

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
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Groups Printed- Passenger Vehicles

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	159	53	212	72	41	71	184	77	145	0	222	618
04:15 PM	0	0	0	0	0	102	49	151	50	64	83	197	63	121	0	184	532
04:30 PM	0	0	0	0	0	120	48	168	66	55	76	197	57	112	0	169	534
04:45 PM	0	0	0	0	0	114	58	172	66	53	79	198	49	110	0	159	529
Total	0	0	0	0	0	495	208	703	254	213	309	776	246	488	0	734	2213
05:00 PM	0	0	0	0	0	163	84	247	64	67	87	218	55	114	0	169	634
05:15 PM	0	0	0	0	0	132	54	186	50	59	76	185	53	111	0	164	535
05:30 PM	0	0	0	0	0	91	46	137	66	64	81	211	43	116	0	159	507
05:45 PM	0	0	0	0	0	119	47	166	85	57	62	204	47	117	0	164	534
Total	0	0	0	0	0	505	231	736	265	247	306	818	198	458	0	656	2210
Grand Total	0	0	0	0	0	1000	439	1439	519	460	615	1594	444	946	0	1390	4423
Apprch %	0	0	0		0	69.5	30.5		32.6	28.9	38.6		31.9	68.1	0		
Total %	0	0	0	0	0	22.6	9.9	32.5	11.7	10.4	13.9	36	10	21.4	0	31.4	

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	120	48	168	**66**	55	76	197	**57**	112	0	**169**	534
04:45 PM	0	0	0	0	0	114	58	172	66	53	79	198	49	110	0	159	529
05:00 PM	0	0	0	0	0	**163**	**84**	**247**	64	**67**	**87**	**218**	55	**114**	0	169	**634**
05:15 PM	0	0	0	0	0	132	54	186	50	59	76	185	53	111	0	164	535
Total Volume	0	0	0	0	0	529	244	773	246	234	318	798	214	447	0	661	2232
% App. Total	0	0	0		0	68.4	31.6		30.8	29.3	39.8		32.4	67.6	0		
PHF	.000	.000	.000	.000	.000	.811	.726	.782	.932	.873	.914	.915	.939	.980	.000	.978	.880

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City of San Bernardino
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E/W: Inland Center Drive
Weather: Clear

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Site Code : 10518598
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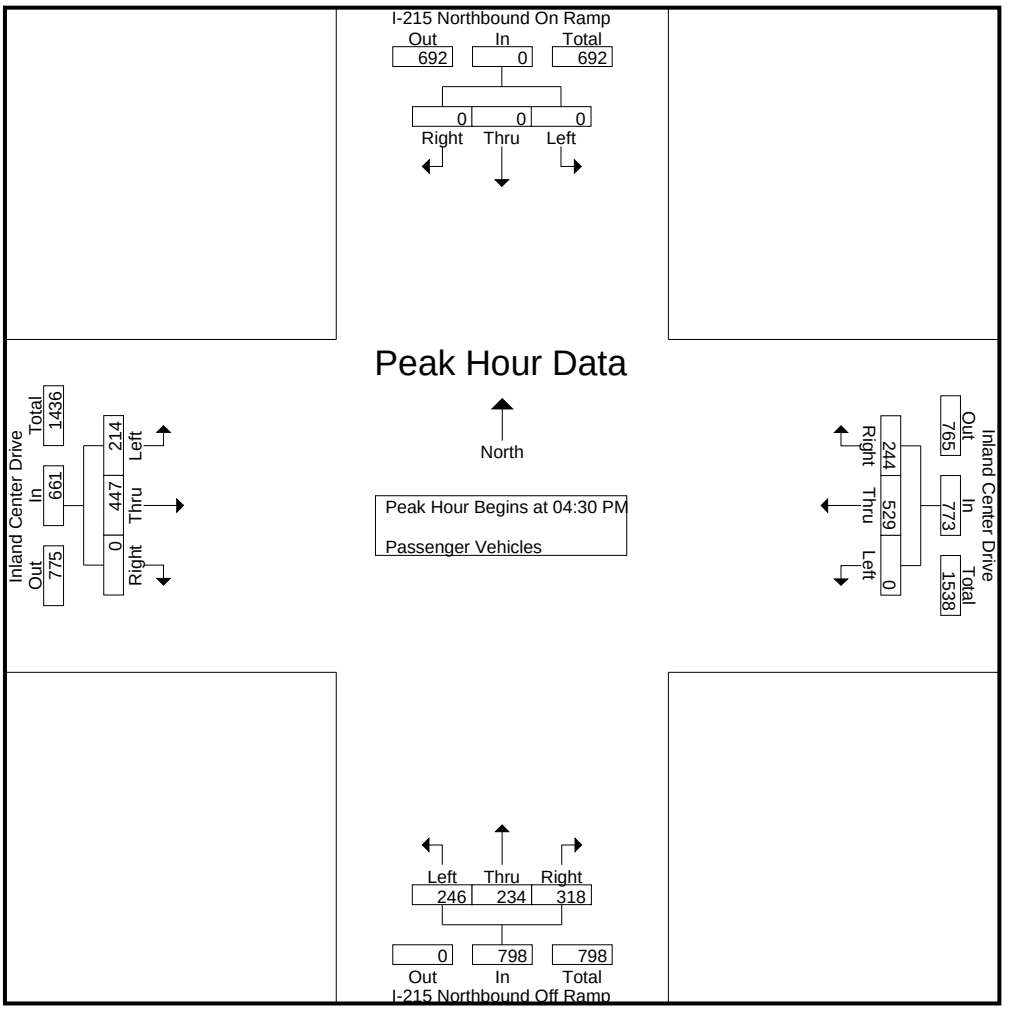

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	120	48	168	**66**	55	76	197	**57**	112	0	**169**
+15 mins.	0	0	0	0	0	114	58	172	66	53	79	198	49	110	0	159
+30 mins.	0	0	0	0	0	**163**	**84**	**247**	64	**67**	**87**	**218**	55	**114**	0	169
+45 mins.	0	0	0	0	0	132	54	186	50	59	76	185	53	111	0	164
Total Volume	0	0	0	0	0	529	244	773	246	234	318	798	214	447	0	661
% App. Total	0	0	0		0	68.4	31.6		30.8	29.3	39.8		32.4	67.6	0	
PHF	.000	.000	.000	.000	.000	.811	.726	.782	.932	.873	.914	.915	.939	.980	.000	.978

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
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Groups Printed- Large 2 Axle Vehicles

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	0	0	0	0	4	0	4	1	6	0	7	11
04:15 PM	0	0	0	0	0	2	0	2	0	1	0	1	1	4	0	5	8
04:30 PM	0	0	0	0	0	2	0	2	0	2	0	2	0	2	0	2	6
04:45 PM	0	0	0	0	0	2	0	2	0	2	0	2	0	0	0	0	4
Total	0	0	0	0	0	6	0	6	0	9	0	9	2	12	0	14	29
05:00 PM	0	0	0	0	0	0	0	0	5	2	3	10	1	0	0	1	11
05:15 PM	0	0	0	0	0	2	2	4	0	3	2	5	0	3	0	3	12
05:30 PM	0	0	0	0	0	0	0	0	0	3	3	6	0	0	0	0	6
05:45 PM	0	0	0	0	0	1	0	1	0	1	3	4	1	1	0	2	7
Total	0	0	0	0	0	3	2	5	5	9	11	25	2	4	0	6	36
Grand Total	0	0	0	0	0	9	2	11	5	18	11	34	4	16	0	20	65
Apprch %	0	0	0		0	81.8	18.2		14.7	52.9	32.4		20	80	0		
Total %	0	0	0	0	0	13.8	3.1	16.9	7.7	27.7	16.9	52.3	6.2	24.6	0	30.8	

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	**2**	0	2	0	2	0	2	0	2	0	2	6
04:45 PM	0	0	0	0	0	2	0	2	0	2	0	2	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	**5**	2	**3**	**10**	**1**	0	0	1	11
05:15 PM	0	0	0	0	0	2	**2**	**4**	0	**3**	2	5	0	**3**	0	**3**	**12**
Total Volume	0	0	0	0	0	6	2	8	5	9	5	19	1	5	0	6	33
% App. Total	0	0	0		0	75	25		26.3	47.4	26.3		16.7	83.3	0		
PHF	.000	.000	.000	.000	.000	.750	.250	.500	.250	.750	.417	.475	.250	.417	.000	.500	.688

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City of San Bernardino
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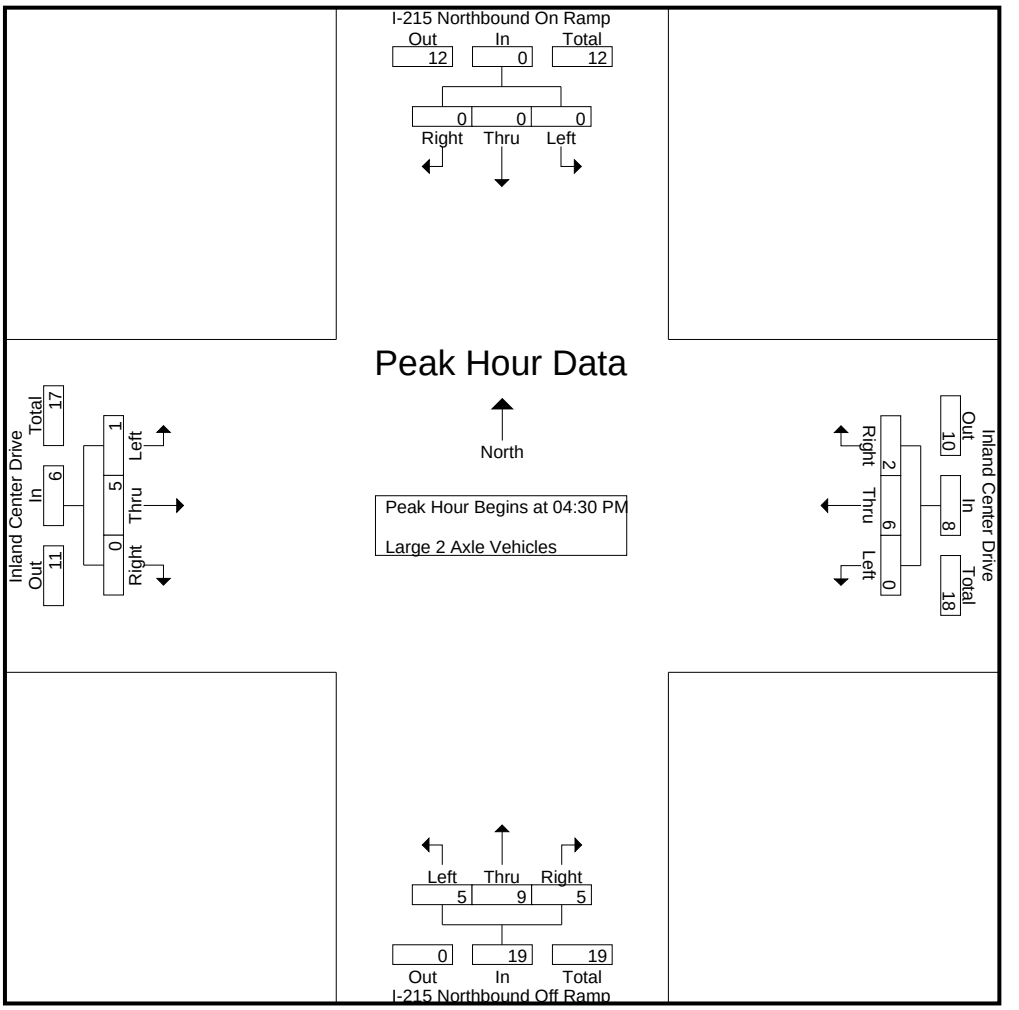
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	**2**	0	2	0	2	0	2	0	2	0	2
+15 mins.	0	0	0	0	0	2	0	2	0	2	0	2	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	**5**	2	**3**	**10**	**1**	0	0	1
+45 mins.	0	0	0	0	0	2	**2**	**4**	0	**3**	2	5	0	**3**	0	**3**
Total Volume	0	0	0	0	0	6	2	8	5	9	5	19	1	5	0	6
% App. Total	0	0	0		0	75	25		26.3	47.4	26.3		16.7	83.3	0	
PHF	.000	.000	.000	.000	.000	.750	.250	.500	.250	.750	.417	.475	.250	.417	.000	.500

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
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Groups Printed- 3 Axle Vehicles

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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	0	0	0	0	0	2	0	2	0	1	0	1	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	3	0	3	0	3	0	3	0	1	0	1	7
05:00 PM	0	0	0	0	0	1	0	1	1	0	1	2	0	0	0	0	3
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	1	0	1	0	2	2	4	0	0	0	0	5
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	3	0	3	1	2	3	6	0	1	0	1	10
Grand Total	0	0	0	0	0	6	0	6	1	5	3	9	0	2	0	2	17
Apprch %	0	0	0		0	100	0		11.1	55.6	33.3		0	100	0		
Total %	0	0	0	0	0	35.3	0	35.3	5.9	29.4	17.6	52.9	0	11.8	0	11.8	

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	1	0	1	**1**	0	**1**	**2**	0	0	0	0	**3**
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**1**	0	**1**	2
Total Volume	0	0	0	0	0	3	0	3	1	1	1	3	0	1	0	1	7
% App. Total	0	0	0		0	100	0		33.3	33.3	33.3		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.250	.250	.250	.375	.000	.250	.000	.250	.583

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
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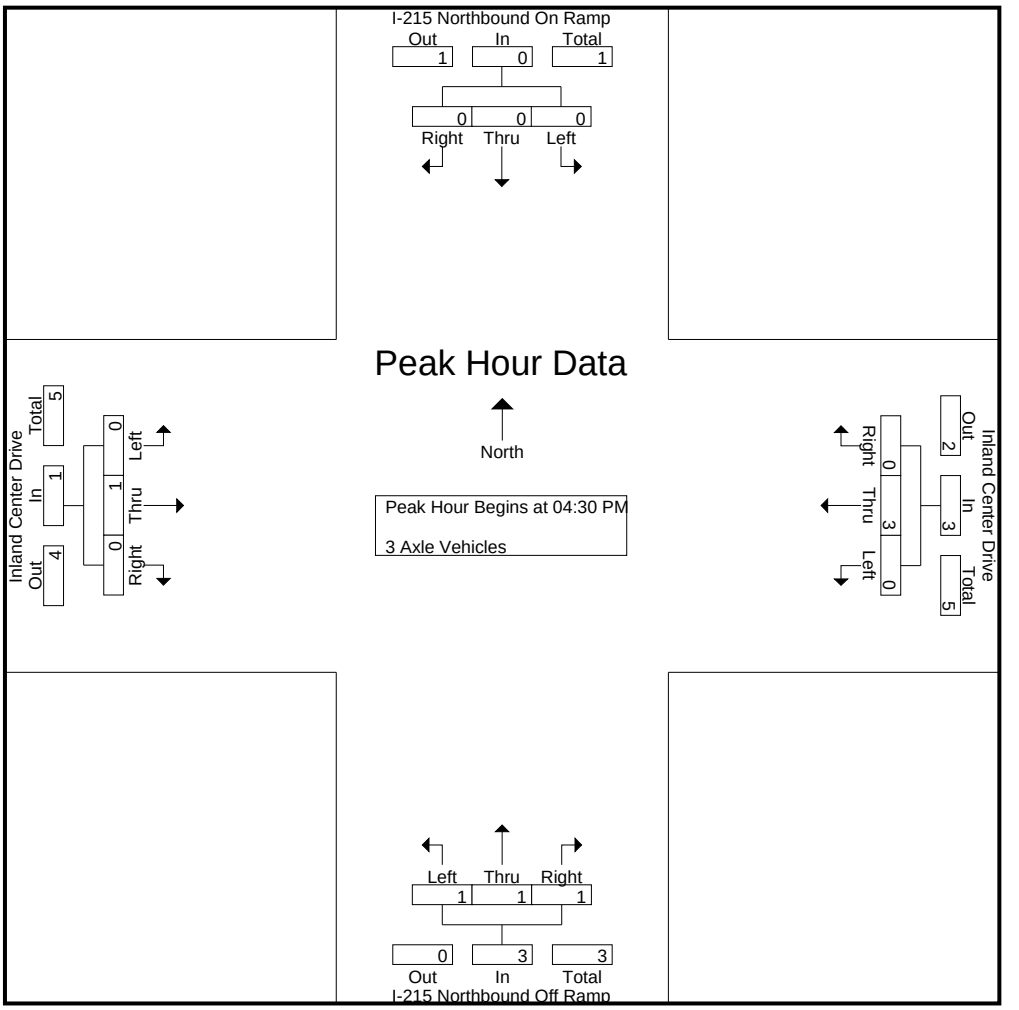

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	**1**	0	**1**	**2**	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**1**	0	**1**
Total Volume	0	0	0	0	0	3	0	3	1	1	1	3	0	1	0	1
% App. Total	0	0	0		0	100	0		33.3	33.3	33.3		0	100	0	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.250	.250	.250	.375	.000	.250	.000	.250

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City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
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Groups Printed- 4+ Axle Trucks

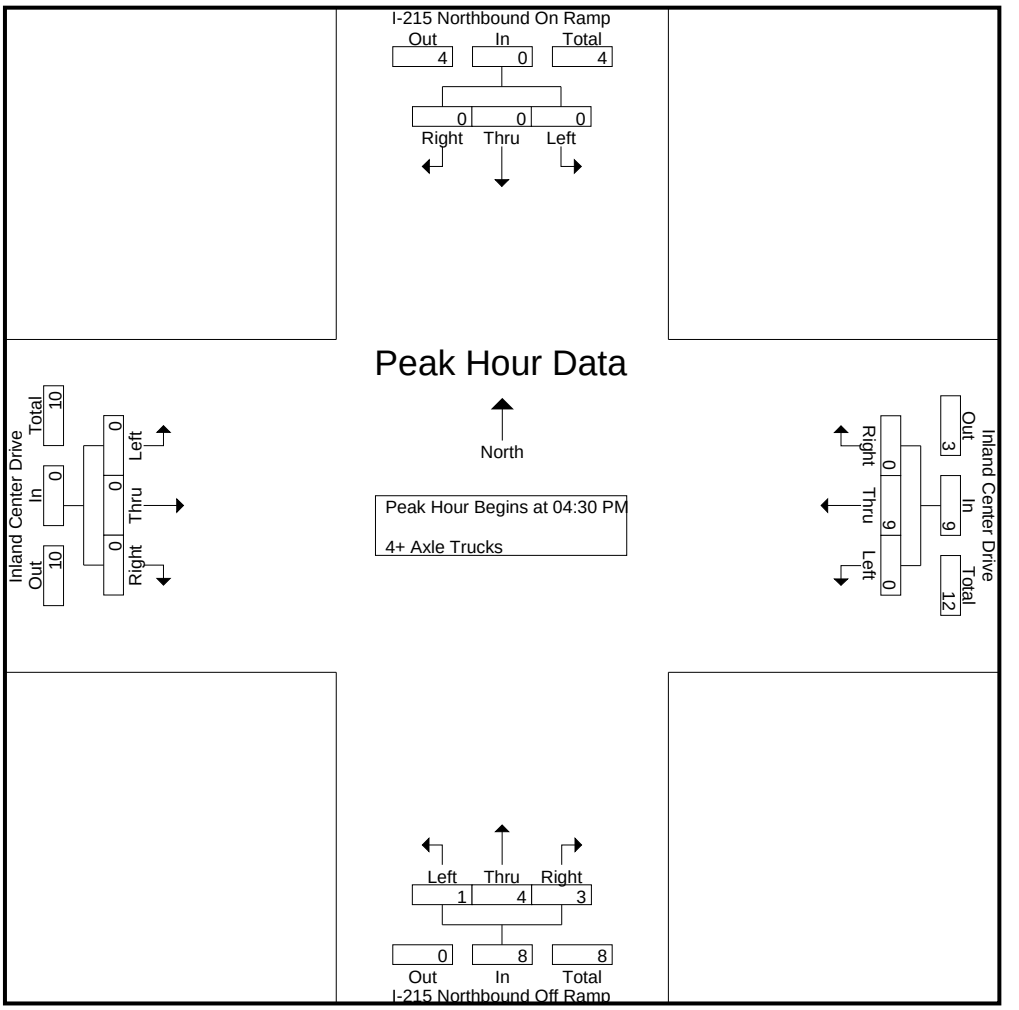
	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	0	2	0	1	6	7	0	1	0	1	10
04:15 PM	0	0	0	0	0	1	0	1	1	1	1	3	1	1	0	2	6
04:30 PM	0	0	0	0	0	0	0	0	1	1	1	3	0	0	0	0	3
04:45 PM	0	0	0	0	0	1	0	1	0	1	2	3	0	0	0	0	4
Total	0	0	0	0	0	4	0	4	2	4	10	16	1	2	0	3	23
05:00 PM	0	0	0	0	0	5	0	5	0	2	0	2	0	0	0	0	7
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
05:30 PM	0	0	0	0	0	2	0	2	0	1	3	4	0	0	0	0	6
05:45 PM	0	0	0	0	0	2	0	2	0	4	2	6	0	0	0	0	8
Total	0	0	0	0	0	12	0	12	0	7	5	12	0	0	0	0	24
Grand Total	0	0	0	0	0	16	0	16	2	11	15	28	1	2	0	3	47
Apprch %	0	0	0		0	100	0		7.1	39.3	53.6		33.3	66.7	0		
Total %	0	0	0	0	0	34	0	34	4.3	23.4	31.9	59.6	2.1	4.3	0	6.4	

	I-215 Northbound On Ramp Southbound				Inland Center Drive Westbound				I-215 Northbound Off Ramp Northbound				Inland Center 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	**1**	1	1	**3**	0	0	0	0	3
04:45 PM	0	0	0	0	0	1	0	1	0	1	**2**	3	0	0	0	0	4
05:00 PM	0	0	0	0	0	**5**	0	**5**	0	**2**	0	2	0	0	0	0	**7**
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	9	0	9	1	4	3	8	0	0	0	0	17
% App. Total	0	0	0		0	100	0		12.5	50	37.5		0	0	0		
PHF	.000	.000	.000	.000	.000	.450	.000	.450	.250	.500	.375	.667	.000	.000	.000	.000	.607

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

City of San Bernardino
N/S: I-215 Northbound Ramps
E/W: Inland Center Drive
Weather: Clear

File Name : 06_SBC_215N_Inland Center PM
Site Code : 10518598
Start Date : 8/16/2018
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	**1**	1	1	**3**	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	1	**2**	3	0	0	0	0
+30 mins.	0	0	0	0	0	**5**	0	**5**	0	**2**	0	2	0	0	0	0
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	9	0	9	1	4	3	8	0	0	0	0
% App. Total	0	0	0		0	100	0		12.5	50	37.5		0	0	0	
PHF	.000	.000	.000	.000	.000	.450	.000	.450	.250	.500	.375	.667	.000	.000	.000	.000

Appendix C

SBTAM Model Plots

Inland Center Dr Industrial Area
SBTAM 2008 Base Year
AM Peak Period

S RANCHO AVE
MILL ST
COLLEGE DR
S MOUNT VERNON AVE
S I ST
RIVERSIDE FWY
S H ST
S G ST
N D ST
S ARROWHEAD AVE
S SIERRA WAY
W MILL ST
E MILL ST
S MOUNTAIN VIEW AVE
ESPERANZA ST
S E ST
E CENTRAL AVE
W JEFFERSON ST
W CITRUS AVE
E CITRUS AVE
GRANT AVE
Project Site
N LA CADENA DR
W OLIVE ST
N PENNSYLVANIA AVE
N MOUNT VERNON AVE
S INLAND CENTER DR
COLTON AVE
W C ST
E C ST
S AUTO PLAZA DR
AUTOPLAZA DR
W ORANGE SHOW RD
E ORANGE SHOW RD

Inland Center Dr Industrial Area
SBTAM 2008 Base Year
PM Peak Period

S RANCHO AVE
MILL ST
W MILL ST
E MILL ST
S I ST
RIVERSIDE FWY
S H ST
S G ST
N D ST
S ARROWHEAD AVE
S SIERRA WAY
S MOUNTAIN VIEW AVE
ESPERANZA ST
S E ST
COLLEGE DR
S MOUNT VERNON AVE
E CITRUS AVE
GRANT AVE
W JEFFERSON ST
E CENTRAL AVE
W CITRUS AVE
Project Site
N LA CADENA DR
W OLIVE ST
N PENNSYLVANIA AVE
S INLAND CENTER DR
N MOUNT VERNON AVE
W ORANGE SHOW RD
E ORANGE SHOW RD
AUTOPLAZA DR
S AUTO PLAZA DR
NOLTON AVE
W C ST
E C ST

Inland Center Dr Industrial Area
SBTAM 2035 Horizon Year
AM Peak Period

S RANCHO AVE
MILL ST
W MILL ST
E MILL ST
S I ST
S H ST
S G ST
N D ST
S ARROWHEAD AVE
S SIERRA WAY
S MOUNTAIN VIEW AVE
ESPERANZA ST
S E ST
COLLEGE DR
S MOUNT VERNON AVE
E CITRUS AVE
GRANT AVE
W JEFFERSON ST
E CENTRAL AVE
W CITRUS AVE
Project Site
N LA CADENA DR
W ORANGE SHOW RD
E ORANGE SHOW RD
S INLAND CENTER DR
W OLIVE ST
N PENNSYLVANIA AVE
N MOUNT VERNON AVE
S AUTO PLAZA DR
AUTOPLAZA DR
RIVERSIDE FWY
W C ST
E C ST
N DOLTON AVE

Inland Center Dr Industrial Area
SBTAM 2035 Horizon Year
PM Peak Period

S RANCHO AVE
MILL ST
COLLEGE DR
S MOUNT VERNON AVE
E CITRUS AVE
GRANT AVE
W JEFFERSON ST
S I ST
S H ST
S G ST
N D ST
S ARROWHEAD AVE
S SIERRA WAY
W MILL ST
E MILL ST
S MOUNTAIN VIEW AVE
ESPERANZA ST
S E ST
E CENTRAL AVE
W CITRUS AVE
Project Site
N LA CADENA DR
W ORANGE SHOW RD
E ORANGE SHOW RD
S INLAND CENTER DR
AUTOPLAZA RD
RIVERSIDE FWY
S AUTO PLAZA DR
W OLIVE ST
N PENNSYLVANIA AVE
N MOUNT VERNON AVE
COLTON AVE
W C ST
E C ST

Appendix D

MUTCD Signal Warrant Analysis Worksheets

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 Without Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **603**

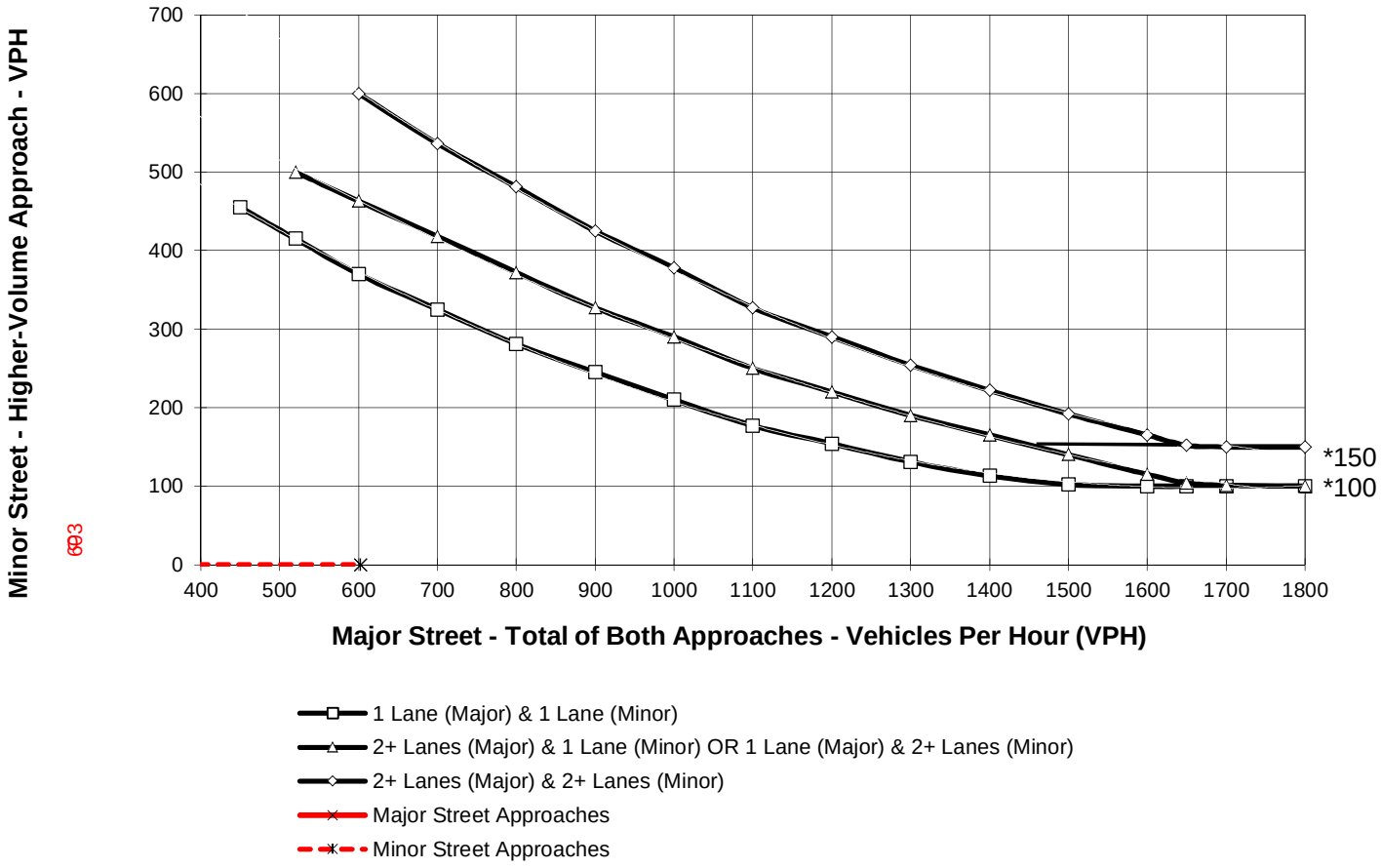
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 Without Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **964**

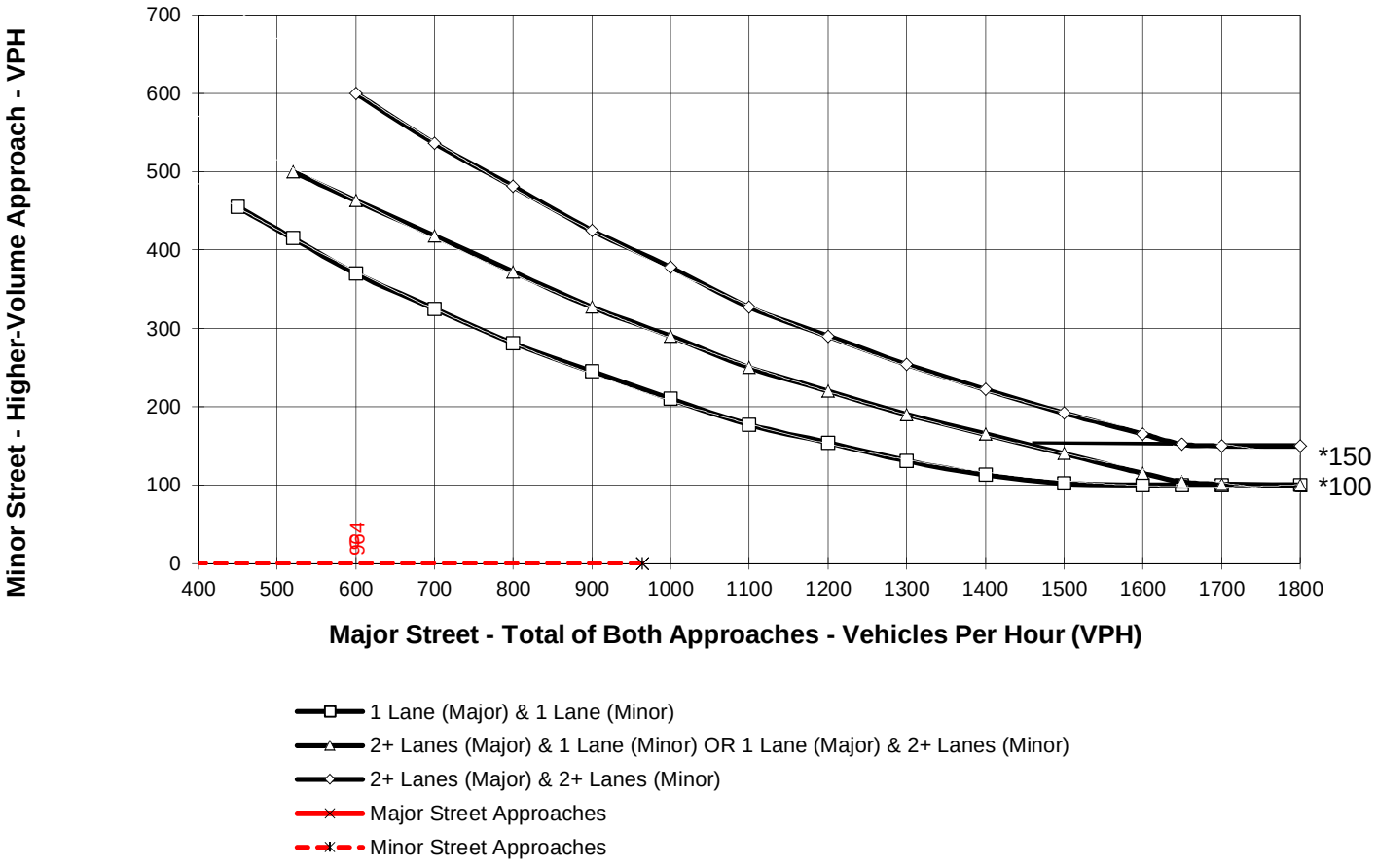
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 Without Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **603**

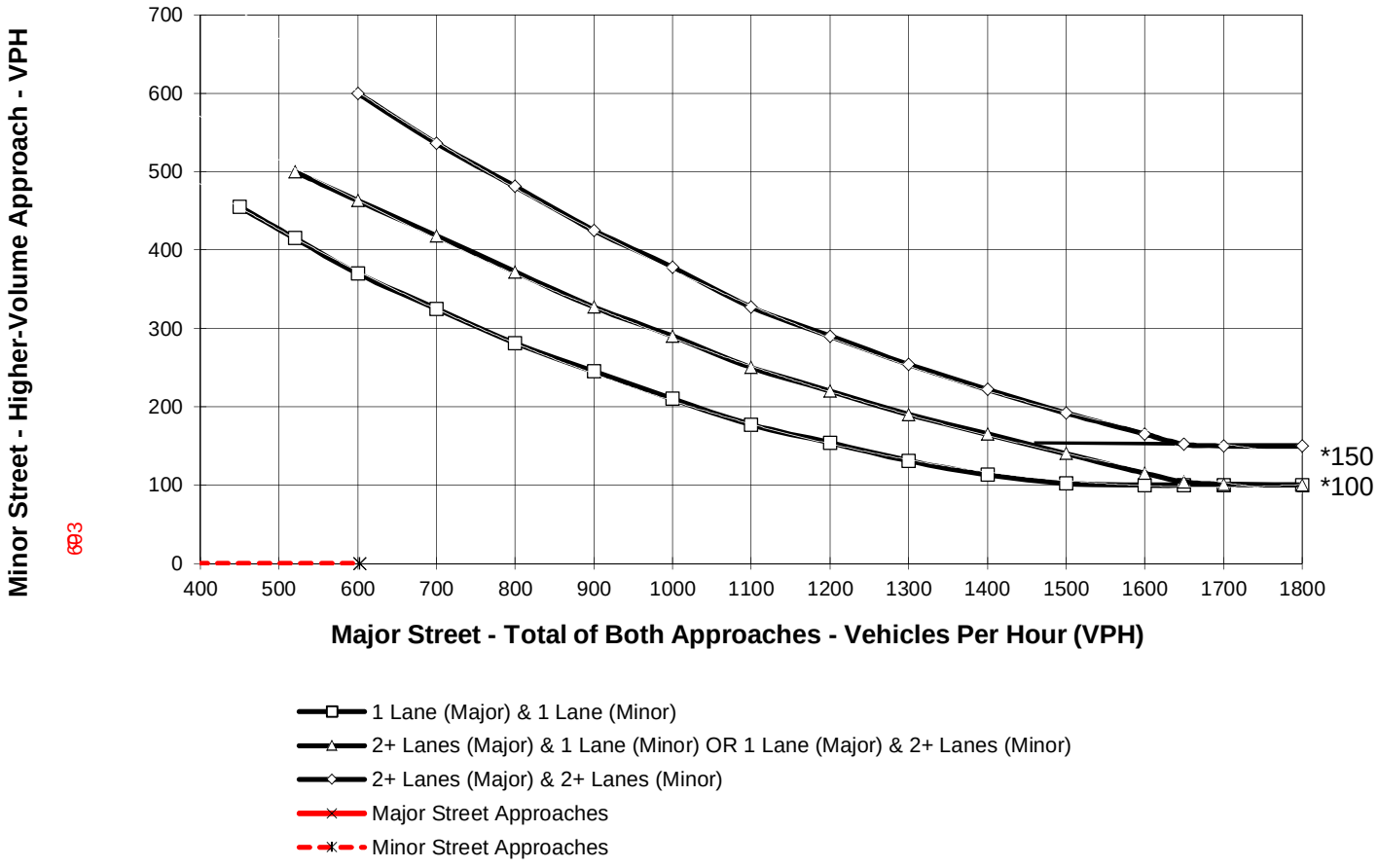
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 Without Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **964**

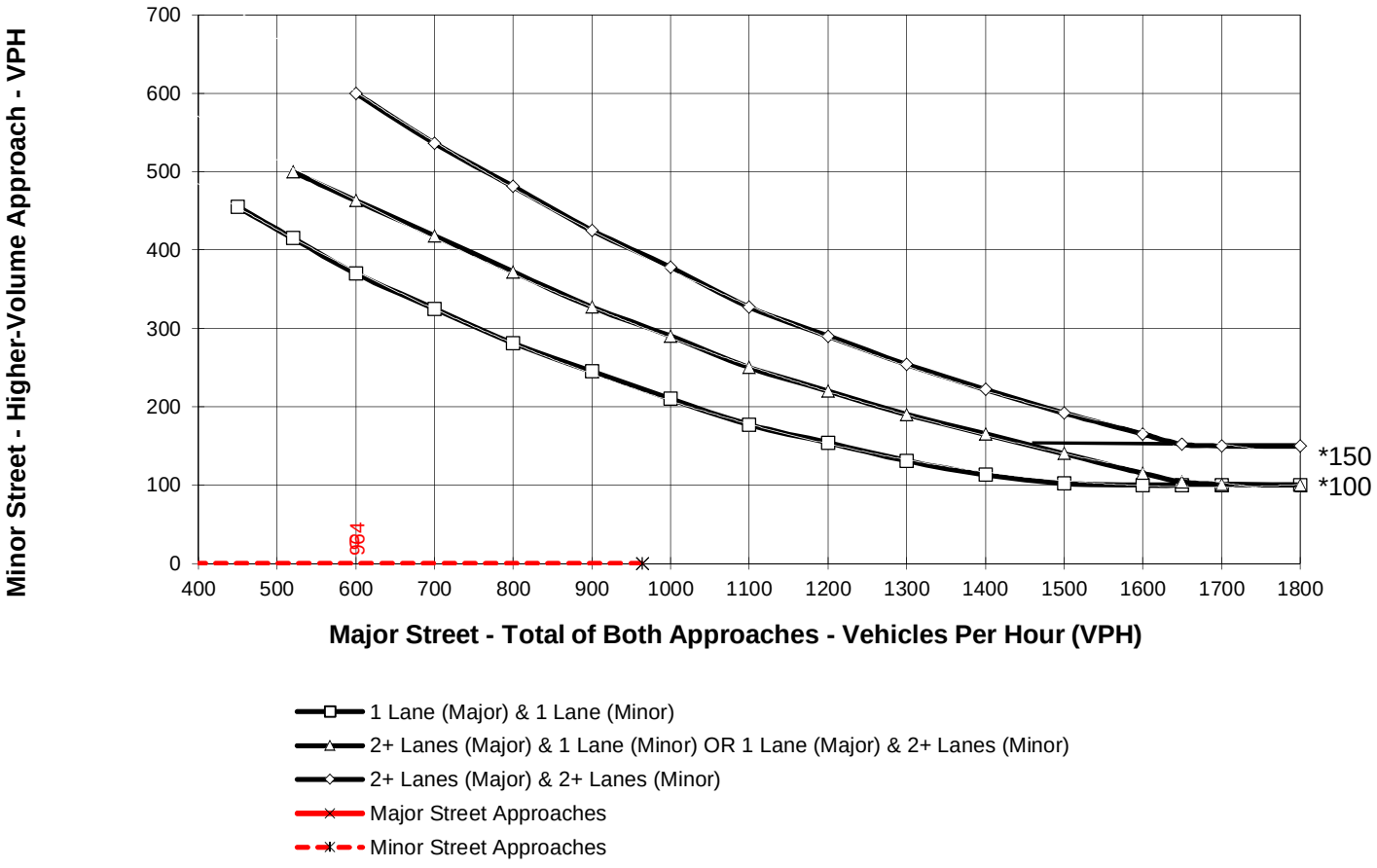
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 Without Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1266**

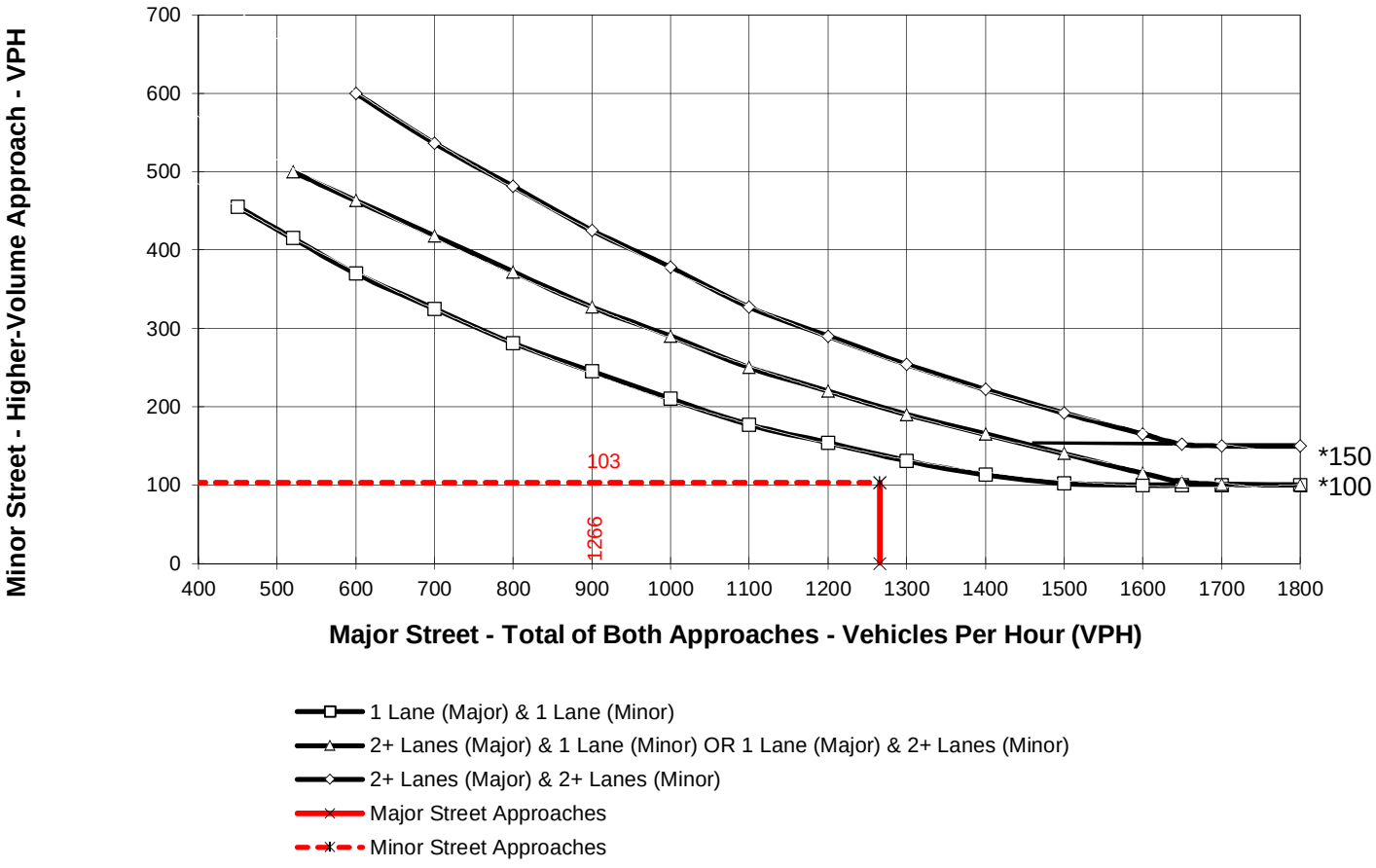
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **103**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 Without Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1581**

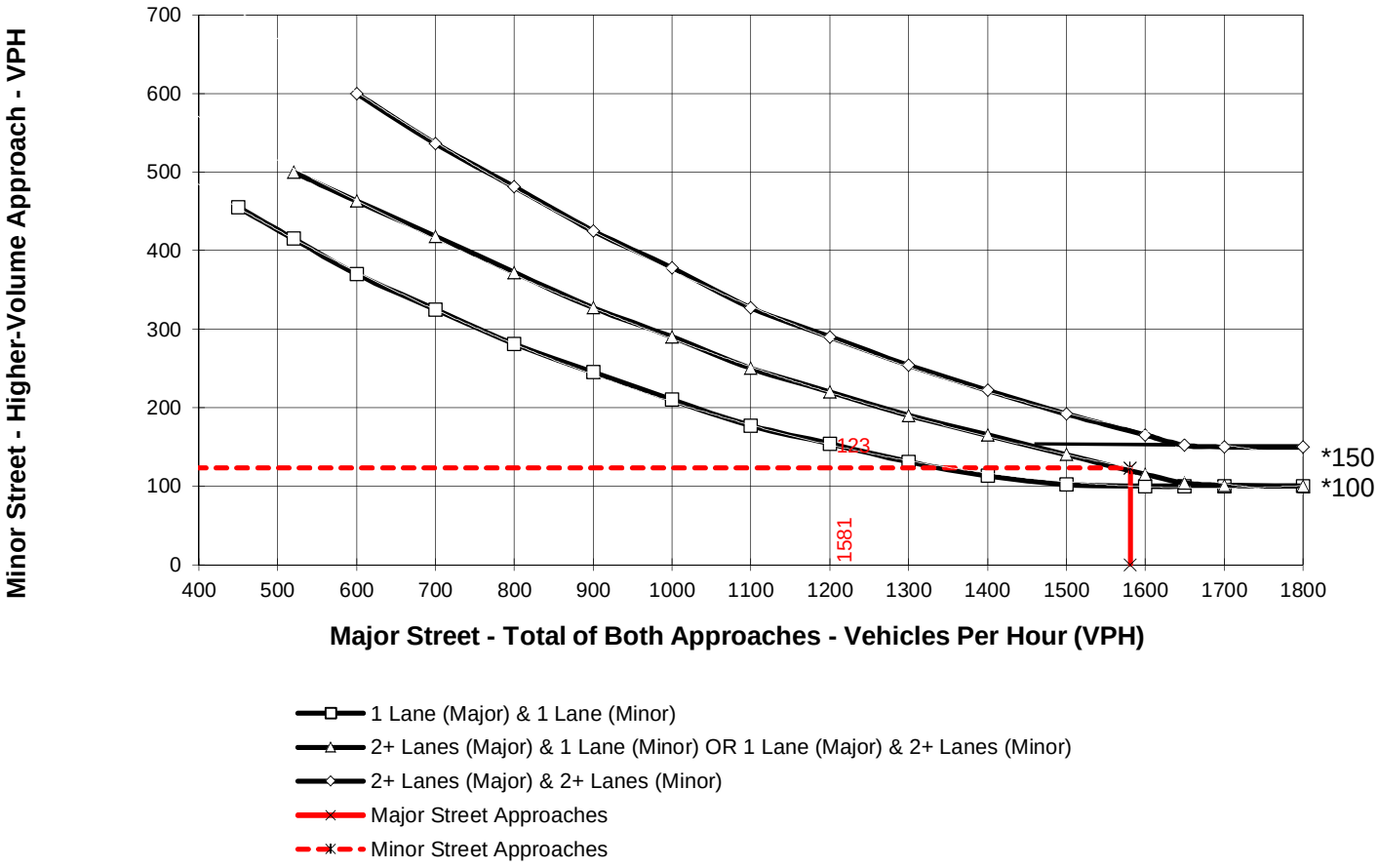
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **123**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **688**

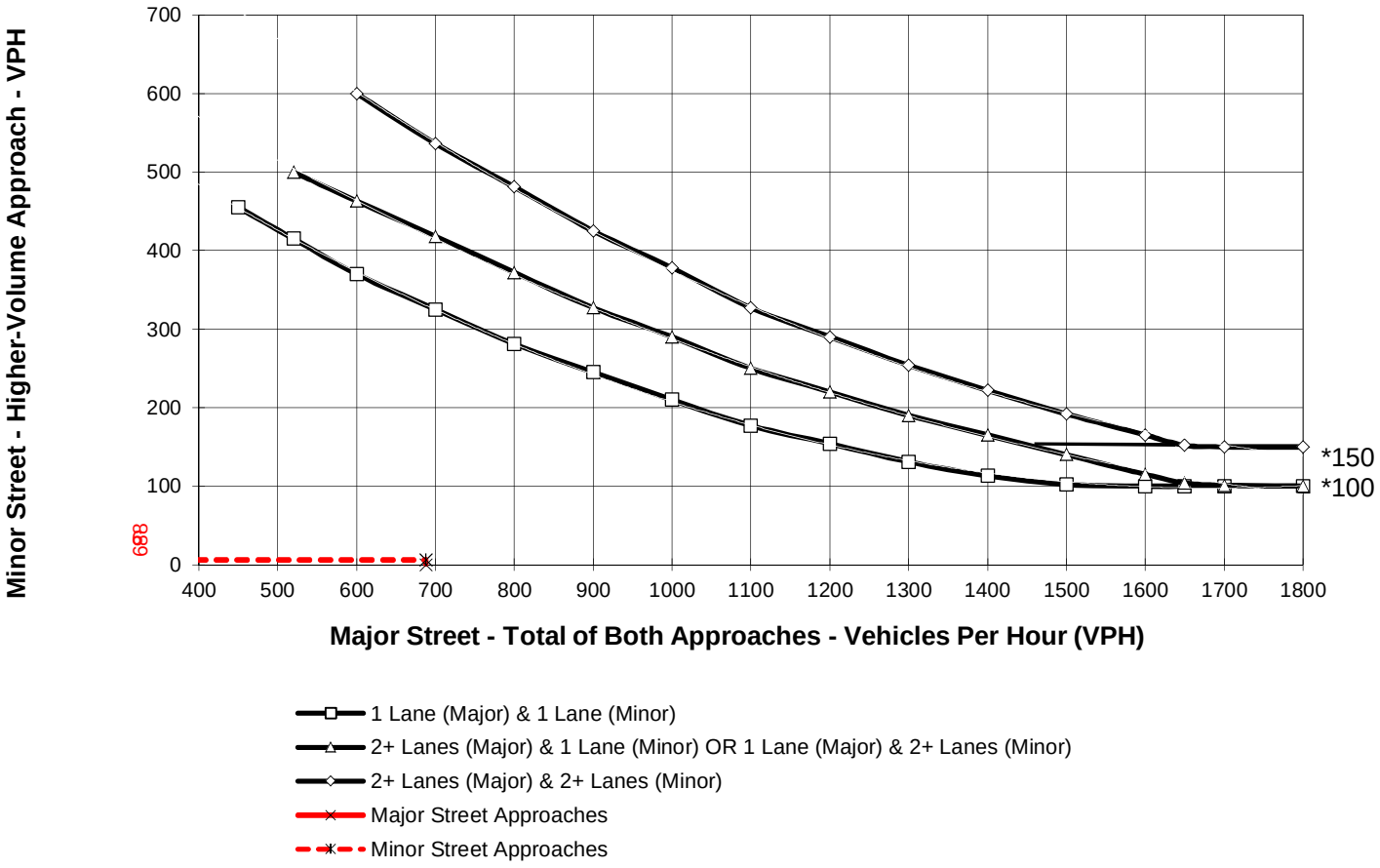
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **6**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **975**

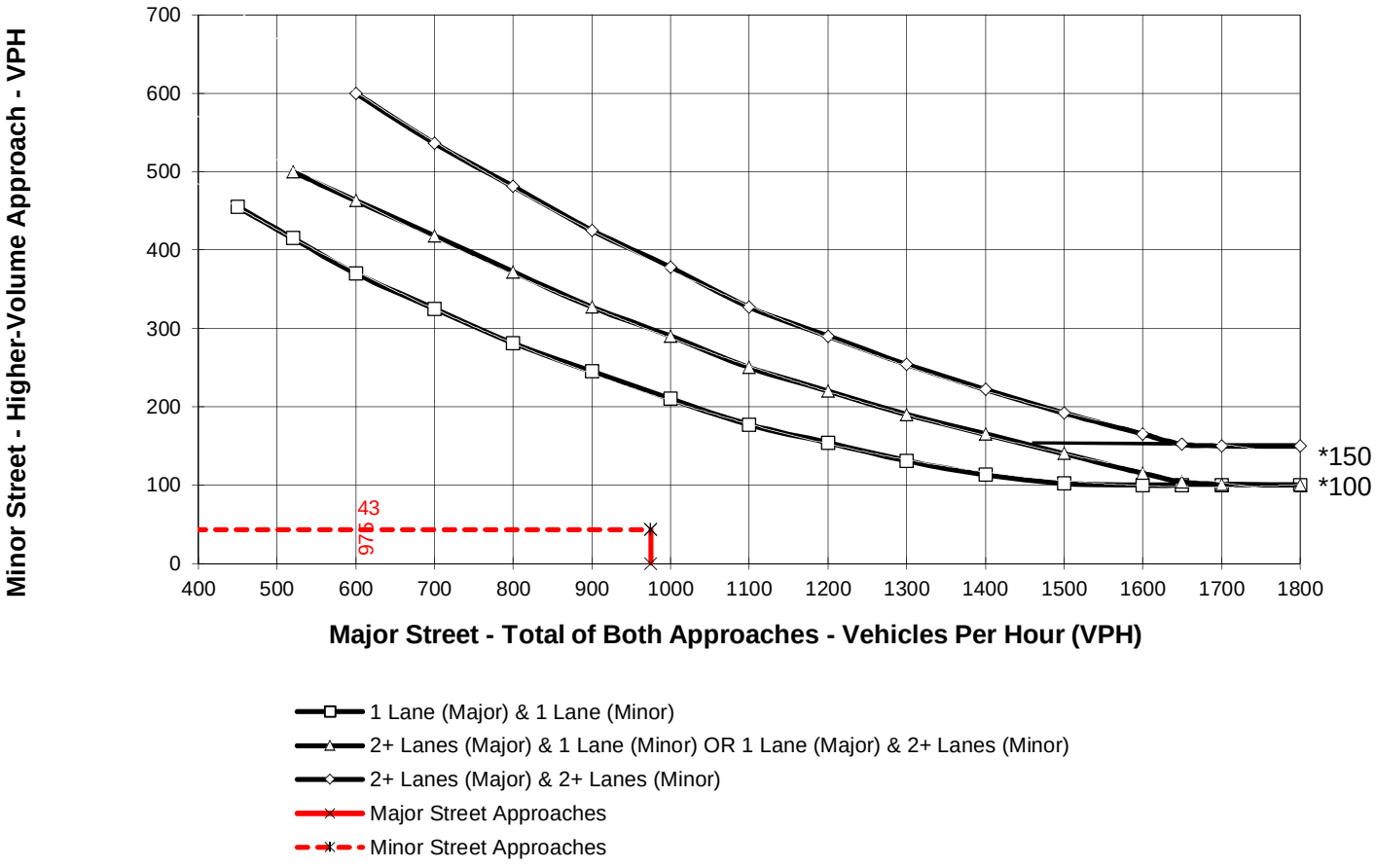
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **43**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **684**

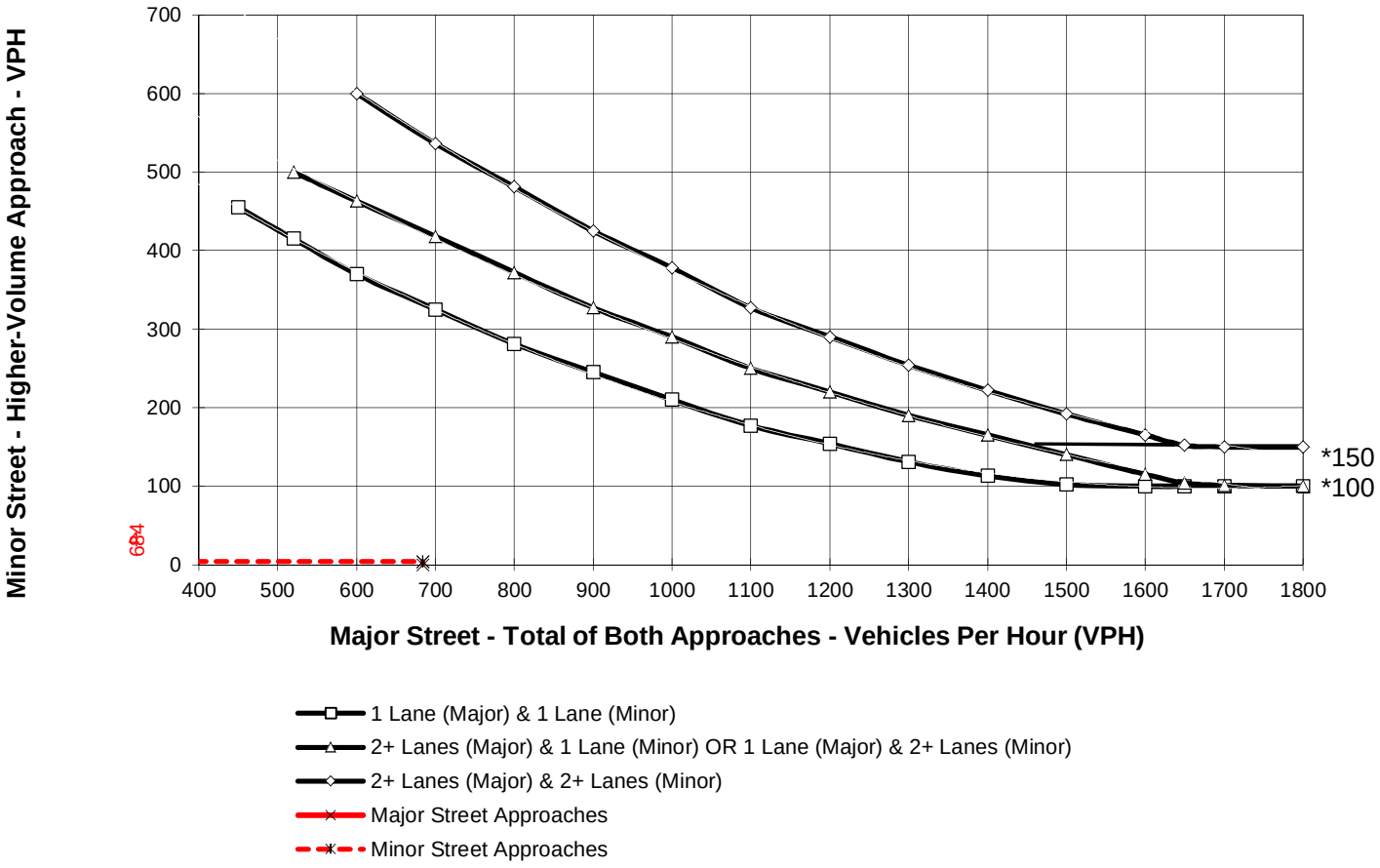
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **4**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1004**

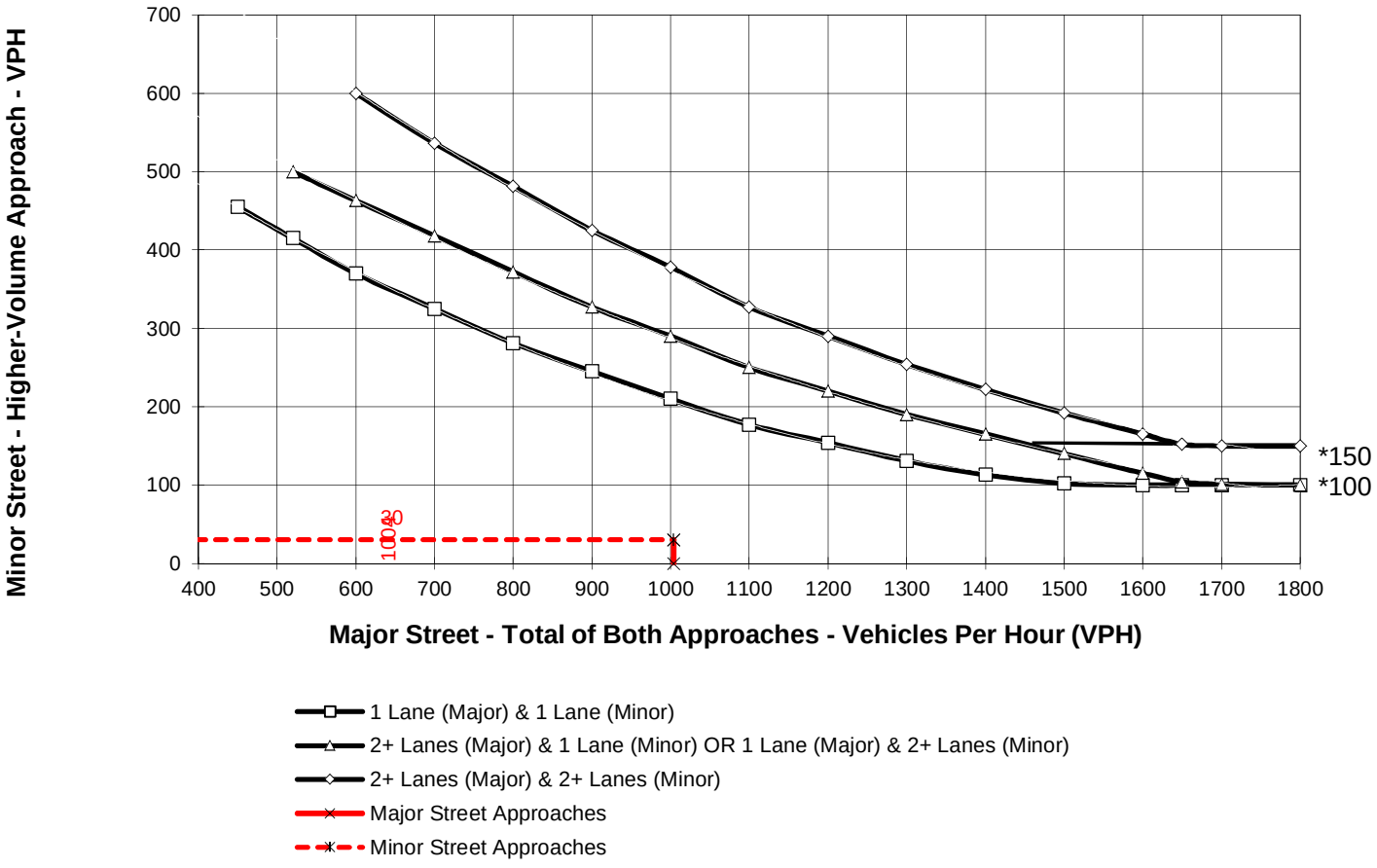
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **30**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1338**

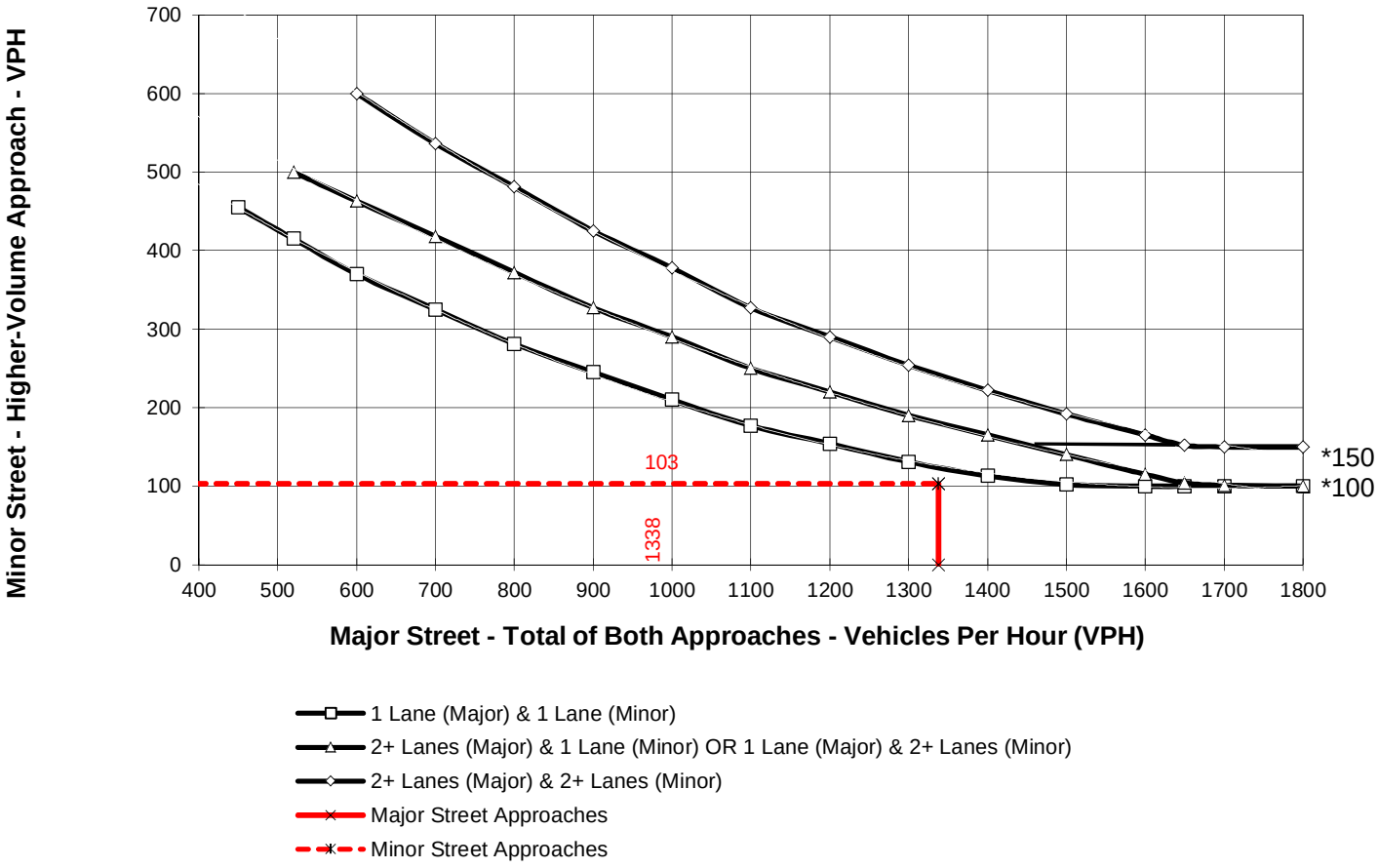
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **103**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1645**

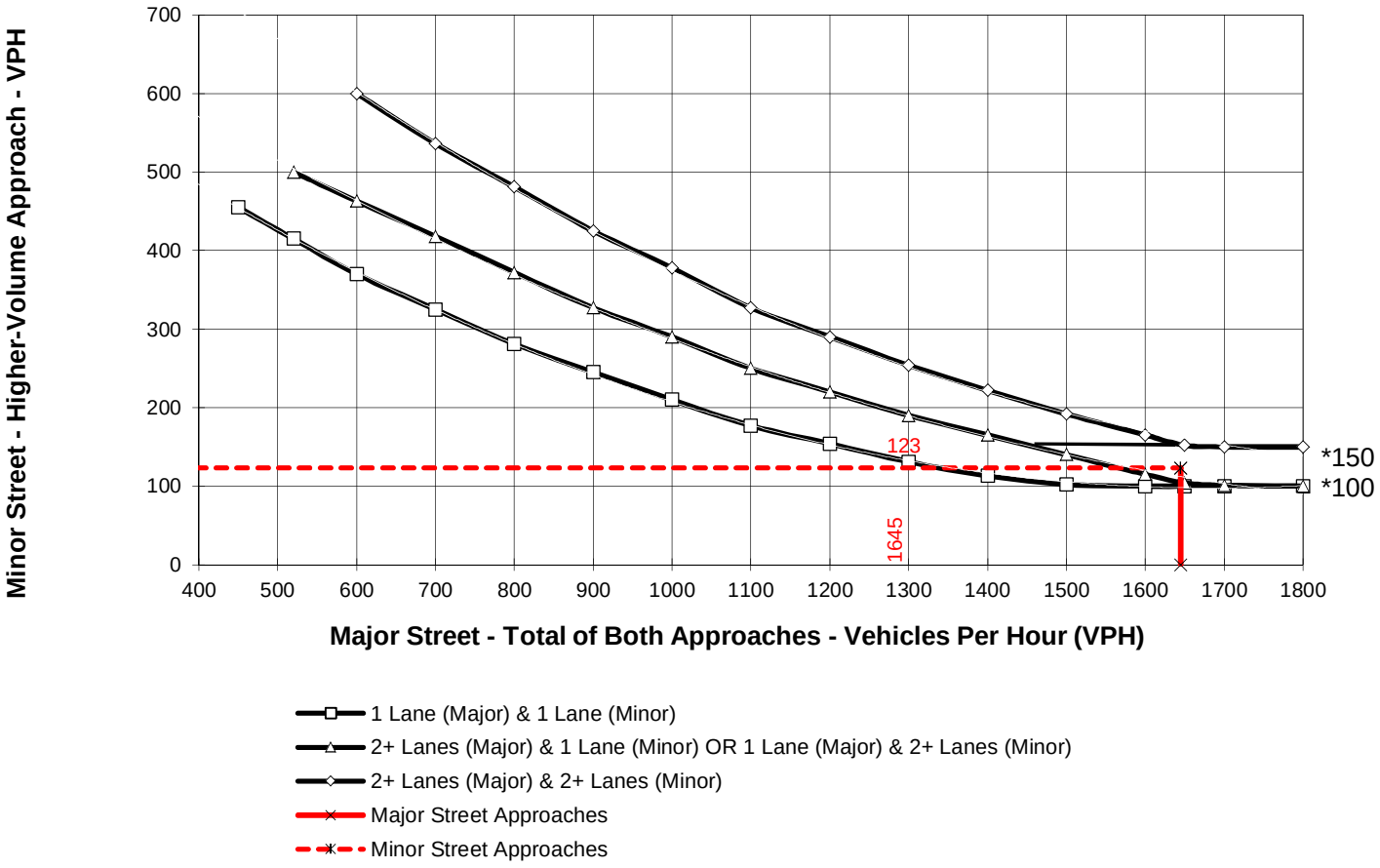
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **123**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1527**

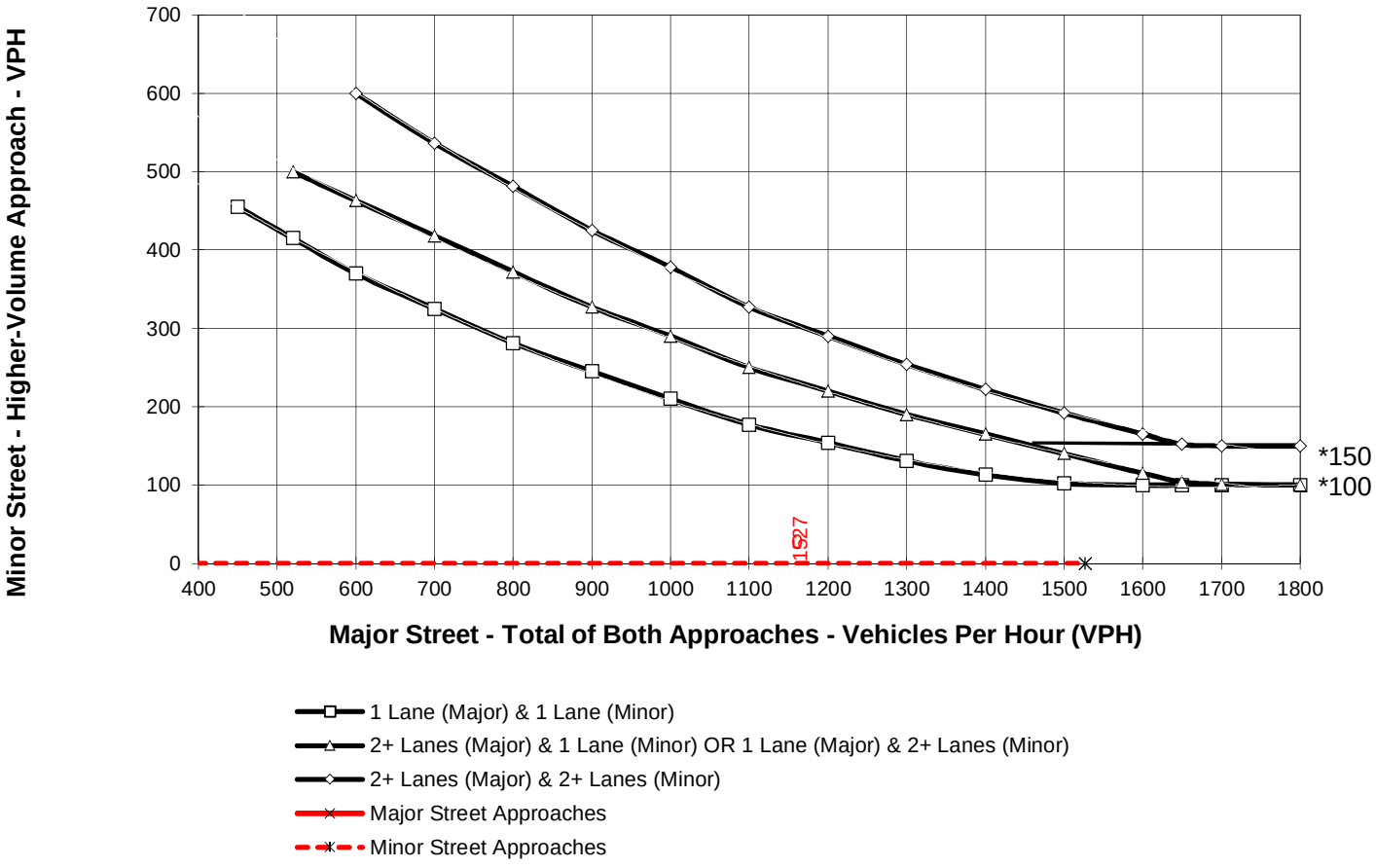
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1865**

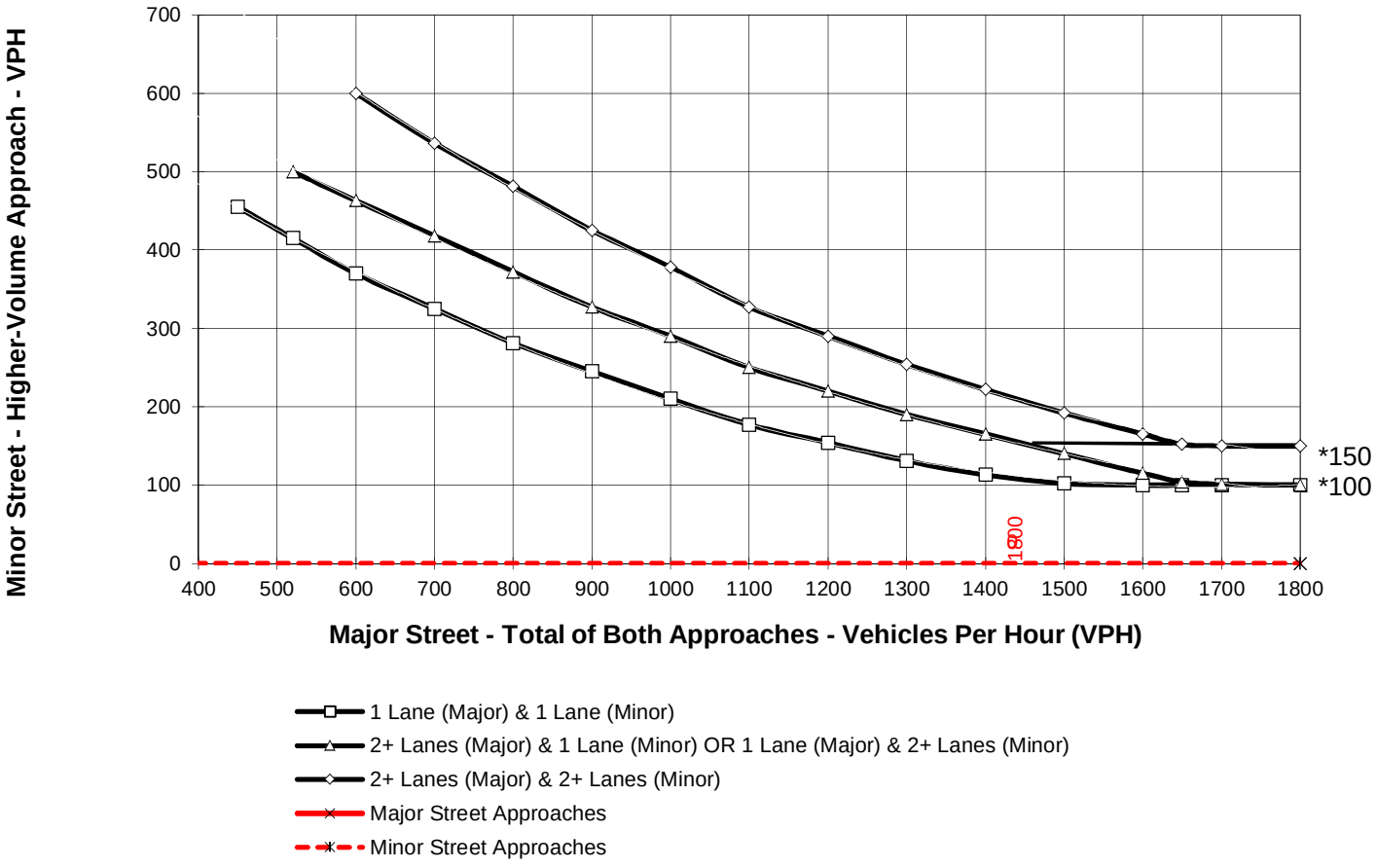
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1527**

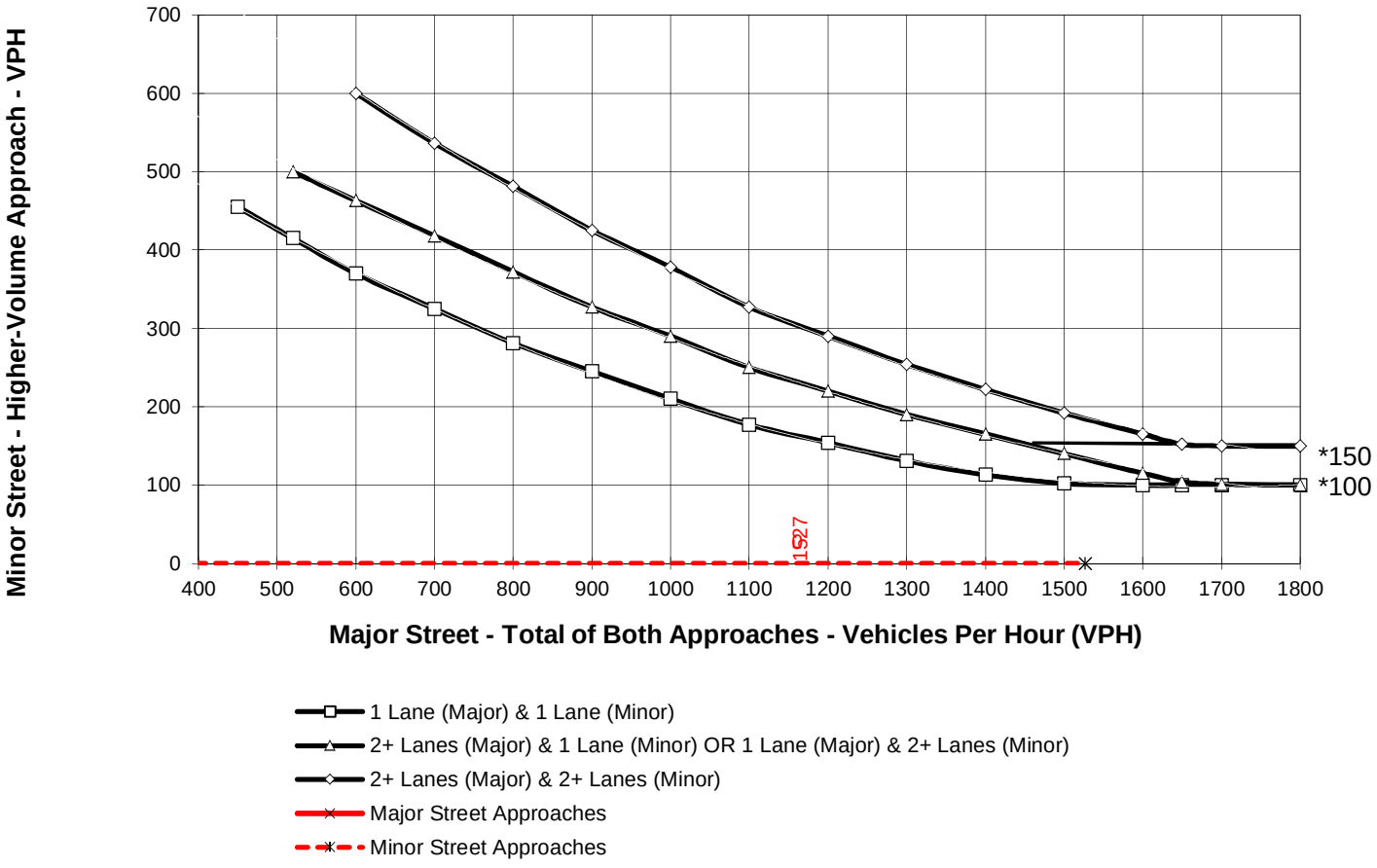
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1865**

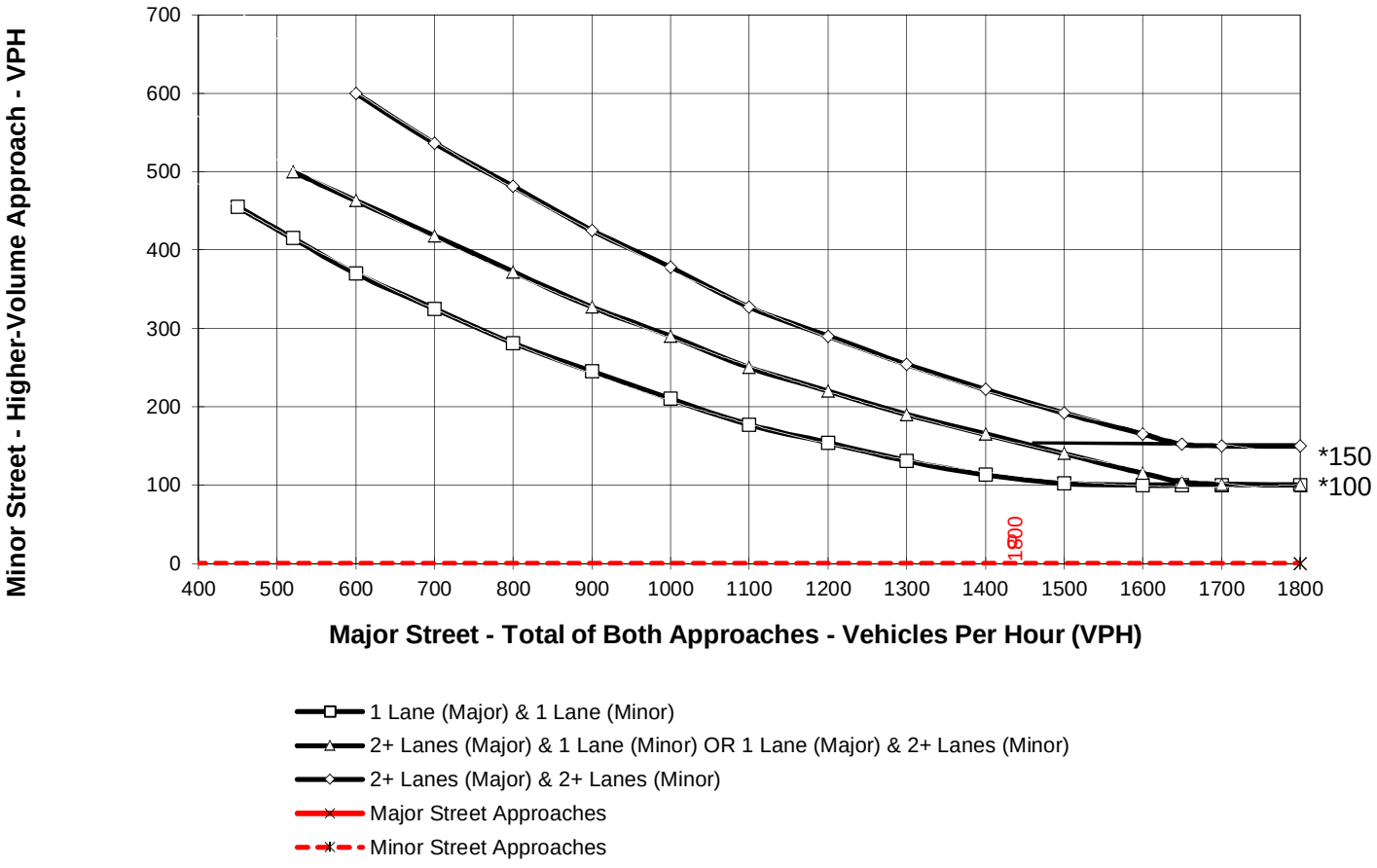
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2552**

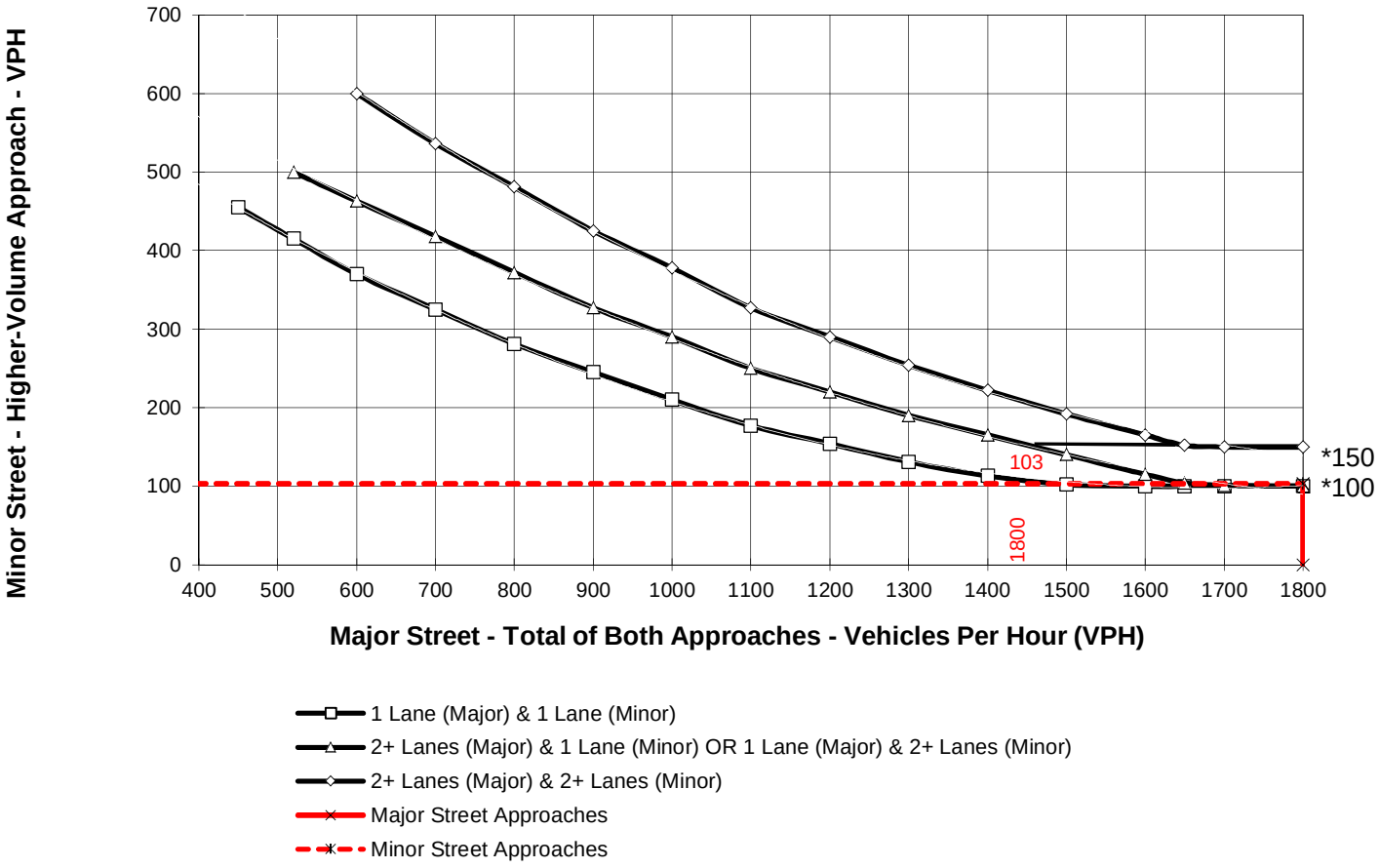
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **103**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2831**

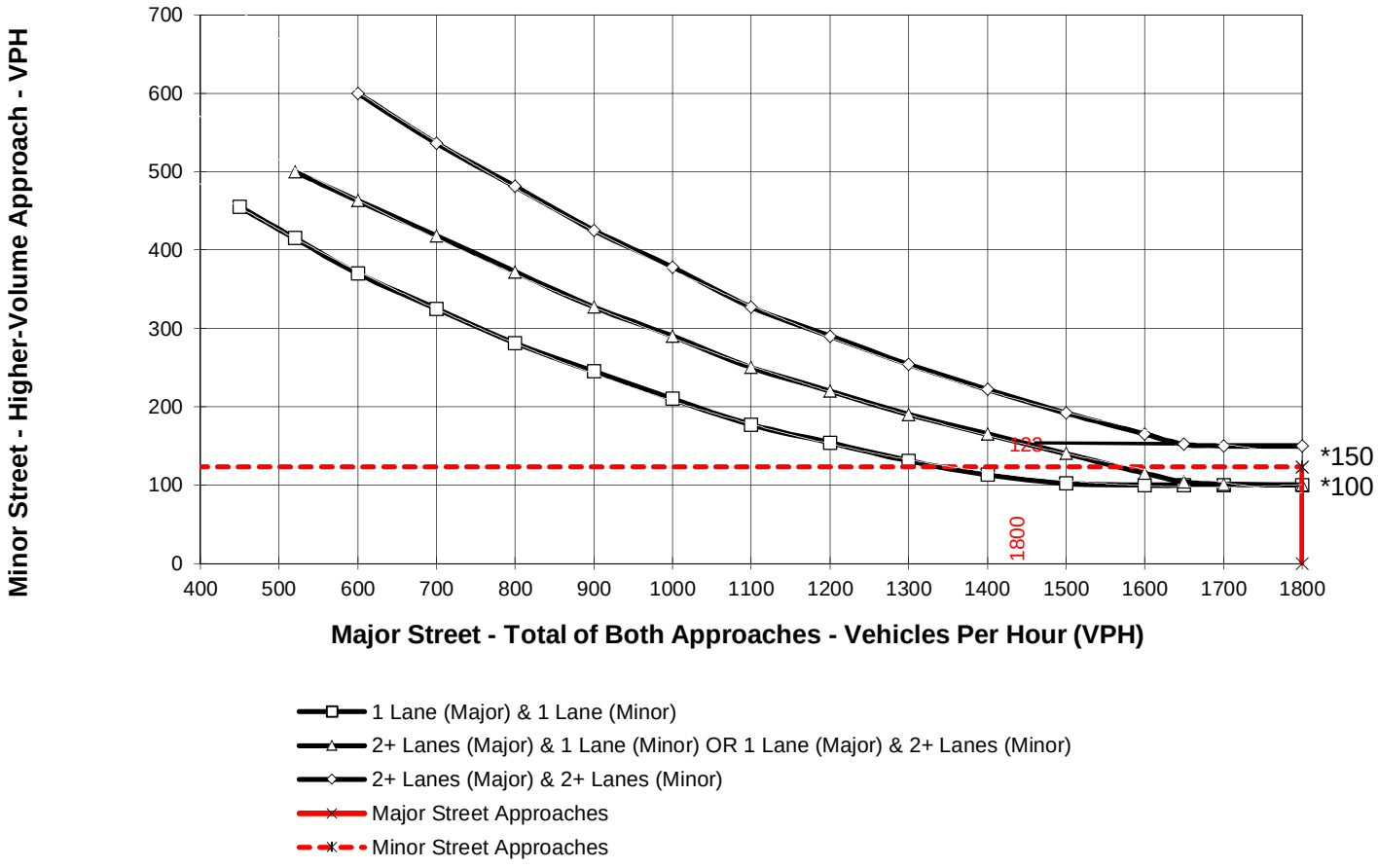
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **123**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. & Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1612**

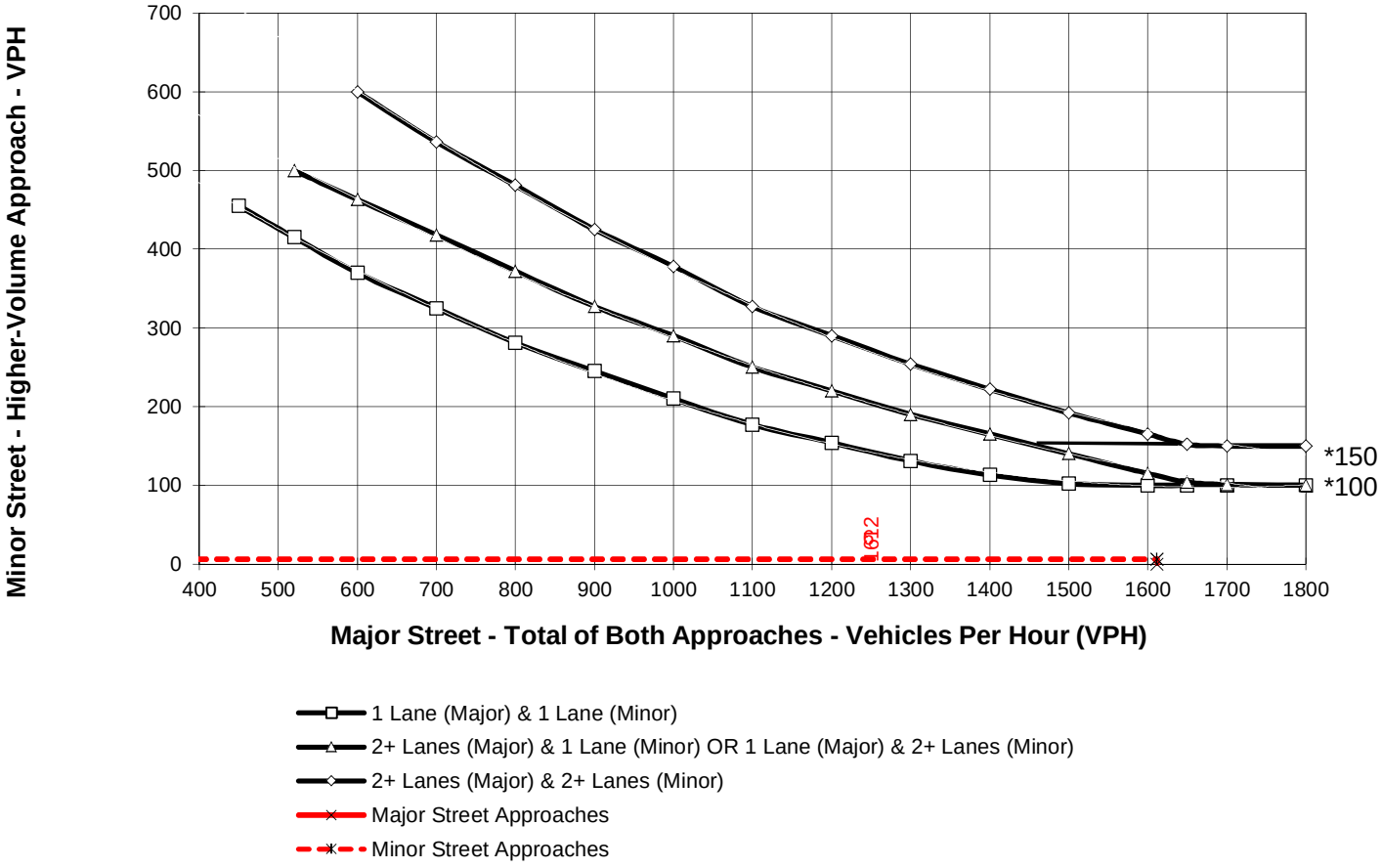
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **6**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. & Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1876**

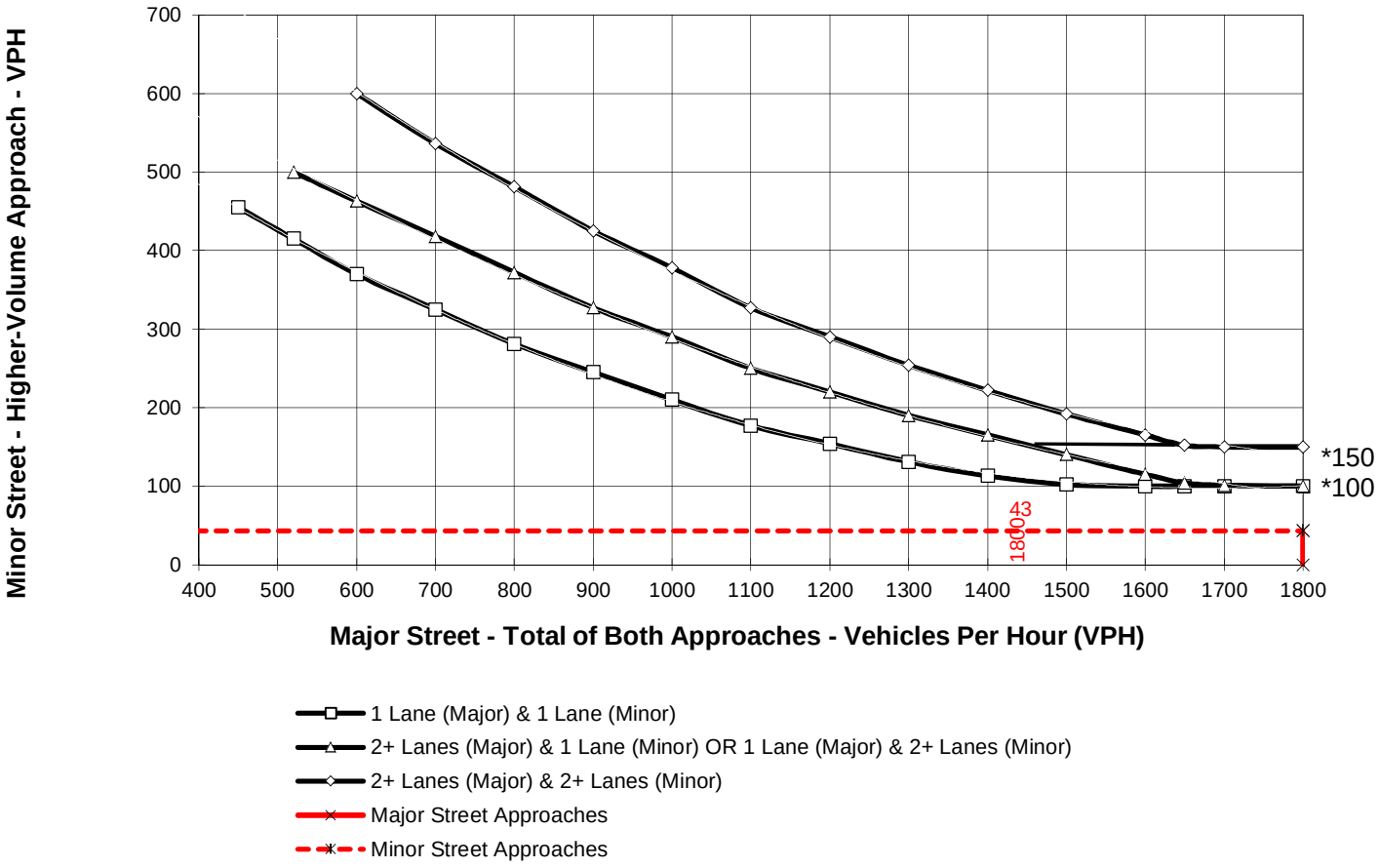
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **43**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. & Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1609**

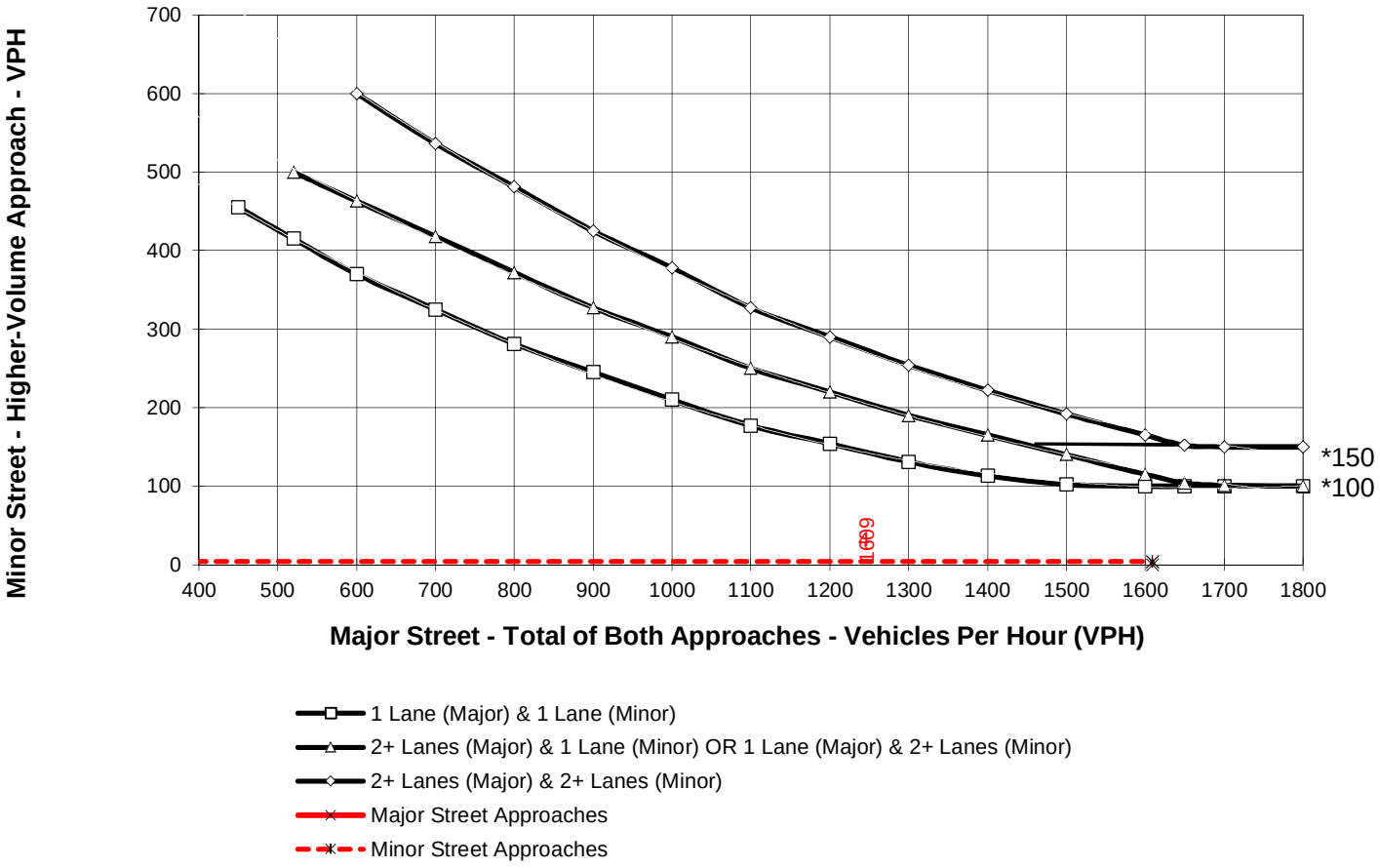
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **4**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. & Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1906**

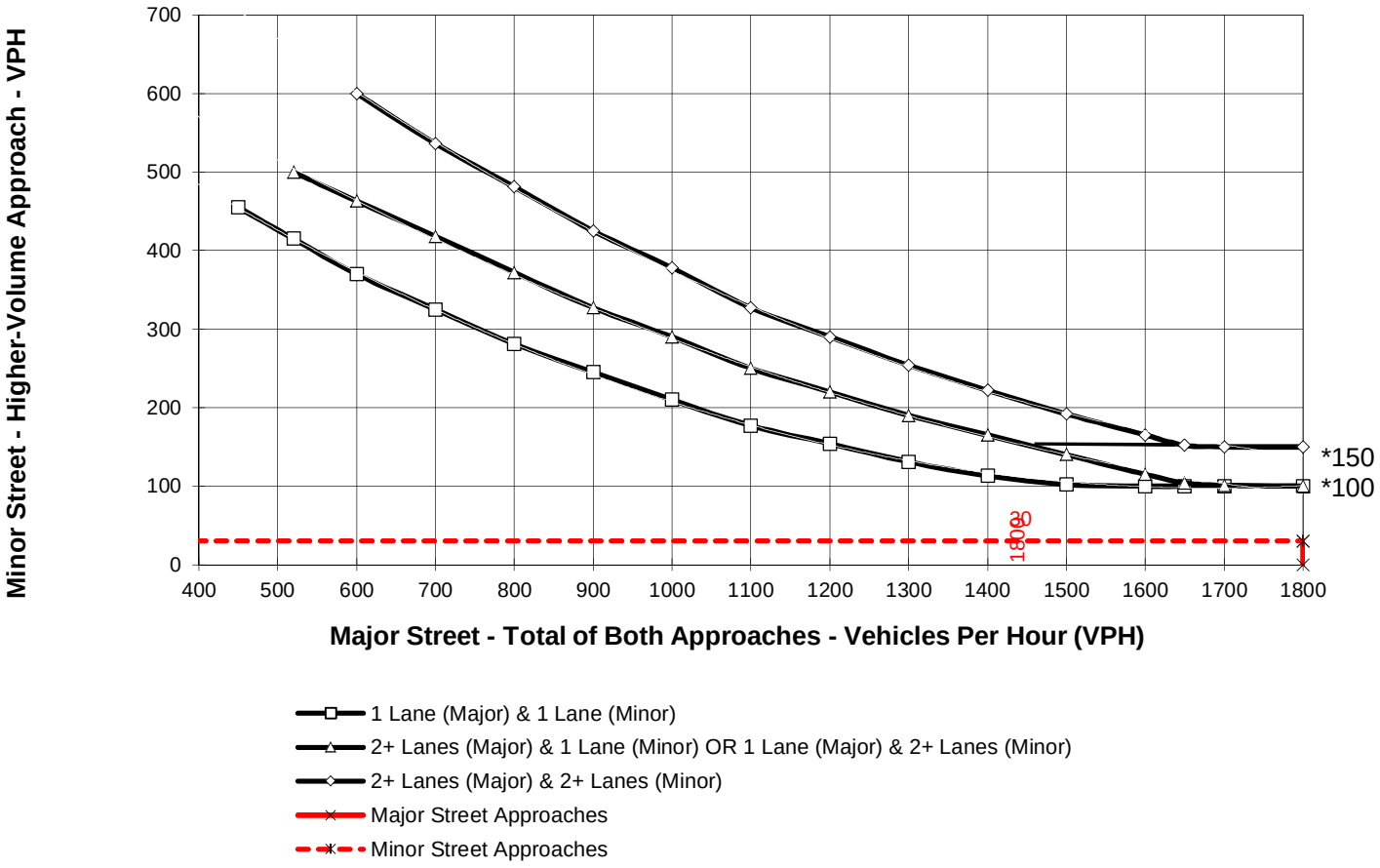
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **30**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. & Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2624**

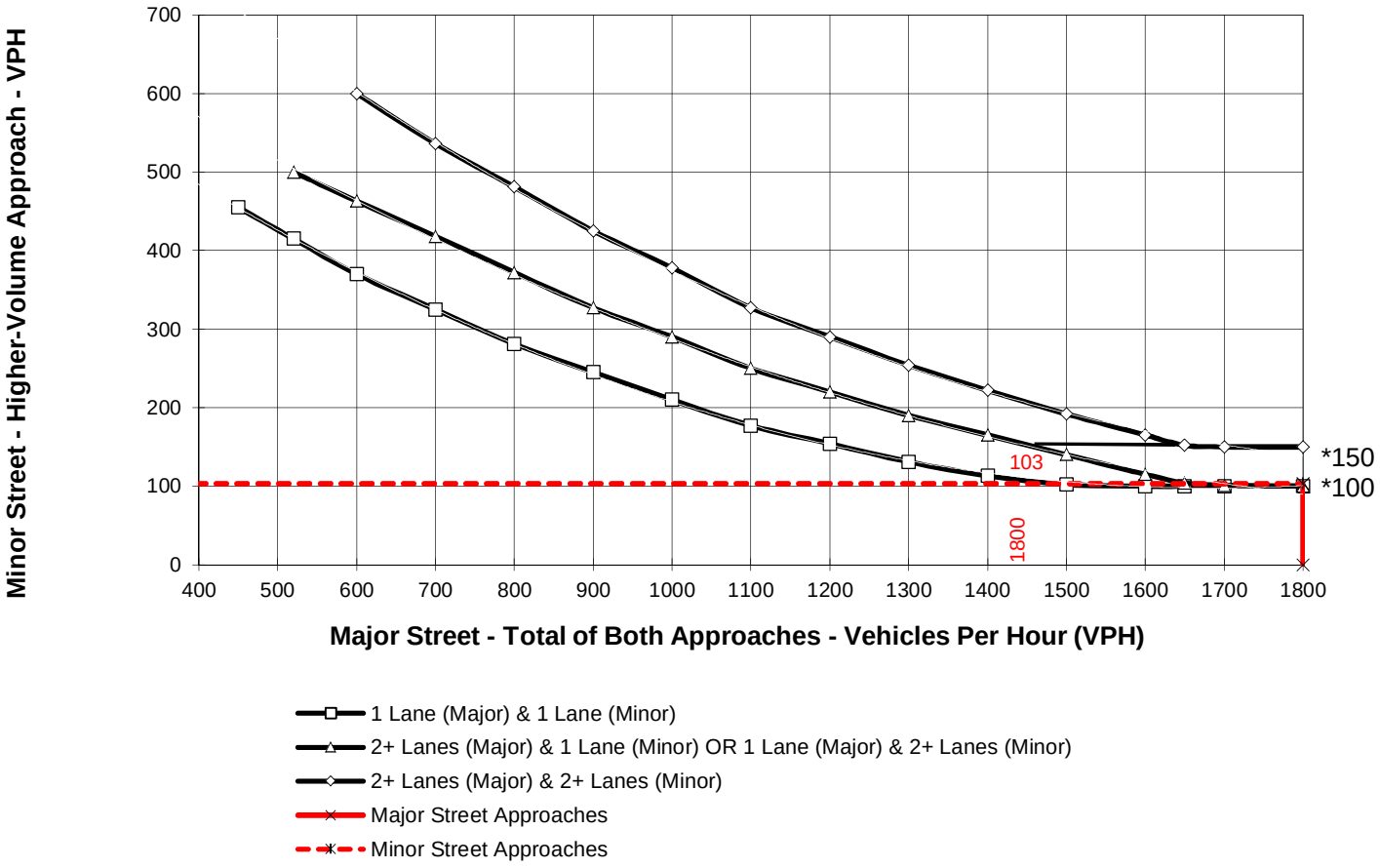
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **103**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Opening Year 2020 With Cuml. & Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2895**

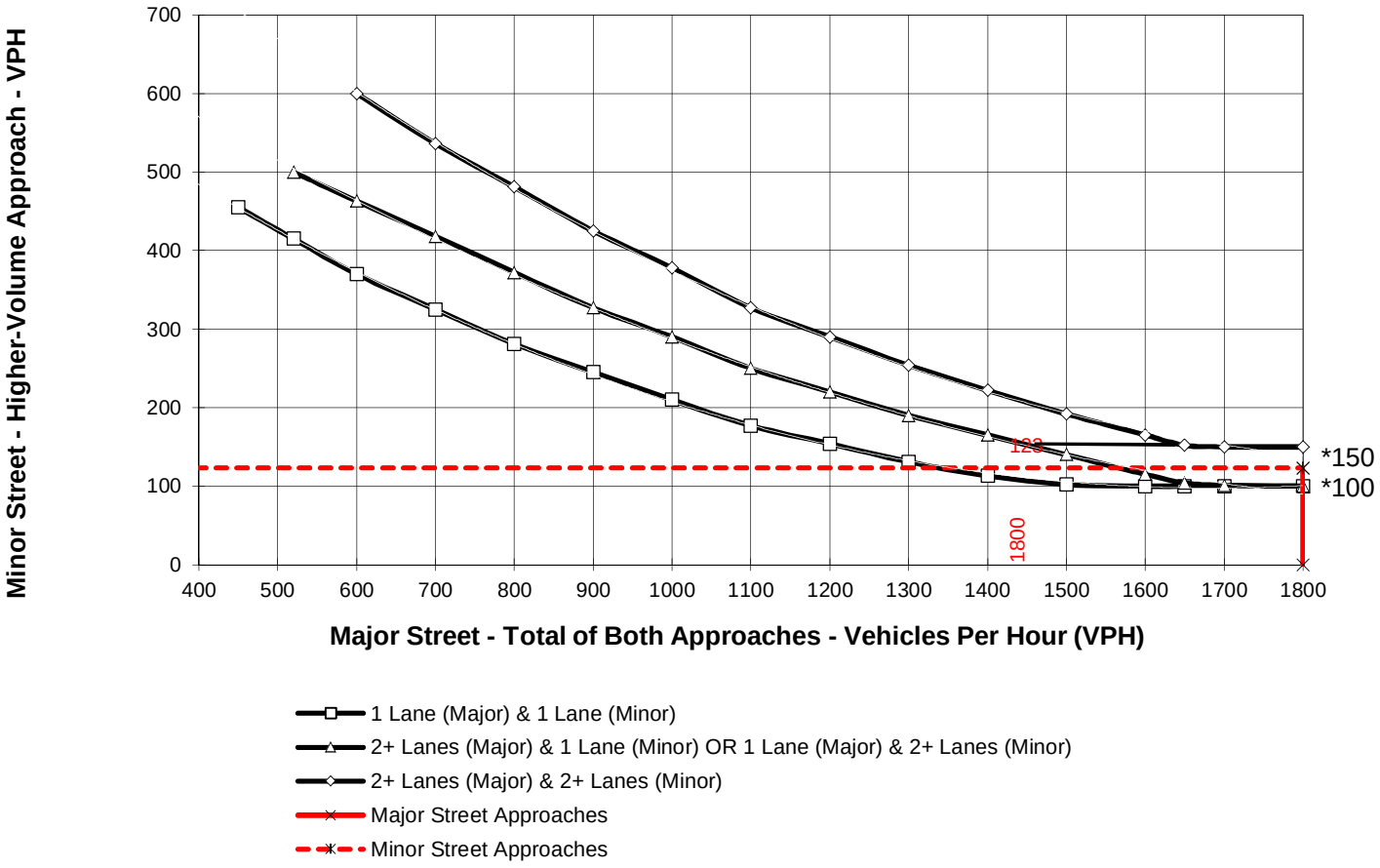
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **123**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 Without Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1757**

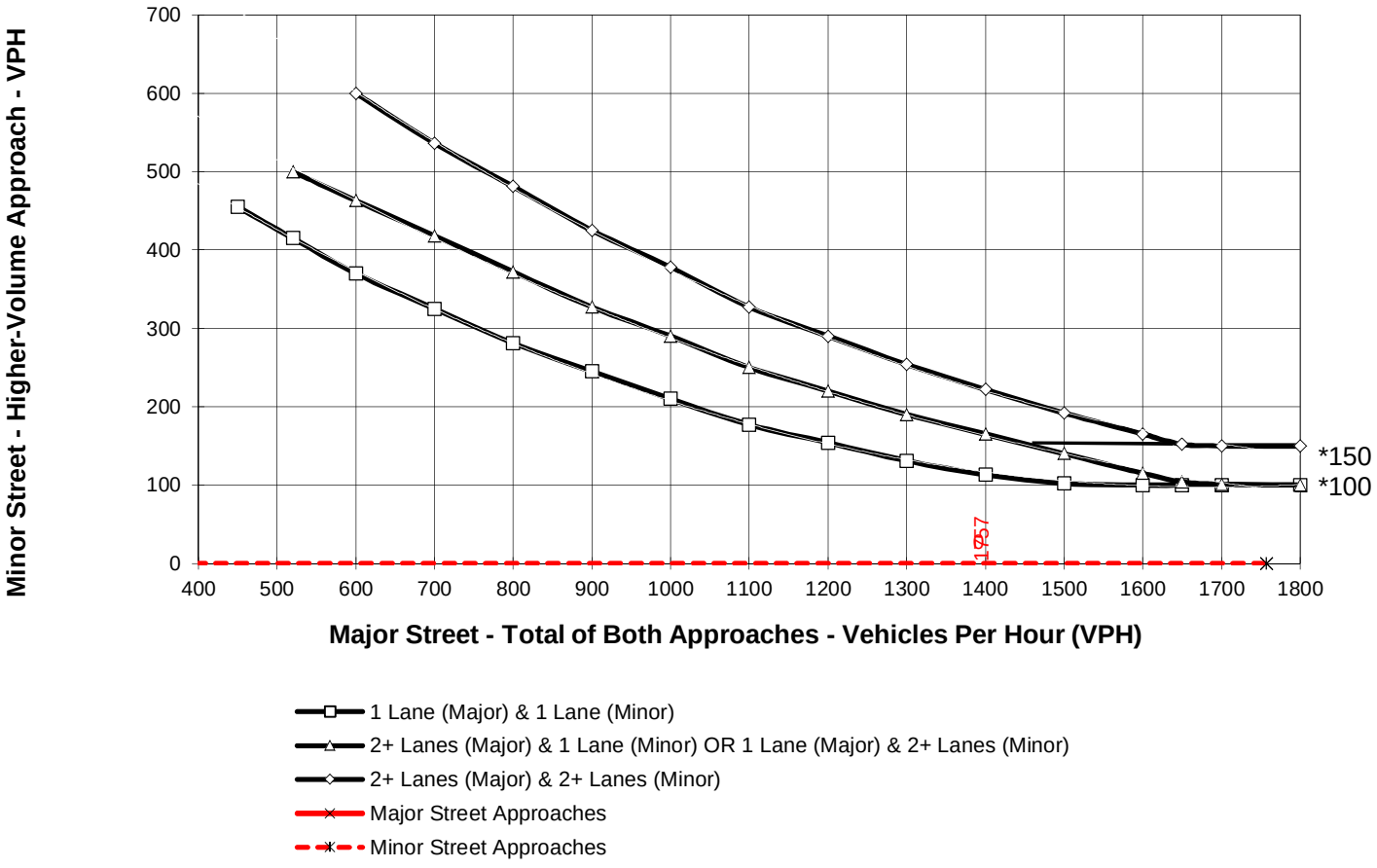
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 Without Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2146**

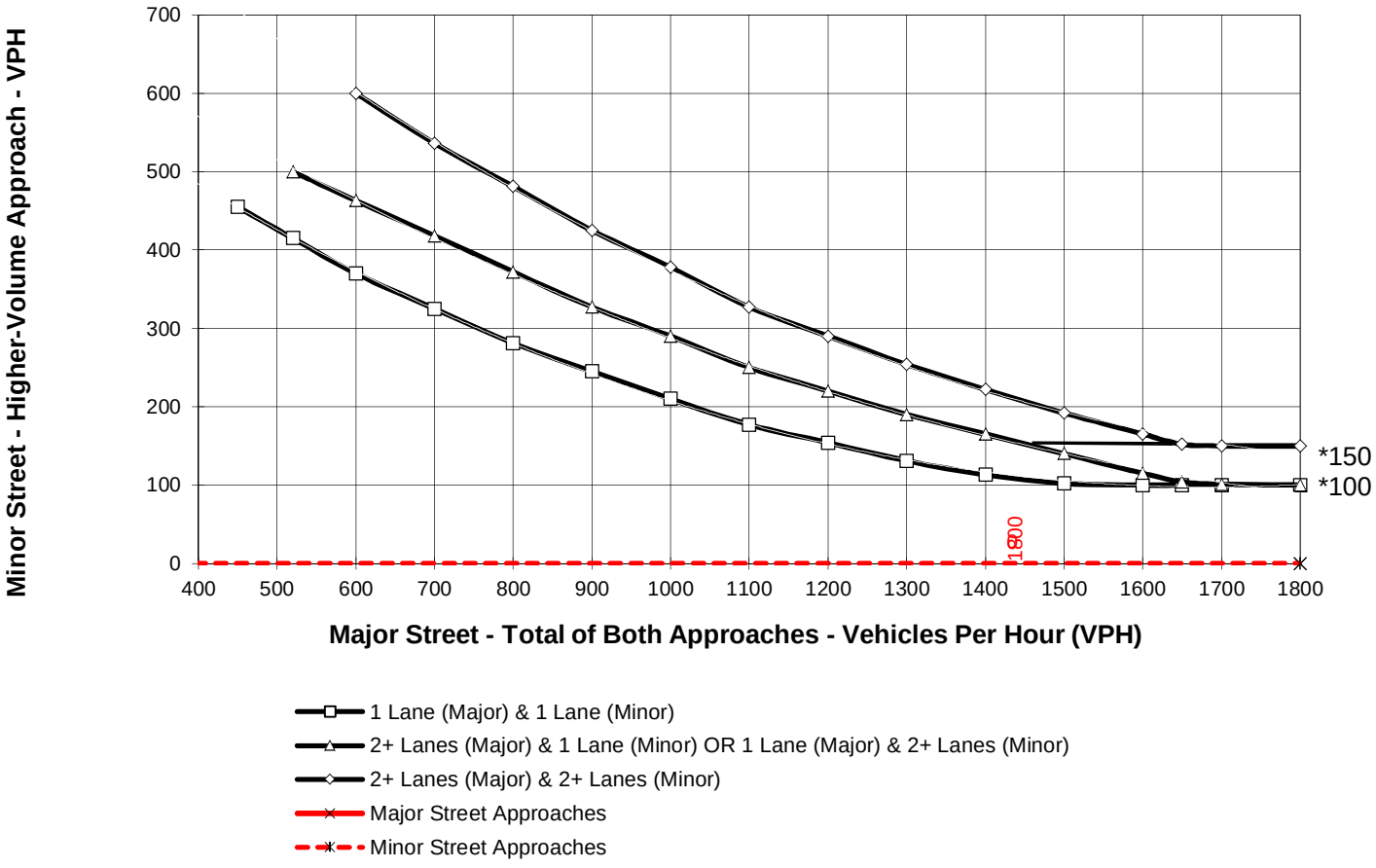
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 Without Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1757**

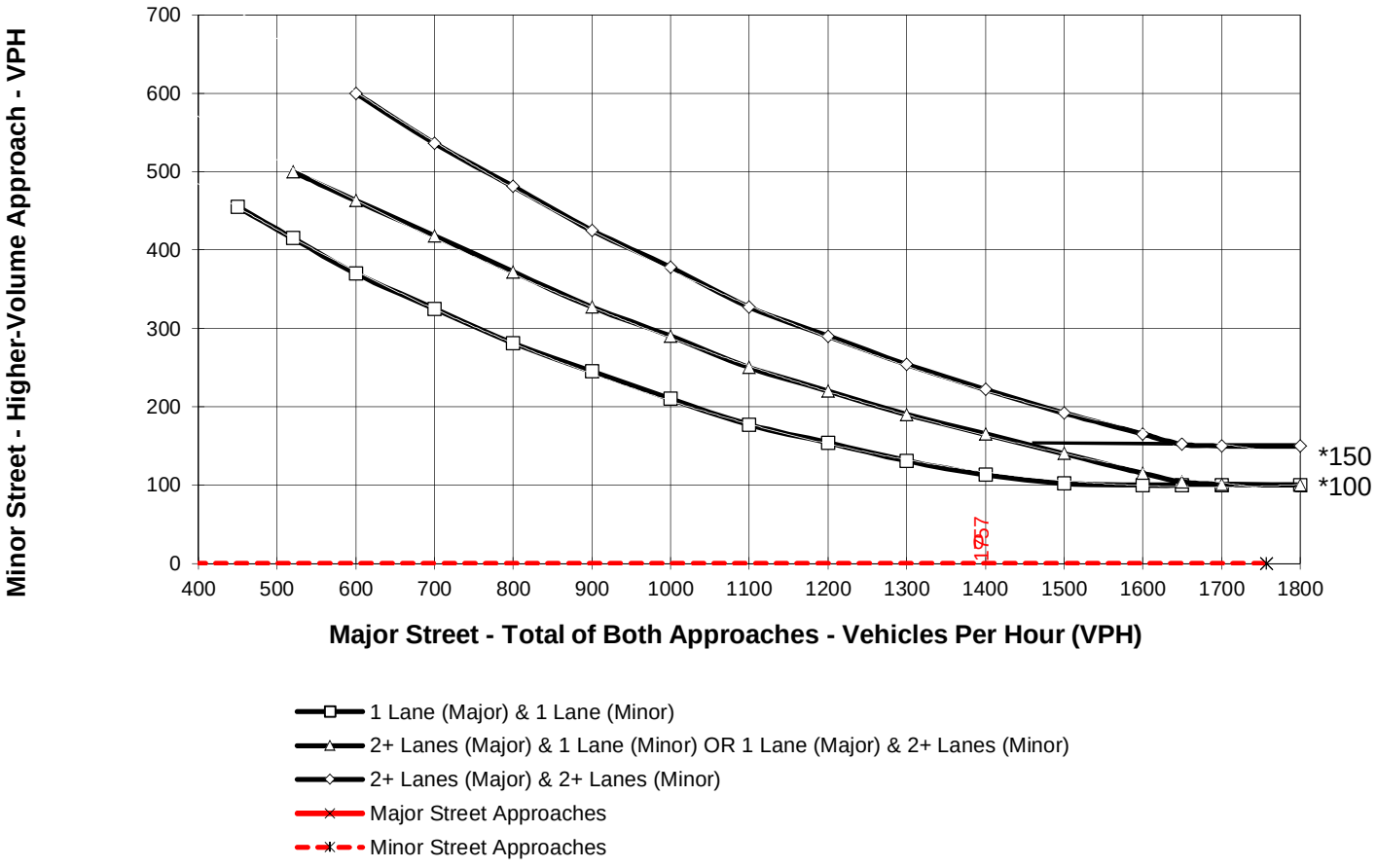
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 Without Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2146**

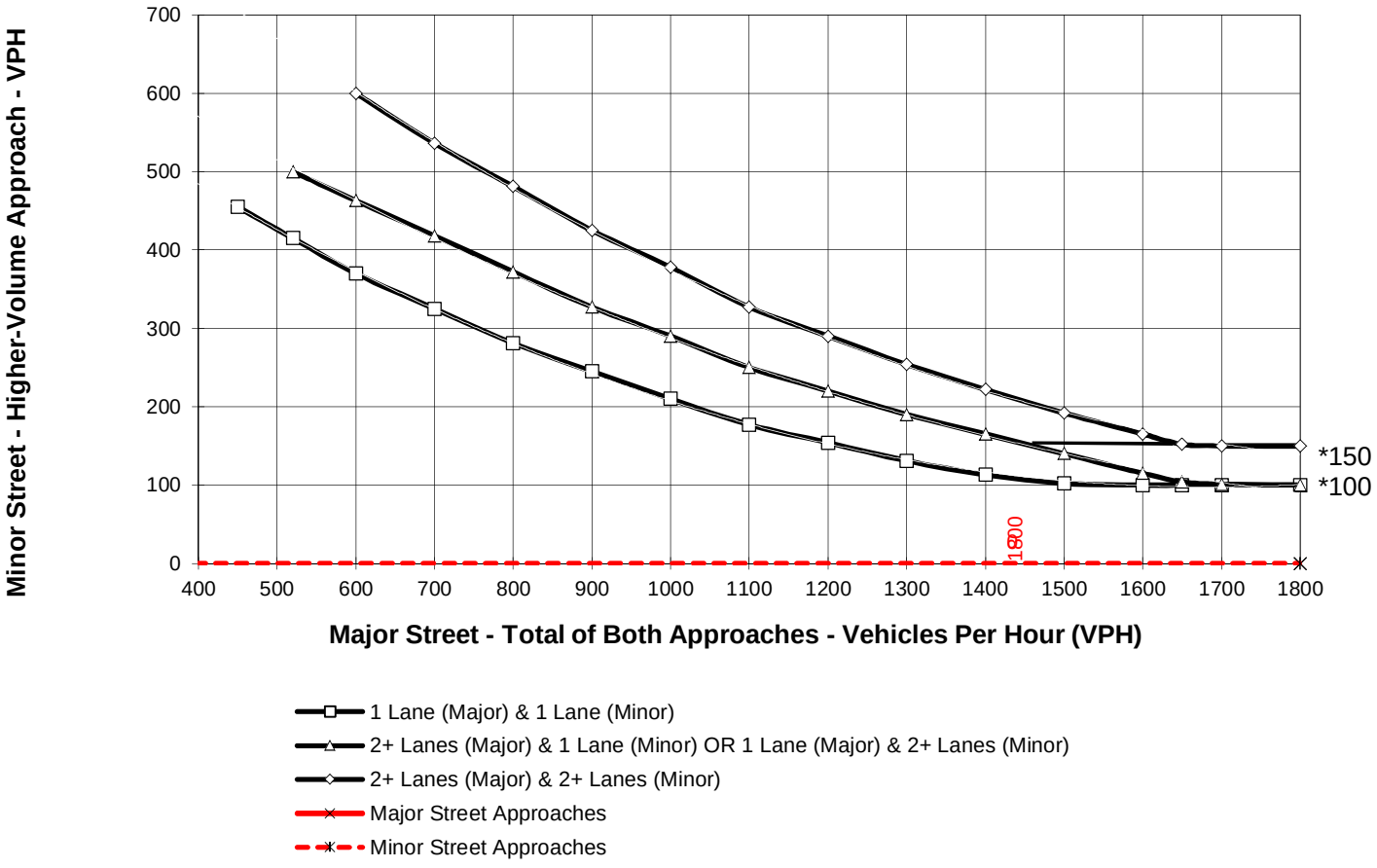
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **0**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 Without Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2956**

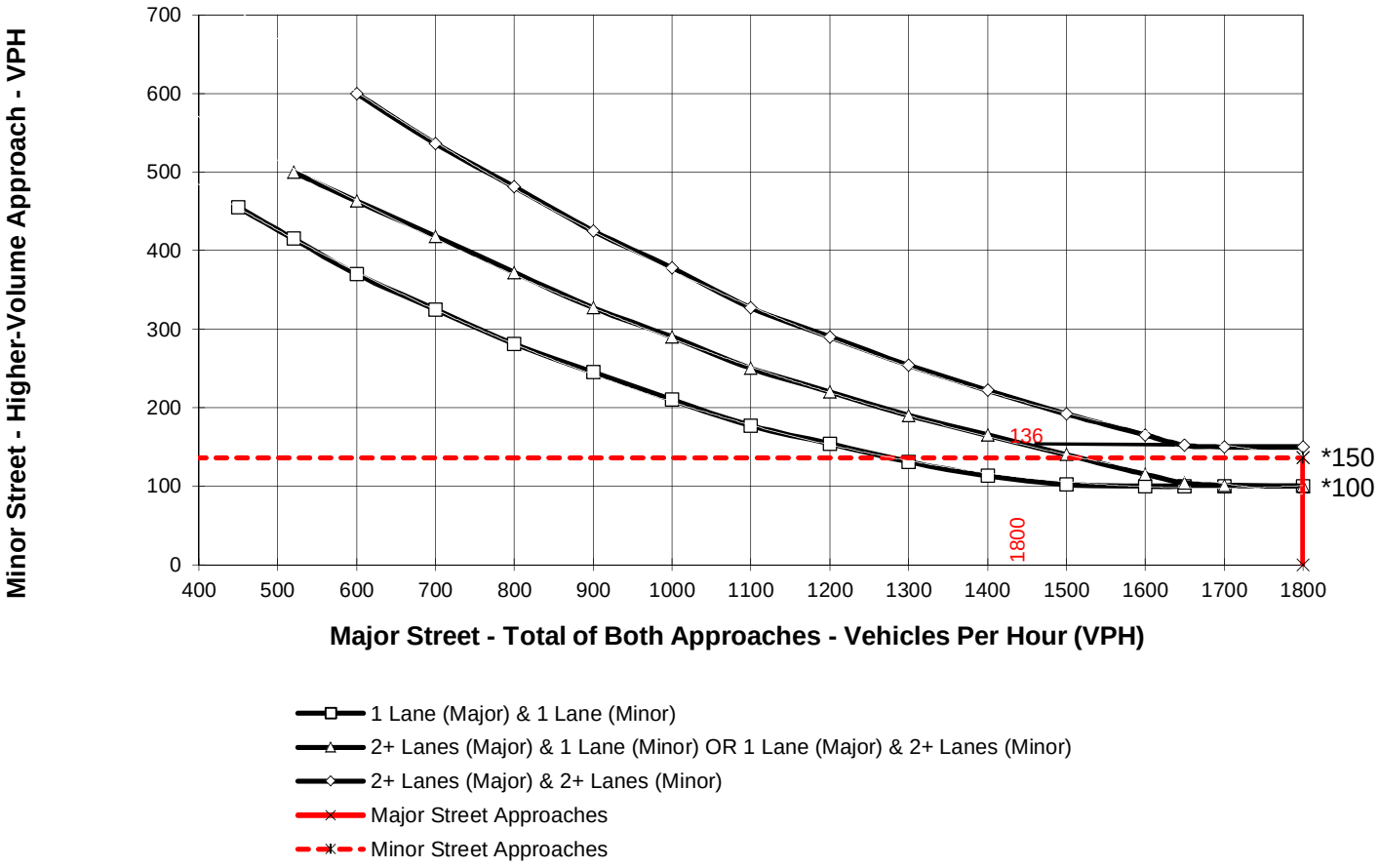
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **136**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 Without Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **3297**

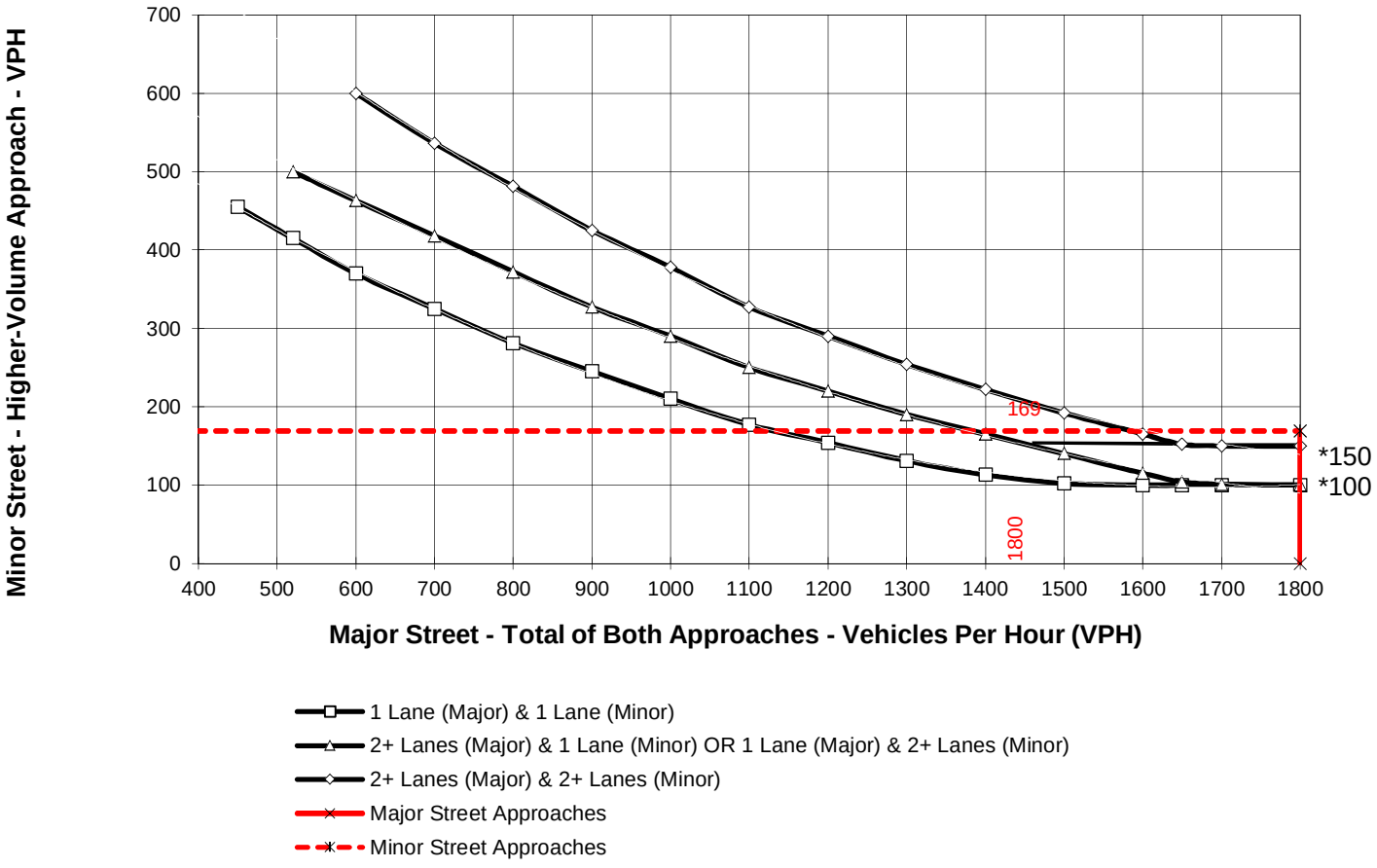
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **169**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 With Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1842**

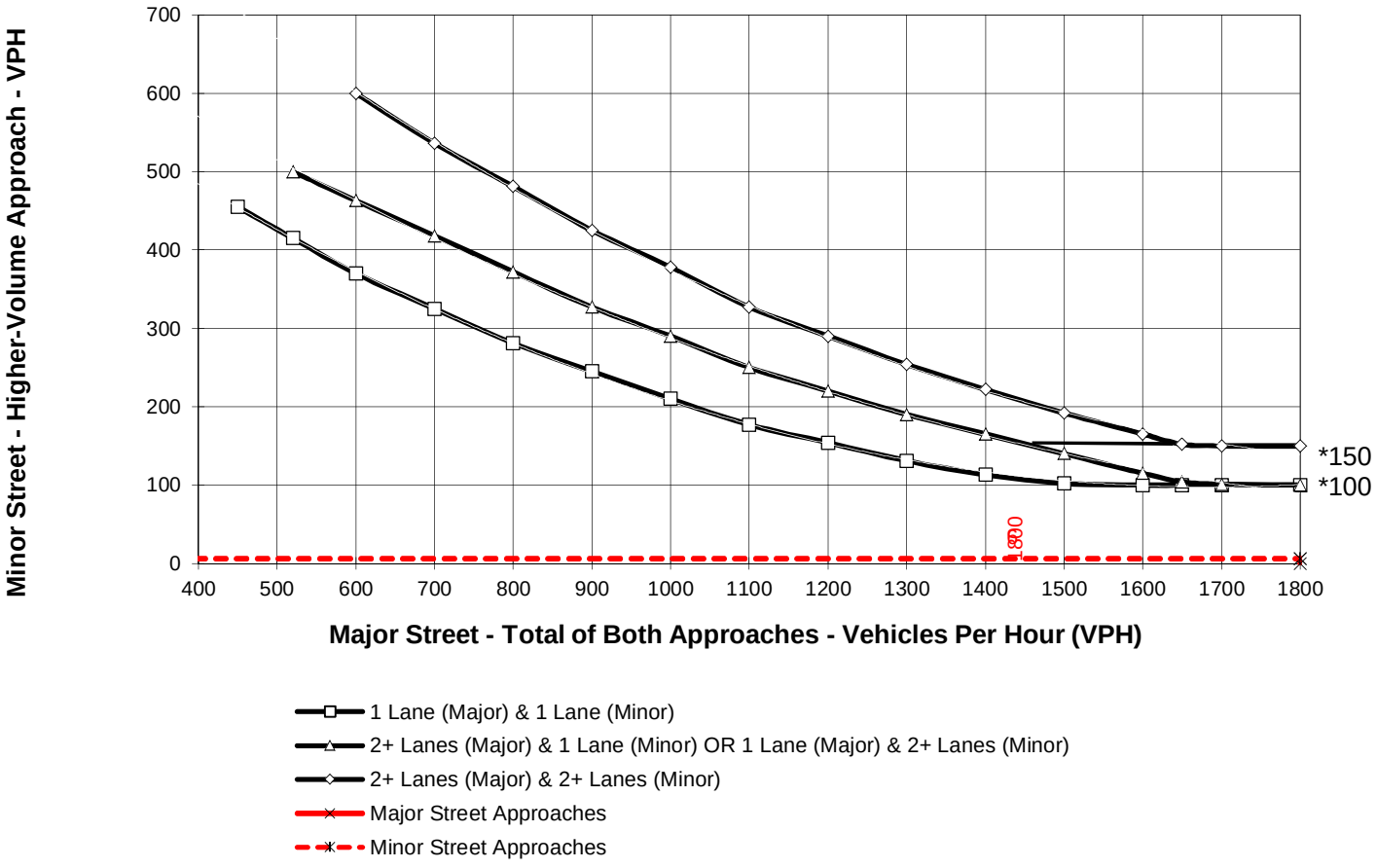
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **6**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 With Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2157**

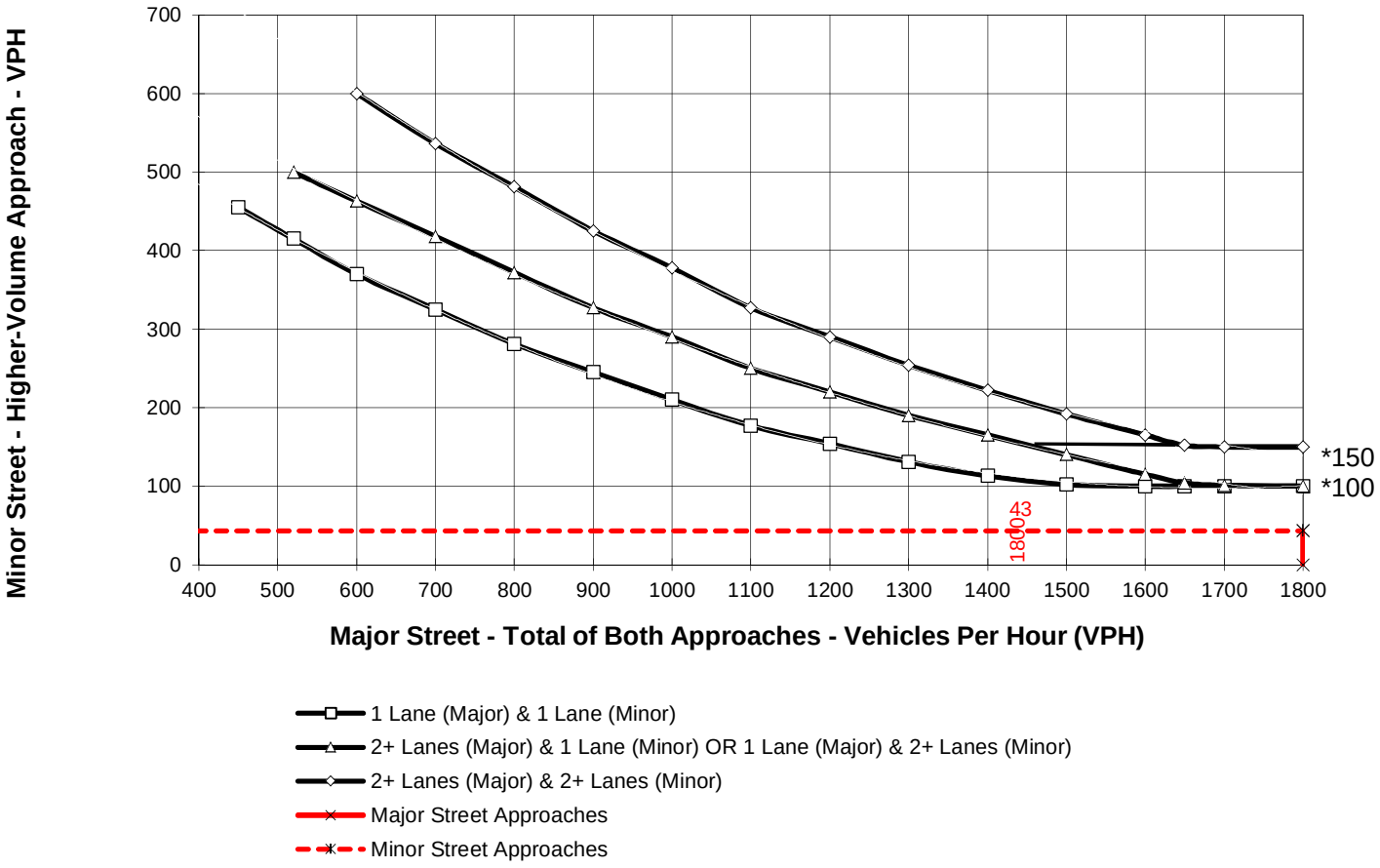
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 1**

High Volume Approach (VPH) = **43**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 With Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **1838**

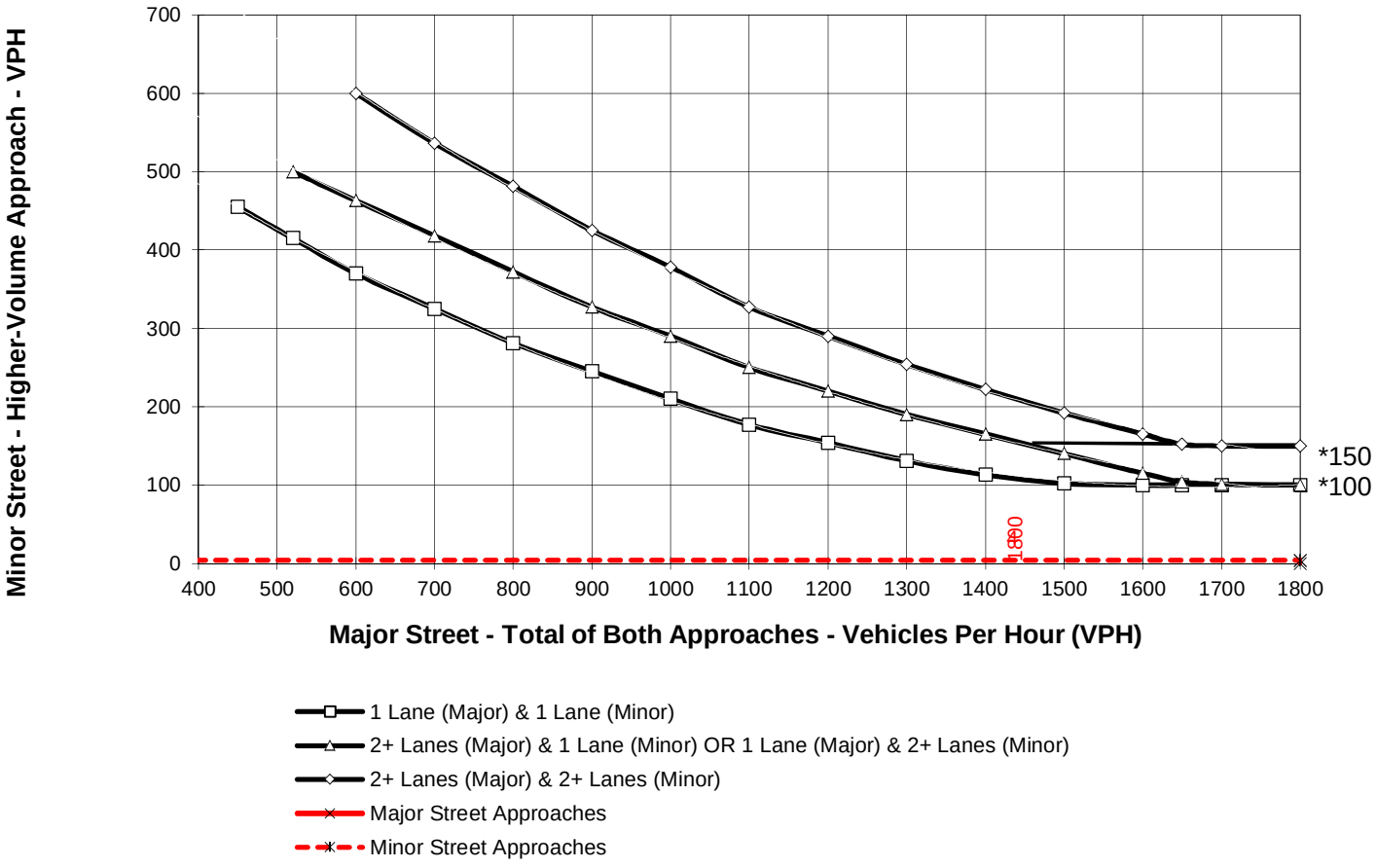
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **4**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 With Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **2186**

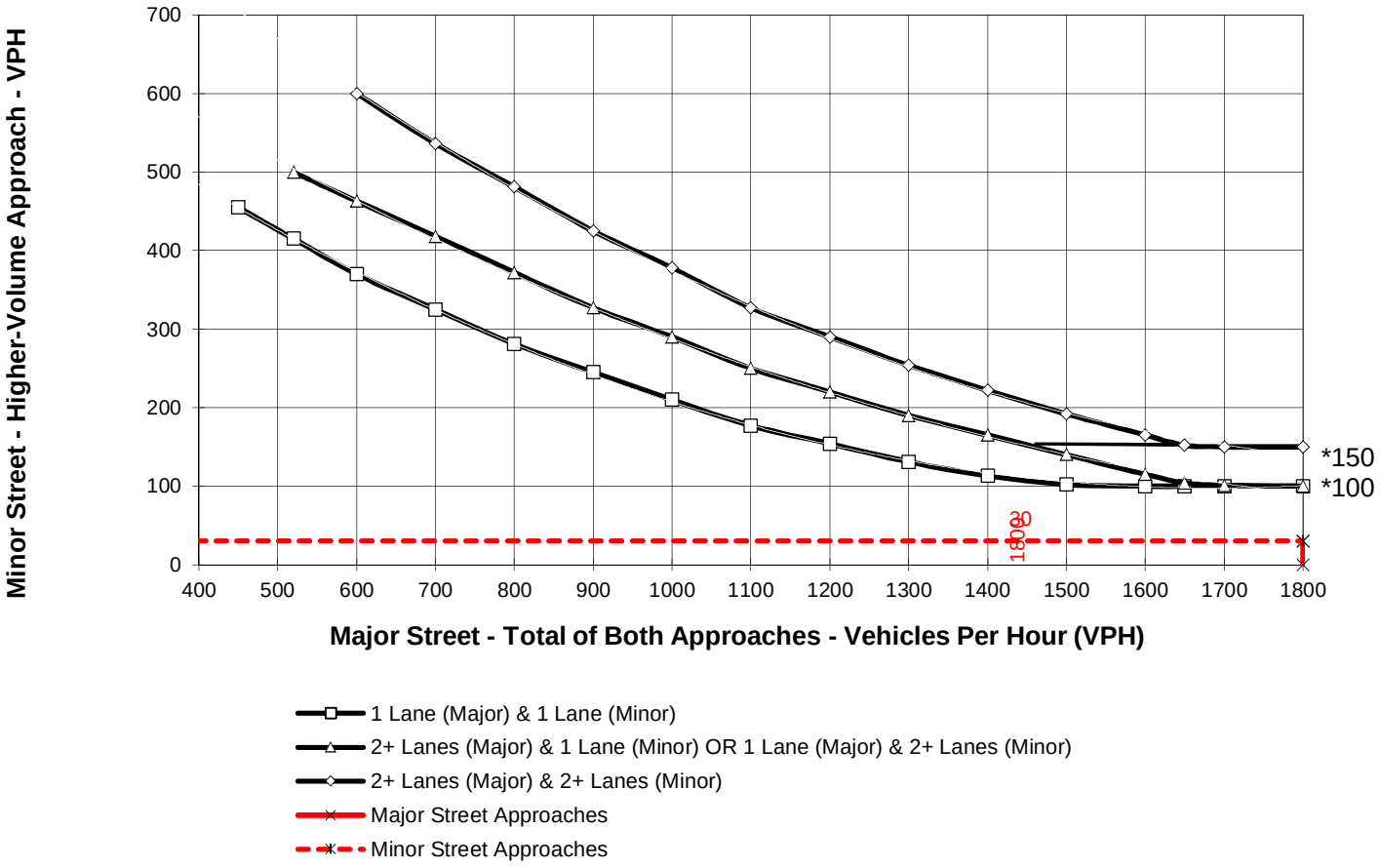
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Driveway 2**

High Volume Approach (VPH) = **30**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2012 Edition

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 With Project - AM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **3028**

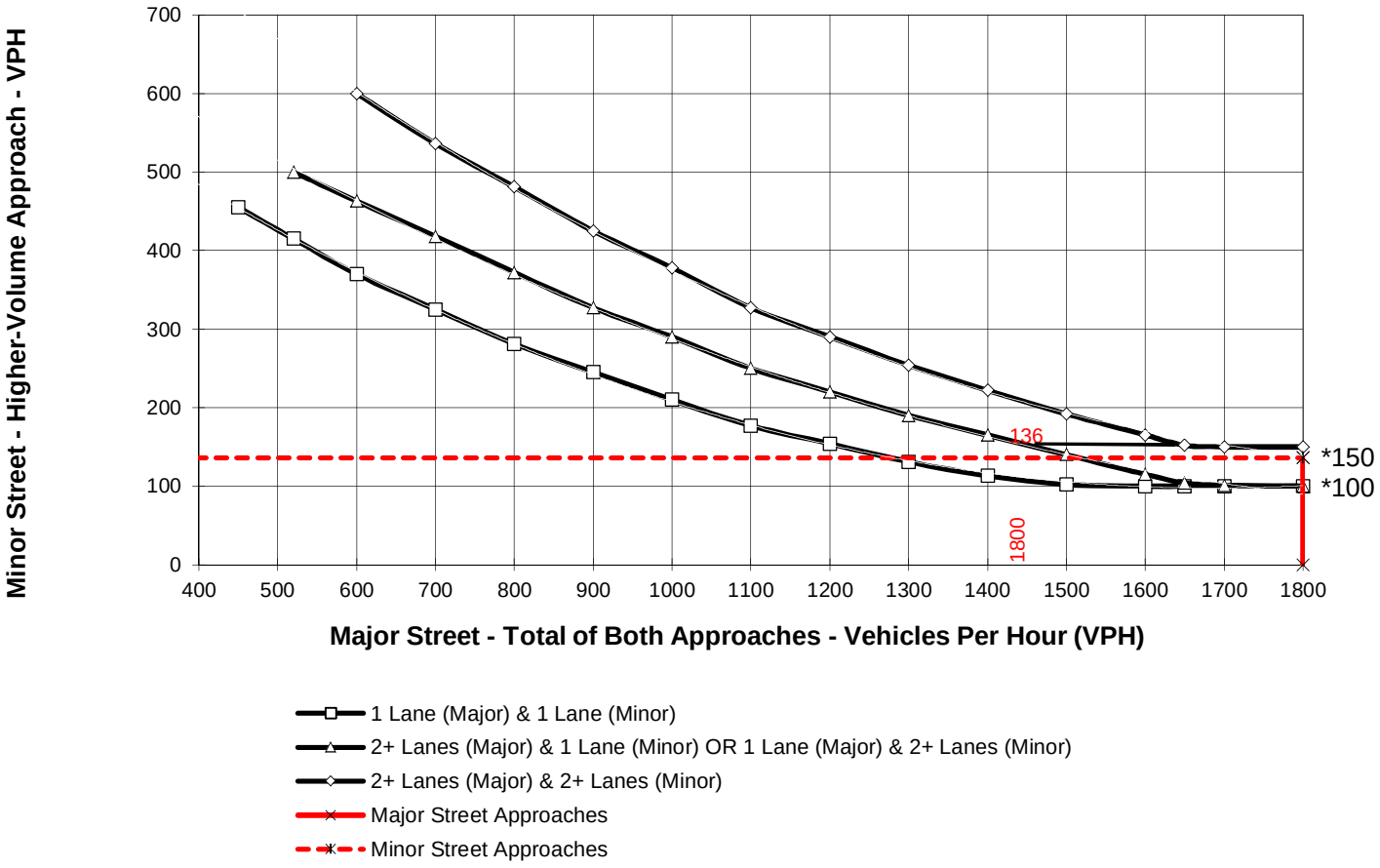
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **136**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Long Range 2040 With Project - PM**

Major Street Name = **Inland Center Drive**

Total of Both Approaches (VPH) = **3361**

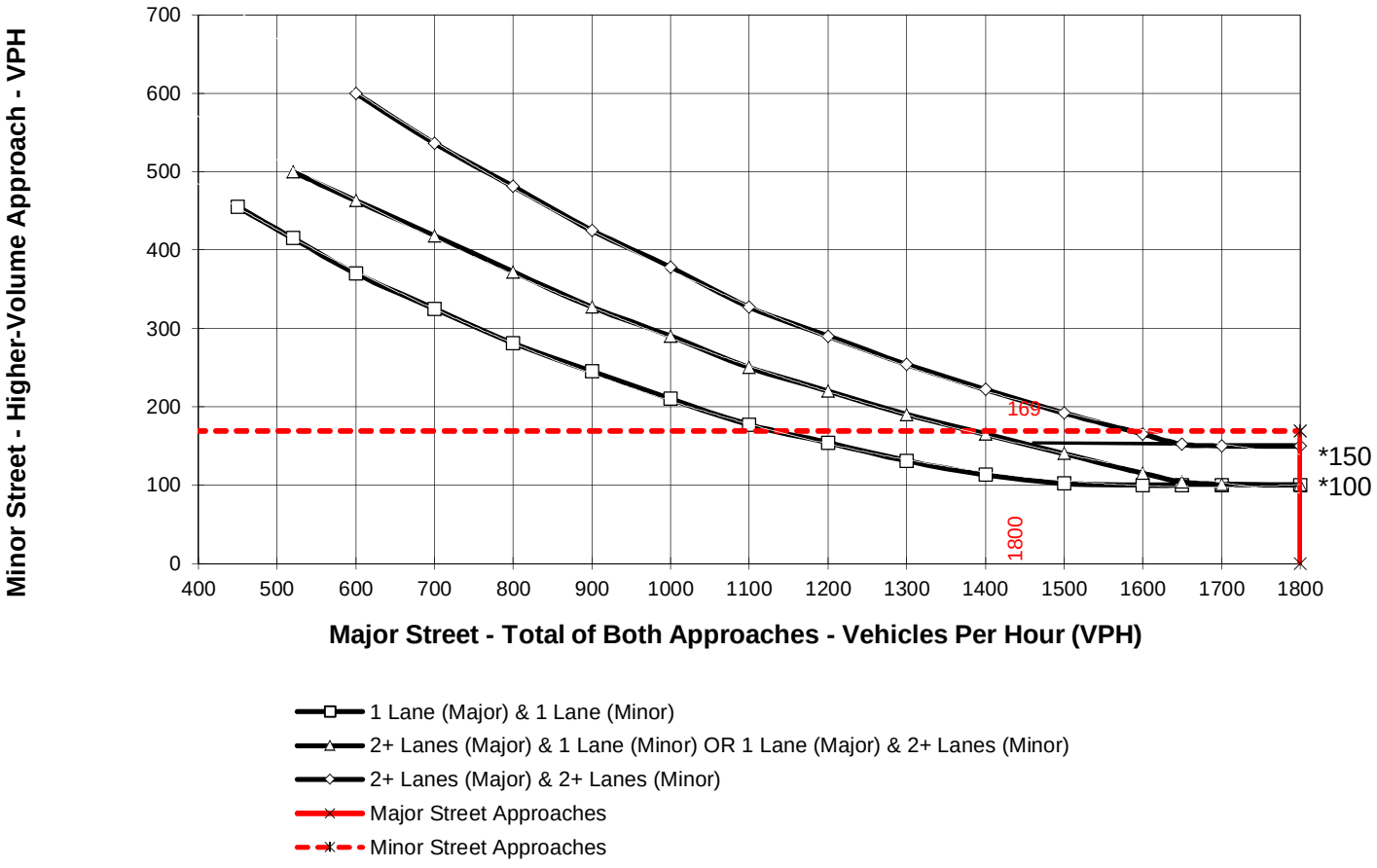
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Scenic Drive**

High Volume Approach (VPH) = **169**

Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Appendix E

Existing Conditions Intersection Analysis Worksheets

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.987			0.994			0.946	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3352	0	1615	3376	0	1615	1789	0	1615	1703	0
Flt Permitted	0.950			0.950			0.602			0.695		
Satd. Flow (perm)	1615	3352	0	1615	3376	0	1023	1789	0	1182	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			19			4			54	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	12	515	78	38	467	45	27	76	3	131	111	62
Future Volume (vph)	12	515	78	38	467	45	27	76	3	131	111	62
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	14	620	94	46	563	54	33	92	4	158	134	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	714	0	46	617	0	33	96	0	158	209	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	12	515	38	467	27	76	131	111
Future Volume (vph)	12	515	38	467	27	76	131	111
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	22.9	9.6	22.5	22.5	22.5	22.5	22.5
Total Split (%)	18.2%	41.6%	17.5%	40.9%	40.9%	40.9%	40.9%	40.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.7	21.8	5.3	23.4	11.5	11.5	11.5	11.5
Actuated g/C Ratio	0.12	0.48	0.12	0.51	0.25	0.25	0.25	0.25
v/c Ratio	0.07	0.44	0.25	0.36	0.13	0.21	0.53	0.45
Control Delay	21.8	11.0	24.5	9.1	14.1	13.7	21.5	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.8	11.0	24.5	9.1	14.1	13.7	21.5	13.4
LOS	C	B	C	A	B	B	C	B
Approach Delay		11.2		10.1		13.8		16.9
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 55	
Actuated Cycle Length: 45.8	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 51.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	14	714	46	617	33	96	158	209
v/c Ratio	0.07	0.44	0.25	0.36	0.13	0.21	0.53	0.45
Control Delay	21.8	11.0	24.5	9.1	14.1	13.7	21.5	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.8	11.0	24.5	9.1	14.1	13.7	21.5	13.4
Queue Length 50th (ft)	3	41	9	34	5	14	27	25
Queue Length 95th (ft)	17	129	37	113	21	44	76	72
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	199	1610	185	1733	414	726	478	721
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.44	0.25	0.36	0.08	0.13	0.33	0.29

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	12	515	78	38	467	45	27	76	3	131	111	62
Future Volume (veh/h)	12	515	78	38	467	45	27	76	3	131	111	62
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	14	620	94	46	563	54	33	92	4	158	134	75
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	29	1226	186	79	1395	134	300	408	18	391	258	145
Arrive On Green	0.02	0.41	0.41	0.05	0.44	0.44	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1619	2980	451	1619	3155	302	1066	1712	74	1181	1085	607
Grp Volume(v), veh/h	14	355	359	46	305	312	33	0	96	158	0	209
Grp Sat Flow(s),veh/h/ln	1619	1710	1720	1619	1710	1747	1066	0	1787	1181	0	1693
Q Serve(g_s), s	0.4	6.9	6.9	1.2	5.4	5.4	1.2	0.0	1.9	5.6	0.0	4.8
Cycle Q Clear(g_c), s	0.4	6.9	6.9	1.2	5.4	5.4	6.0	0.0	1.9	7.5	0.0	4.8
Prop In Lane	1.00		0.26	1.00		0.17	1.00		0.04	1.00		0.36
Lane Grp Cap(c), veh/h	29	703	708	79	756	772	300	0	425	391	0	403
V/C Ratio(X)	0.48	0.51	0.51	0.58	0.40	0.40	0.11	0.00	0.23	0.40	0.00	0.52
Avail Cap(c_a), veh/h	199	703	708	185	756	772	476	0	719	585	0	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	9.8	9.8	20.8	8.5	8.5	17.4	0.0	13.7	16.7	0.0	14.8
Incr Delay (d2), s/veh	12.0	2.6	2.6	6.7	1.6	1.6	0.2	0.0	0.3	0.7	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.8	3.8	0.7	2.9	2.9	0.4	0.0	1.0	1.9	0.0	2.3
LnGrp Delay(d),s/veh	33.8	12.4	12.4	27.5	10.1	10.0	17.6	0.0	14.0	17.4	0.0	15.8
LnGrp LOS	C	B	B	C	B	B	B		B	B		B
Approach Vol, veh/h		728			663			129			367	
Approach Delay, s/veh		12.8			11.3			14.9			16.5	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	22.9		15.1	5.3	24.3		15.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.1	18.4		18.0	5.5	18.0		18.0
Max Q Clear Time (g_c+I1), s	3.2	8.9		8.0	2.4	7.4		9.5
Green Ext Time (p_c), s	0.0	3.1		0.4	0.0	2.8		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.912				0.964	
Flt Protected	0.983		0.950			
Satd. Flow (prot)	1524	0	1615	1800	1735	0
Flt Permitted	0.983		0.950			
Satd. Flow (perm)	1524	0	1615	1800	1735	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	146				31	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

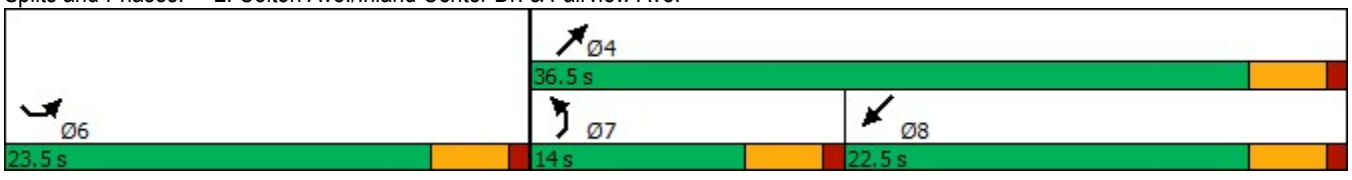
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	56	105	110	136	218	79
Future Volume (vph)	56	105	110	136	218	79
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	78	146	153	189	303	110
Shared Lane Traffic (%)						
Lane Group Flow (vph)	224	0	153	189	413	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	56	110	136	218
Future Volume (vph)	56	110	136	218
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	23.5	14.0	36.5	22.5
Total Split (%)	39.2%	23.3%	60.8%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	19.6	8.8	26.1	15.8
Actuated g/C Ratio	0.36	0.16	0.47	0.29
v/c Ratio	0.35	0.59	0.22	0.80
Control Delay	8.3	34.7	8.3	31.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	8.3	34.7	8.3	31.1
LOS	A	C	A	C
Approach Delay	8.3		20.1	31.1
Approach LOS	A		C	C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 55	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 22.0	Intersection LOS: C
Intersection Capacity Utilization 45.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	224	153	189	413
v/c Ratio	0.35	0.59	0.22	0.80
Control Delay	8.3	34.7	8.3	31.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	8.3	34.7	8.3	31.1
Queue Length 50th (ft)	20	52	32	124
Queue Length 95th (ft)	41	80	47	156
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	637	287	1082	607
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.35	0.53	0.17	0.68

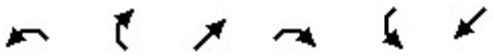
Intersection Summary

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	56	105	110	136	218	79
Future Volume (veh/h)	56	105	110	136	218	79
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	78	146	153	189	303	110
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	183	343	190	867	354	129
Arrive On Green	0.35	0.35	0.12	0.48	0.28	0.28
Sat Flow, veh/h	521	975	1619	1800	1261	458
Grp Volume(v), veh/h	225	0	153	189	0	413
Grp Sat Flow(s),veh/h/ln	1502	0	1619	1800	0	1719
Q Serve(g_s), s	6.2	0.0	5.0	3.3	0.0	12.3
Cycle Q Clear(g_c), s	6.2	0.0	5.0	3.3	0.0	12.3
Prop In Lane	0.35	0.65	1.00			0.27
Lane Grp Cap(c), veh/h	528	0	190	867	0	483
V/C Ratio(X)	0.43	0.00	0.80	0.22	0.00	0.86
Avail Cap(c_a), veh/h	528	0	285	1066	0	573
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.4	0.0	23.2	8.1	0.0	18.4
Incr Delay (d2), s/veh	2.5	0.0	9.6	0.1	0.0	10.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	2.7	1.7	0.0	7.2
LnGrp Delay(d),s/veh	15.9	0.0	32.8	8.2	0.0	29.0
LnGrp LOS	B		C	A		C
Approach Vol, veh/h	225			342	413	
Approach Delay, s/veh	15.9			19.2	29.0	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				30.5		23.5	10.9	19.7
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				32.0		19.0	9.5	18.0
Max Q Clear Time (g_c+I1), s				5.3		8.2	7.0	14.3
Green Ext Time (p_c), s				1.1		0.5	0.1	0.9

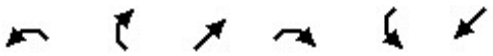
Intersection Summary	
HCM 2010 Ctrl Delay	22.6
HCM 2010 LOS	C

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1900	0	1900	1900
Flt Permitted						
Satd. Flow (perm)	1900	0	1900	0	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	299	0	0	270
Future Volume (vph)	0	0	299	0	0	270
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	325	0	0	293
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	325	0	0	293

Intersection Summary

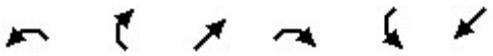
Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	299	0	0	270
Future Vol, veh/h	0	0	299	0	0	270
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	325	0	0	293

Major/Minor	Minor2		Major2	
Conflicting Flow All	293	293	0	0
Stage 1	293	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	621	751	-	-
Stage 1	674	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	751	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

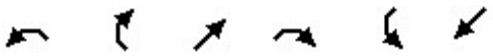
Approach	NE	SW
HCM Control Delay, s		0
HCM LOS	-	

Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	299	0	0	270
Future Volume (vph)	0	0	299	0	0	270
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	325	0	0	293
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	325	0	0	293

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	299	0	0	270
Future Vol, veh/h	0	0	299	0	0	270
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	0	325	0	0	293

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	325	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	721	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	721	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt						0.850						0.850
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1615	0	1615	0	1530	1615	1800	0	1615	1800	1530
Flt Permitted		0.950		0.950			0.298			0.447		
Satd. Flow (perm)	0	1615	0	1615	0	1530	507	1800	0	760	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						143						537
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1	0	0	205	0	25	50	248	1	4	244	424
Future Volume (vph)	1	0	0	205	0	25	50	248	1	4	244	424
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1	0	0	259	0	32	63	314	1	5	309	537
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	259	0	32	63	315	0	5	309	537

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Configurations								
Traffic Volume (vph)	0	205	25	50	248	4	244	424
Future Volume (vph)	0	205	25	50	248	4	244	424
Turn Type	NA	Prot	Prot	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	2	6	6	7	4	3	8	
Permitted Phases				4		8		8
Detector Phase	2	6	6	7	4	3	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	24.5	23.0	23.0	10.0	22.5	10.0	22.5	22.5
Total Split (%)	30.6%	28.8%	28.8%	12.5%	28.1%	12.5%	28.1%	28.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	20.4	15.8	15.8	23.3	22.3	20.8	16.6	16.6
Actuated g/C Ratio	0.28	0.21	0.21	0.31	0.30	0.28	0.22	0.22
v/c Ratio	0.00	0.76	0.07	0.26	0.58	0.02	0.77	0.71
Control Delay	23.0	43.6	0.3	20.4	28.9	17.2	42.5	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.0	43.6	0.3	20.4	28.9	17.2	42.5	8.6
LOS	C	D	A	C	C	B	D	A
Approach Delay	23.0				27.5		20.9	
Approach LOS	C				C		C	

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 74.1			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 26.0		Intersection LOS: C	
Intersection Capacity Utilization 47.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Inland Center Dr. & I St.

Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Group Flow (vph)	1	259	32	63	315	5	309	537
v/c Ratio	0.00	0.76	0.07	0.26	0.58	0.02	0.77	0.71
Control Delay	23.0	43.6	0.3	20.4	28.9	17.2	42.5	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.0	43.6	0.3	20.4	28.9	17.2	42.5	8.6
Queue Length 50th (ft)	0	119	0	21	121	2	144	0
Queue Length 95th (ft)	3	169	0	41	203	8	198	37
Internal Link Dist (ft)	133				59		387	
Turn Bay Length (ft)				110		50		
Base Capacity (vph)	445	411	496	243	583	277	446	783
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.63	0.06	0.26	0.54	0.02	0.69	0.69

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	205	0	25	50	248	1	4	244	424
Future Volume (veh/h)	1	0	0	205	0	25	50	248	1	4	244	424
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	0	0	259	0	32	63	314	1	5	309	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	690	0	0	0	0	0	315	501	2	287	408	347
Arrive On Green	0.43	0.00	0.00	0.00	0.00	0.00	0.06	0.28	0.28	0.01	0.23	0.00
Sat Flow, veh/h	1619	0	0		0		1619	1793	6	1619	1800	1530
Grp Volume(v), veh/h	1	0	0		0.0		63	0	315	5	309	0
Grp Sat Flow(s),veh/h/ln	1619	0	0				1619	0	1799	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.0				1.4	0.0	7.2	0.1	7.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				1.4	0.0	7.2	0.1	7.5	0.0
Prop In Lane	1.00		0.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	690	0	0				315	0	503	287	408	347
V/C Ratio(X)	0.00	0.00	0.00				0.20	0.00	0.63	0.02	0.76	0.00
Avail Cap(c_a), veh/h	690	0	0				408	0	690	466	690	587
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.7	0.0	0.0				13.1	0.0	14.8	14.1	16.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.3	0.0	1.3	0.0	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.6	0.0	3.7	0.1	4.0	0.0
LnGrp Delay(d),s/veh	7.7	0.0	0.0				13.4	0.0	16.1	14.1	19.8	0.0
LnGrp LOS	A						B		B	B	B	
Approach Vol, veh/h		1						378			314	
Approach Delay, s/veh		7.7						15.6			19.8	
Approach LOS		A						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		24.5	4.8	17.6			7.3	15.1
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		20.0	5.5	18.0			5.5	18.0
Max Q Clear Time (g_c+I1), s		2.0	2.1	9.2			3.4	9.5
Green Ext Time (p_c), s		0.0	0.0	1.2			0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.5
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.977			0.895			0.997			0.988	
Flt Protected		0.960			0.993		0.950			0.950		
Satd. Flow (prot)	0	1782	0	0	1689	0	1805	1894	0	1805	3567	0
Flt Permitted		0.960			0.993		0.950			0.950		
Satd. Flow (perm)	0	1782	0	0	1689	0	1805	1894	0	1805	3567	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	80	0	17	5	3	28	22	416	8	15	672	61
Future Volume (vph)	80	0	17	5	3	28	22	416	8	15	672	61
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	100	0	21	6	4	35	28	520	10	19	840	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	121	0	0	45	0	28	530	0	19	916	0

Intersection Summary

Intersection	
Int Delay, s/veh	20.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	80	0	17	5	3	28	22	416	8	15	672	61
Future Vol, veh/h	80	0	17	5	3	28	22	416	8	15	672	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	100	0	21	6	4	35	28	520	10	19	840	76

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1517	1502	458	1039	1535	525	916	0	0	530	0	0
Stage 1	916	916	-	581	581	-	-	-	-	-	-	-
Stage 2	601	586	-	458	954	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 91	123	555	199	117	556	753	-	-	1048	-	-
Stage 1	297	354	-	503	503	-	-	-	-	-	-	-
Stage 2	491	500	-	557	340	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 80	116	555	183	111	556	753	-	-	1048	-	-
Mov Cap-2 Maneuver	~ 80	116	-	183	111	-	-	-	-	-	-	-
Stage 1	286	348	-	484	484	-	-	-	-	-	-	-
Stage 2	440	482	-	526	334	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	271.3	17	0.5	0.2
HCM LOS	F	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	753	-	-	344	94	1048	-	-
HCM Lane V/C Ratio	0.037	-	-	0.131	1.29	0.018	-	-
HCM Control Delay (s)	10	-	-	17	271.3	8.5	-	-
HCM Lane LOS	A	-	-	C	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	8.7	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.933				0.850			
Flt Protected				0.950	0.999					0.950		
Satd. Flow (prot)	0	0	0	1470	2884	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.999					0.950		
Satd. Flow (perm)	0	0	0	1470	2884	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									281			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

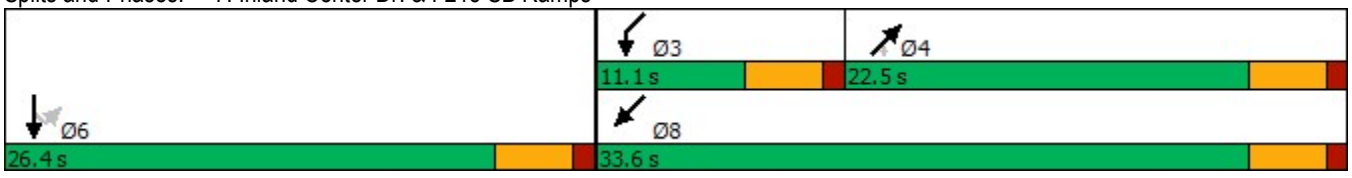
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	121	293	247	0	285	233	116	500	0
Future Volume (vph)	0	0	0	121	293	247	0	285	233	116	500	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	146	353	298	0	343	281	140	602	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	131	666	0	0	343	281	140	602	0

Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	121	293	285	233	116	500
Future Volume (vph)	121	293	285	233	116	500
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	26.4	26.4	22.5	22.5	11.1	33.6
Total Split (%)	44.0%	44.0%	37.5%	37.5%	18.5%	56.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	22.2	22.2	11.2	11.2	6.5	19.6
Actuated g/C Ratio	0.44	0.44	0.22	0.22	0.13	0.38
v/c Ratio	0.20	0.53	0.32	0.51	0.37	0.46
Control Delay	12.0	13.9	18.1	6.4	25.5	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.0	13.9	18.1	6.4	25.5	12.4
LOS	B	B	B	A	C	B
Approach Delay		13.6	12.8			14.9
Approach LOS		B	B			B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 51	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 53.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	131	666	343	281	140	602
v/c Ratio	0.20	0.53	0.32	0.51	0.37	0.46
Control Delay	12.0	13.9	18.1	6.4	25.5	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.0	13.9	18.1	6.4	25.5	12.4
Queue Length 50th (ft)	26	79	33	0	20	66
Queue Length 95th (ft)	63	135	49	36	43	89
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	640	1257	1760	728	387	1981
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.53	0.19	0.39	0.36	0.30

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	121	293	247	0	285	233	116	500	0
Future Volume (veh/h)	0	0	0	121	293	247	0	285	233	116	500	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				146	353	298	0	343	281	140	602	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				674	716	594	0	1202	374	245	1412	0
Arrive On Green				0.42	0.42	0.42	0.00	0.24	0.24	0.08	0.41	0.00
Sat Flow, veh/h				1619	1720	1428	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				146	349	302	0	343	281	140	602	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1448	0	1638	1530	1478	1710	0
Q Serve(g_s), s				3.0	7.9	8.1	0.0	3.0	8.9	2.4	6.6	0.0
Cycle Q Clear(g_c), s				3.0	7.9	8.1	0.0	3.0	8.9	2.4	6.6	0.0
Prop In Lane				1.00		0.99	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				674	707	603	0	1202	374	245	1412	0
V/C Ratio(X)				0.22	0.49	0.50	0.00	0.29	0.75	0.57	0.43	0.00
Avail Cap(c_a), veh/h				674	707	603	0	1681	523	371	1891	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				9.9	11.3	11.3	0.0	16.1	18.4	23.2	11.0	0.0
Incr Delay (d2), s/veh				0.7	2.4	3.0	0.0	0.1	3.8	2.1	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	4.2	3.7	0.0	1.3	4.1	1.0	3.1	0.0
LnGrp Delay(d),s/veh				10.6	13.7	14.3	0.0	16.3	22.2	25.3	11.2	0.0
LnGrp LOS				B	B	B		B	C	C	B	
Approach Vol, veh/h					797			624			742	
Approach Delay, s/veh					13.4			19.0			13.9	
Approach LOS					B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			8.9	17.4		26.4		26.2
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			6.6	18.0		21.9		29.1
Max Q Clear Time (g_c+I1), s			4.4	10.9		10.1		8.6
Green Ext Time (p_c), s			0.1	1.9		3.7		4.1

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.979	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1674	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1674	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13	420									87
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

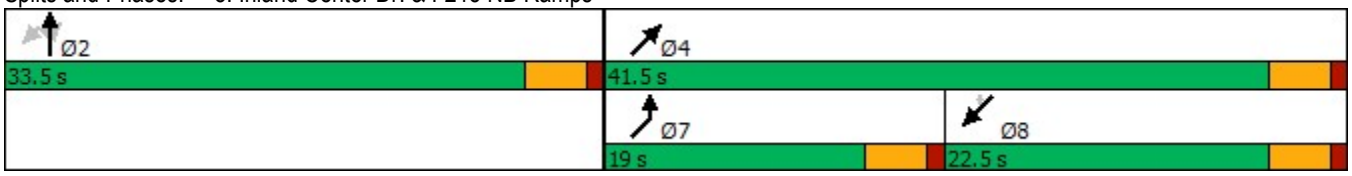
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	385	329	390	0	0	0	177	252	0	0	232	17
Future Volume (vph)	385	329	390	0	0	0	177	252	0	0	232	17
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	481	411	488	0	0	0	221	315	0	0	290	21
Shared Lane Traffic (%)			14%									
Lane Group Flow (vph)	481	479	420	0	0	0	221	315	0	0	290	21

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	385	329	390	177	252	232	17
Future Volume (vph)	385	329	390	177	252	232	17
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	33.5	33.5	33.5	19.0	41.5	22.5	22.5
Total Split (%)	44.7%	44.7%	44.7%	25.3%	55.3%	30.0%	30.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	29.1	29.1	29.1	12.8	25.9	8.5	8.5
Actuated g/C Ratio	0.45	0.45	0.45	0.20	0.40	0.13	0.13
v/c Ratio	0.66	0.62	0.47	0.68	0.23	0.35	0.08
Control Delay	19.7	18.2	3.5	36.0	12.8	26.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.7	18.2	3.5	36.0	12.8	26.7	0.5
LOS	B	B	A	D	B	C	A
Approach Delay		14.2			22.3	25.0	
Approach LOS		B			C	C	

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 64	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 53.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	481	479	420	221	315	290	21
v/c Ratio	0.66	0.62	0.47	0.68	0.23	0.35	0.08
Control Delay	19.7	18.2	3.5	36.0	12.8	26.7	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.7	18.2	3.5	36.0	12.8	26.7	0.5
Queue Length 50th (ft)	145	144	0	80	40	31	0
Queue Length 95th (ft)	216	215	29	131	56	43	0
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	734	768	890	367	1983	1747	494
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.62	0.47	0.60	0.16	0.17	0.04

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	385	329	390	0	0	0	177	252	0	0	232	17
Future Volume (veh/h)	385	329	390	0	0	0	177	252	0	0	232	17
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	481	469	450				221	315	0	0	290	21
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	805	895	761				269	1191	0	0	652	161
Arrive On Green	0.50	0.50	0.50				0.17	0.35	0.00	0.00	0.11	0.11
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	481	469	450				221	315	0	0	290	21
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	12.4	10.3	12.2				7.7	3.9	0.0	0.0	2.6	0.7
Cycle Q Clear(g_c), s	12.4	10.3	12.2				7.7	3.9	0.0	0.0	2.6	0.7
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	805	895	761				269	1191	0	0	652	161
V/C Ratio(X)	0.60	0.52	0.59				0.82	0.26	0.00	0.00	0.45	0.13
Avail Cap(c_a), veh/h	805	895	761				403	2170	0	0	1911	472
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	10.5	10.0	10.4				23.5	13.6	0.0	0.0	24.5	23.7
Incr Delay (d2), s/veh	3.3	2.2	3.4				8.2	0.1	0.0	0.0	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	5.6	5.8				4.1	1.8	0.0	0.0	1.1	0.3
LnGrp Delay(d),s/veh	13.7	12.2	13.8				31.7	13.8	0.0	0.0	25.0	24.0
LnGrp LOS	B	B	B				C	B			C	C
Approach Vol, veh/h		1400						536			311	
Approach Delay, s/veh		13.2						21.2			24.9	
Approach LOS		B						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		33.5		24.8			14.2	10.6
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		29.0		37.0			14.5	18.0
Max Q Clear Time (g_c+I1), s		14.4		5.9			9.7	4.6
Green Ext Time (p_c), s		5.7		2.2			0.3	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B

Notes

Scenario Report

Scenario:	EX_AM
Command:	EX_AM
Volume:	EX_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.295
Loss Time (sec):	0	Average Delay (sec/veh):	14.6
Optimal Cycle:	26	Level Of Service:	B

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	12	515	78	38	467	45	27	76	3	131	111	62
Growth 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
Initial Bse:	12	515	78	38	467	45	27	76	3	131	111	62
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:	12	515	78	38	467	45	27	76	3	131	111	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	515	78	38	467	45	27	76	3	131	111	62
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:	12	515	78	38	467	45	27	76	3	131	111	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.52	0.99	0.99	0.65	0.95	0.95
Lanes:	1.00	1.74	0.26	1.00	1.82	0.18	1.00	0.96	0.04	1.00	0.64	0.36
Final Sat.:	1805	3072	465	1805	3250	313	988	1817	72	1231	1153	644
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.02	0.14	0.14	0.03	0.04	0.04	0.11	0.10	0.10
Crit Moves:		****		****						****		
Green/Cycle:	0.03	0.57	0.57	0.07	0.61	0.61	0.36	0.36	0.36	0.36	0.36	0.36
Volume/Cap:	0.24	0.30	0.30	0.30	0.24	0.24	0.08	0.12	0.12	0.30	0.27	0.27
Uniform Del:	47.5	11.2	11.2	44.0	8.8	8.8	21.0	21.3	21.3	22.9	22.6	22.6
IncremntDel:	2.4	0.1	0.1	1.3	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	49.9	11.3	11.3	45.3	8.9	8.9	21.1	21.4	21.4	23.2	22.8	22.8
User DelAdj:	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:	49.9	11.3	11.3	45.3	8.9	8.9	21.1	21.4	21.4	23.2	22.8	22.8
LOS by Move:	D	B	B	D	A	A	C	C	C	C	C	C
HCM2kAvgQ:	1	5	5	1	4	4	1	2	2	3	4	4

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.325
Loss Time (sec):	0	Average Delay (sec/veh):	19.1
Optimal Cycle:	28	Level Of Service:	B

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	56	0	105	110	136	0	0	218	79
Growth 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
Initial Bse:	0	0	0	56	0	105	110	136	0	0	218	79
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	56	0	105	110	136	0	0	218	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	56	0	105	110	136	0	0	218	79
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	56	0	105	110	136	0	0	218	79
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	1.00	0.83	0.95	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	0.35	0.00	0.65	1.00	1.00	0.00	0.00	0.73	0.27
Final Sat.:	0	0	0	550	0	1031	1805	1900	0	0	1344	487
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.10	0.06	0.07	0.00	0.00	0.16	0.16
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.31	0.00	0.31	0.19	0.69	0.00	0.00	0.50	0.50
Volume/Cap:	0.00	0.00	0.00	0.33	0.00	0.33	0.32	0.10	0.00	0.00	0.32	0.32
Uniform Del:	0.0	0.0	0.0	26.3	0.0	26.3	35.1	5.3	0.0	0.0	15.0	15.0
IncremntDel:	0.0	0.0	0.0	0.4	0.0	0.4	0.6	0.0	0.0	0.0	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	26.6	0.0	26.6	35.7	5.3	0.0	0.0	15.2	15.2
User DelAdj:	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	26.6	0.0	26.6	35.7	5.3	0.0	0.0	15.2	15.2
LOS by Move:	A	A	A	C	A	C	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	4	3	1	0	0	5	5

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.157
Loss Time (sec):	0	Average Delay (sec/veh):	0.0
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	1 0	1	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	299	0	0	270	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	299	0	0	270	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	0	0	0	0	0	0	299	0	0	270	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	299	0	0	270	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	0	0	0	0	0	0	299	0	0	270	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	1900	0	0	0	0	0	1900	0	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.14	0.00
Crit Moves:								****				
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.14	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.157
Loss Time (sec): 0 Average Delay (sec/veh): 0.0
Optimal Cycle: 22 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	299	0	0	270	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	299	0	0	270	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	0	0	0	0	0	0	299	0	0	270	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	299	0	0	270	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	0	0	0	0	0	0	299	0	0	270	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	0	0	1900	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.14	0.00
Crit Moves:								****				
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.14	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.404
Loss Time (sec): 0 Average Delay (sec/veh): 11.4
Optimal Cycle: 38 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	1	0	1
Volume Module:												
Base Vol:	1	0	0	205	0	25	50	248	1	4	244	424
Growth 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
Initial Bse:	1	0	0	205	0	25	50	248	1	4	244	424
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:	1	0	0	205	0	25	50	248	1	4	244	424
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	205	0	25	50	248	1	4	244	424
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:	1	0	0	205	0	25	50	248	1	4	244	424
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	0.95	1.00	0.85
Lanes:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1805	0	0	1805	0	1615	1805	1890	8	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.02	0.03	0.13	0.13	0.00	0.13	0.26
Crit Moves:	****			****			****					****
Green/Cycle:	0.00	0.00	0.00	0.28	0.00	0.28	0.72	0.71	0.71	0.66	0.65	0.65
Volume/Cap:	0.40	0.00	0.00	0.40	0.00	0.06	0.06	0.19	0.19	0.01	0.20	0.40
Uniform Del:	49.9	0.0	0.0	29.2	0.0	26.3	4.3	5.0	5.0	5.8	7.1	8.3
IncremntDel:	83.0	0.0	0.0	0.5	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	132.9	0.0	0.0	29.7	0.0	26.3	4.3	5.0	5.0	5.8	7.1	8.6
User DelAdj:	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:	132.9	0.0	0.0	29.7	0.0	26.3	4.3	5.0	5.0	5.8	7.1	8.6
LOS by Move:	F	A	A	C	A	C	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	5	0	1	0	3	3	0	3	6

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.291
Loss Time (sec):	0	Average Delay (sec/veh):	6.3
Optimal Cycle:	20	Level Of Service:	A

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	1! 0	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	5	3	28	80	0	17	22	416	8	15	672	61
Growth 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
Initial Bse:	5	3	28	80	0	17	22	416	8	15	672	61
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:	5	3	28	80	0	17	22	416	8	15	672	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	3	28	80	0	17	22	416	8	15	672	61
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:	5	3	28	80	0	17	22	416	8	15	672	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.76	1.00	0.76	0.35	1.00	1.00	0.45	0.94	0.94
Lanes:	0.14	0.08	0.78	0.82	0.00	0.18	1.00	0.98	0.02	1.00	1.83	0.17
Final Sat.:	230	138	1290	1196	0	254	667	1859	36	861	3270	297
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.07	0.00	0.07	0.03	0.22	0.22	0.02	0.21	0.21
Crit Moves:				****				****				
Green/Cycle:	0.23	0.23	0.23	0.23	0.00	0.23	0.77	0.77	0.77	0.77	0.77	0.77
Volume/Cap:	0.09	0.09	0.09	0.29	0.00	0.29	0.04	0.29	0.29	0.02	0.27	0.27
Uniform Del:	30.3	30.3	30.3	31.8	0.0	31.8	2.7	3.4	3.4	2.7	3.3	3.3
IncremntDel:	0.1	0.1	0.1	0.5	0.0	0.5	0.0	0.1	0.1	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	30.4	30.4	30.4	32.2	0.0	32.2	2.8	3.5	3.5	2.7	3.4	3.4
User DelAdj:	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:	30.4	30.4	30.4	32.2	0.0	32.2	2.8	3.5	3.5	2.7	3.4	3.4
LOS by Move:	C	C	C	C	A	C	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	3	0	3	0	4	4	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.301
Loss Time (sec):	0	Average Delay (sec/veh):	27.7
Optimal Cycle:	29	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	1	2	0 2
Volume Module:												
Base Vol:	0	0	0	121	293	247	0	285	233	116	500	0
Growth 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
Initial Bse:	0	0	0	121	293	247	0	285	233	116	500	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	0	0	121	293	247	0	285	233	116	500	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	121	293	247	0	285	233	116	500	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	0	0	121	293	247	0	285	233	116	500	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.87	0.87	0.87	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.09	0.91	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1658	1799	1517	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.16	0.16	0.00	0.05	0.14	0.03	0.14	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.46	0.46	0.46	0.00	0.15	0.15	0.39	0.54	0.00
Volume/Cap:	0.00	0.00	0.00	0.16	0.36	0.36	0.00	0.36	0.94	0.09	0.26	0.00
Uniform Del:	0.0	0.0	0.0	15.9	17.6	17.6	0.0	37.8	41.8	19.3	12.1	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.3	39.7	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	15.9	17.7	17.7	0.0	38.1	81.5	19.4	12.2	0.0
User DelAdj:	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	15.9	17.7	17.7	0.0	38.1	81.5	19.4	12.2	0.0
LOS by Move:	A	A	A	B	B	B	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	2	6	6	0	3	11	1	4	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.370
Loss Time (sec):	0	Average Delay (sec/veh):	17.3
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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 1	0 0	0	0 0	1 0	2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	385	329	390	0	0	0	177	252	0	0	232	17
Growth 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
Initial Bse:	385	329	390	0	0	0	177	252	0	0	232	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:	385	329	390	0	0	0	177	252	0	0	232	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	385	329	390	0	0	0	177	252	0	0	232	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:	385	329	390	0	0	0	177	252	0	0	232	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.92	1.08	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1598	1894	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.24	0.21	0.21	0.00	0.00	0.00	0.10	0.07	0.00	0.00	0.03	0.01
Crit Moves:	****						****				****	
Green/Cycle:	0.64	0.64	0.64	0.00	0.00	0.00	0.27	0.36	0.00	0.00	0.09	0.09
Volume/Cap:	0.37	0.32	0.32	0.00	0.00	0.00	0.37	0.20	0.00	0.00	0.37	0.12
Uniform Del:	8.3	8.0	8.0	0.0	0.0	0.0	29.9	22.3	0.0	0.0	42.8	41.8
IncremntDel:	0.2	0.1	0.1	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.4	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	8.5	8.0	8.0	0.0	0.0	0.0	30.4	22.4	0.0	0.0	43.1	42.1
User DelAdj:	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:	8.5	8.0	8.0	0.0	0.0	0.0	30.4	22.4	0.0	0.0	43.1	42.1
LOS by Move:	A	A	A	A	A	A	C	C	A	A	D	D
HCM2kAvgQ:	6	5	5	0	0	0	5	3	0	0	2	1

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

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Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.982			0.992			0.950	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3352	0	1615	3358	0	1615	1786	0	1615	1710	0
Flt Permitted	0.950			0.950			0.412			0.613		
Satd. Flow (perm)	1615	3352	0	1615	3358	0	700	1786	0	1042	1710	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			29			5			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	21	735	115	103	489	67	87	165	9	138	179	90
Future Volume (vph)	21	735	115	103	489	67	87	165	9	138	179	90
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	22	782	122	110	520	71	93	176	10	147	190	96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	904	0	110	591	0	93	186	0	147	286	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	21	735	103	489	87	165	138	179
Future Volume (vph)	21	735	103	489	87	165	138	179
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	25.5	12.0	27.5	22.5	22.5	22.5	22.5
Total Split (%)	16.7%	42.5%	20.0%	45.8%	37.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.6	22.1	7.2	29.3	12.8	12.8	12.8	12.8
Actuated g/C Ratio	0.11	0.42	0.14	0.55	0.24	0.24	0.24	0.24
v/c Ratio	0.13	0.64	0.50	0.32	0.55	0.43	0.59	0.64
Control Delay	26.4	16.6	33.1	8.2	31.5	20.2	28.7	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.4	16.6	33.1	8.2	31.5	20.2	28.7	22.9
LOS	C	B	C	A	C	C	C	C
Approach Delay		16.8		12.1		24.0		24.9
Approach LOS		B		B		C		C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 53.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 67.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	22	904	110	591	93	186	147	286
v/c Ratio	0.13	0.64	0.50	0.32	0.55	0.43	0.59	0.64
Control Delay	26.4	16.6	33.1	8.2	31.5	20.2	28.7	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.4	16.6	33.1	8.2	31.5	20.2	28.7	22.9
Queue Length 50th (ft)	7	121	34	39	27	50	43	71
Queue Length 95th (ft)	26	206	#93	115	67	97	92	136
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	171	1411	233	1867	243	623	361	622
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.64	0.47	0.32	0.38	0.30	0.41	0.46

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	21	735	115	103	489	67	87	165	9	138	179	90
Future Volume (veh/h)	21	735	115	103	489	67	87	165	9	138	179	90
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	22	782	122	110	520	71	93	176	10	147	190	96
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	42	1147	179	137	1347	183	266	472	27	346	316	160
Arrive On Green	0.03	0.39	0.39	0.08	0.45	0.45	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1619	2966	463	1619	3026	412	994	1687	96	1089	1129	570
Grp Volume(v), veh/h	22	451	453	110	293	298	93	0	186	147	0	286
Grp Sat Flow(s),veh/h/ln	1619	1710	1718	1619	1710	1727	994	0	1783	1089	0	1699
Q Serve(g_s), s	0.7	11.9	11.9	3.6	6.2	6.3	4.9	0.0	4.6	6.8	0.0	7.9
Cycle Q Clear(g_c), s	0.7	11.9	11.9	3.6	6.2	6.3	12.8	0.0	4.6	11.4	0.0	7.9
Prop In Lane	1.00		0.27	1.00		0.24	1.00		0.05	1.00		0.34
Lane Grp Cap(c), veh/h	42	662	665	137	762	769	266	0	499	346	0	476
V/C Ratio(X)	0.52	0.68	0.68	0.80	0.38	0.39	0.35	0.00	0.37	0.42	0.00	0.60
Avail Cap(c_a), veh/h	164	662	665	224	762	769	317	0	591	402	0	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.1	13.9	13.9	24.4	10.1	10.1	22.4	0.0	15.7	20.3	0.0	16.9
Incr Delay (d2), s/veh	9.7	5.6	5.6	10.5	1.5	1.5	0.8	0.0	0.5	0.8	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.5	6.6	2.0	3.2	3.3	1.4	0.0	2.3	2.1	0.0	3.8
LnGrp Delay(d),s/veh	35.8	19.5	19.4	34.9	11.5	11.6	23.2	0.0	16.2	21.1	0.0	18.2
LnGrp LOS	D	B	B	C	B	B	C		B	C		B
Approach Vol, veh/h		926			701			279			433	
Approach Delay, s/veh		19.8			15.2			18.5			19.2	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	25.5		19.7	5.9	28.7		19.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	21.0		18.0	5.5	23.0		18.0
Max Q Clear Time (g_c+I1), s	5.6	13.9		14.8	2.7	8.3		13.4
Green Ext Time (p_c), s	0.0	3.3		0.4	0.0	3.2		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930				0.978	
Flt Protected	0.976		0.950			
Satd. Flow (prot)	1543	0	1615	1800	1760	0
Flt Permitted	0.976		0.950			
Satd. Flow (perm)	1543	0	1615	1800	1760	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	51				19	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

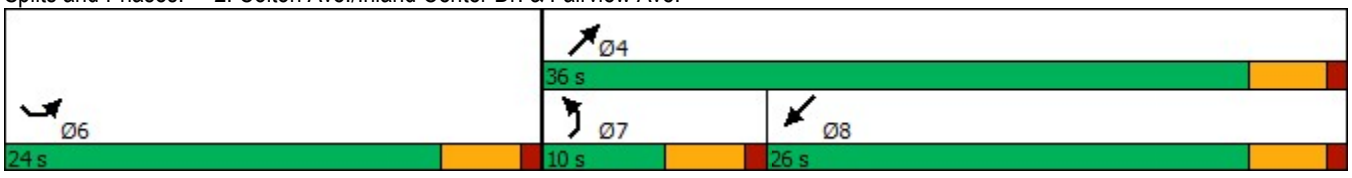
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	43	46	46	350	348	69
Future Volume (vph)	43	46	46	350	348	69
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	48	51	51	389	387	77
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	0	51	389	464	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	43	46	350	348
Future Volume (vph)	43	46	350	348
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	24.0	10.0	36.0	26.0
Total Split (%)	40.0%	16.7%	60.0%	43.3%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	20.2	5.7	22.5	17.2
Actuated g/C Ratio	0.39	0.11	0.43	0.33
v/c Ratio	0.16	0.29	0.50	0.78
Control Delay	9.0	29.6	12.2	26.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	9.0	29.6	12.2	26.4
LOS	A	C	B	C
Approach Delay	9.0		14.2	26.4
Approach LOS	A		B	C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 52	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 45.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	99	51	389	464
v/c Ratio	0.16	0.29	0.50	0.78
Control Delay	9.0	29.6	12.2	26.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	9.0	29.6	12.2	26.4
Queue Length 50th (ft)	11	17	78	136
Queue Length 95th (ft)	40	47	133	#247
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	630	177	1130	764
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.29	0.34	0.61

Intersection Summary

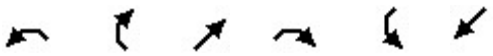
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	43	46	46	350	348	69
Future Volume (veh/h)	43	46	46	350	348	69
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	48	51	51	389	387	77
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	274	291	81	815	461	92
Arrive On Green	0.37	0.37	0.05	0.45	0.32	0.32
Sat Flow, veh/h	732	778	1619	1800	1459	290
Grp Volume(v), veh/h	100	0	51	389	0	464
Grp Sat Flow(s),veh/h/ln	1526	0	1619	1800	0	1749
Q Serve(g_s), s	2.3	0.0	1.6	7.9	0.0	12.9
Cycle Q Clear(g_c), s	2.3	0.0	1.6	7.9	0.0	12.9
Prop In Lane	0.48	0.51	1.00			0.17
Lane Grp Cap(c), veh/h	571	0	81	815	0	553
V/C Ratio(X)	0.18	0.00	0.63	0.48	0.00	0.84
Avail Cap(c_a), veh/h	571	0	171	1089	0	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.9	0.0	24.3	9.9	0.0	16.6
Incr Delay (d2), s/veh	0.7	0.0	7.8	0.4	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.9	4.0	0.0	7.2
LnGrp Delay(d),s/veh	11.6	0.0	32.0	10.4	0.0	23.4
LnGrp LOS	B		C	B		C
Approach Vol, veh/h	100			440	464	
Approach Delay, s/veh	11.6			12.9	23.4	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				28.1		24.0	7.1	21.0
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				31.5		19.5	5.5	21.5
Max Q Clear Time (g_c+I1), s				9.9		4.3	3.6	14.9
Green Ext Time (p_c), s				2.4		0.2	0.0	1.6

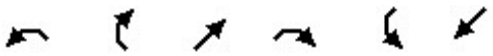
Intersection Summary	
HCM 2010 Ctrl Delay	17.6
HCM 2010 LOS	B

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1900	0	1900	1900
Flt Permitted						
Satd. Flow (perm)	1900	0	1900	0	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	403	0	0	505
Future Volume (vph)	0	0	403	0	0	505
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	438	0	0	549
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	438	0	0	549

Intersection Summary

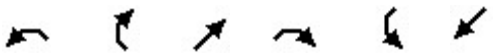
Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	403	0	0	505
Future Vol, veh/h	0	0	403	0	0	505
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	438	0	0	549

Major/Minor	Minor2		Major2	
Conflicting Flow All	549	549	0	0
Stage 1	549	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	446	539	-	-
Stage 1	520	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	539	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

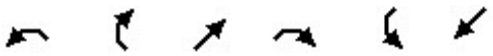
Approach	NE	SW
HCM Control Delay, s		0
HCM LOS	-	

Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	403	0	0	505
Future Volume (vph)	0	0	403	0	0	505
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	438	0	0	549
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	438	0	0	549

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	403	0	0	505
Future Vol, veh/h	0	0	403	0	0	505
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	0	438	0	0	549

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	438	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	623	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	623	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.865				0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1470	0	1615	0	1530	1615	1800	0	1700	1800	1530
Flt Permitted				0.950			0.130					
Satd. Flow (perm)	0	1470	0	1615	0	1530	221	1800	0	1700	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		290				127						351
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

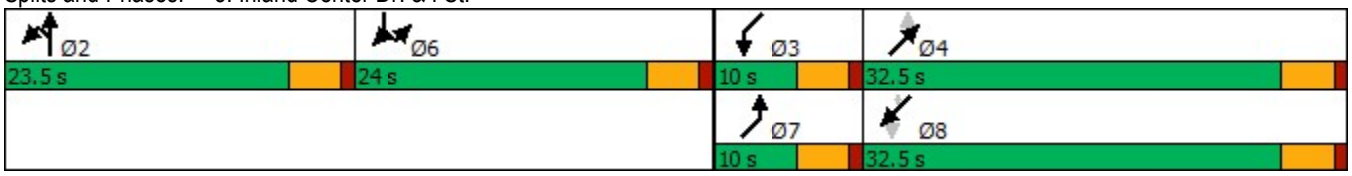
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	1	264	0	53	46	357	0	0	452	316
Future Volume (vph)	0	0	1	264	0	53	46	357	0	0	452	316
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	1	293	0	59	51	397	0	0	502	351
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	293	0	59	51	397	0	0	502	351

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR	Ø3
Lane Configurations								
Traffic Volume (vph)	0	264	53	46	357	452	316	
Future Volume (vph)	0	264	53	46	357	452	316	
Turn Type	NA	Prot	Prot	pm+pt	NA	NA	Perm	
Protected Phases	2	6	6	7	4	8		3
Permitted Phases				4			8	
Detector Phase	2	6	6	7	4	8	8	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5	9.5
Total Split (s)	23.5	24.0	24.0	10.0	32.5	32.5	32.5	10.0
Total Split (%)	26.1%	26.7%	26.7%	11.1%	36.1%	36.1%	36.1%	11%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.3	17.9	17.9	31.9	31.9	26.3	26.3	
Actuated g/C Ratio	0.23	0.22	0.22	0.39	0.39	0.32	0.32	
v/c Ratio	0.00	0.84	0.14	0.29	0.57	0.88	0.48	
Control Delay	0.0	54.8	0.7	19.9	23.6	46.4	5.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.0	54.8	0.7	19.9	23.6	46.4	5.3	
LOS	A	D	A	B	C	D	A	
Approach Delay					23.2	29.5		
Approach LOS					C	C		

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 82.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 31.2	Intersection LOS: C
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1	293	59	51	397	502	351
v/c Ratio	0.00	0.84	0.14	0.29	0.57	0.88	0.48
Control Delay	0.0	54.8	0.7	19.9	23.6	46.4	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.0	54.8	0.7	19.9	23.6	46.4	5.3
Queue Length 50th (ft)	0	160	0	17	163	271	0
Queue Length 95th (ft)	0	#298	0	39	249	#457	60
Internal Link Dist (ft)	133				59	387	
Turn Bay Length (ft)				110			
Base Capacity (vph)	565	385	462	178	738	618	755
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.76	0.13	0.29	0.54	0.81	0.46

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	1	264	0	53	46	357	0	0	452	316
Future Volume (veh/h)	0	0	1	264	0	53	46	357	0	0	452	316
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	0	0	1	293	0	59	51	397	0	0	502	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	0	515	0	0	0	285	855	0	431	613	521
Arrive On Green	0.00	0.00	0.36	0.00	0.00	0.00	0.05	0.47	0.00	0.00	0.34	0.00
Sat Flow, veh/h	0	0	1445		0		1619	1800	0	1619	1800	1530
Grp Volume(v), veh/h	0	0	1		0.0		51	397	0	0	502	0
Grp Sat Flow(s),veh/h/ln	0	0	1445				1619	1800	0	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.0				1.0	7.9	0.0	0.0	13.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				1.0	7.9	0.0	0.0	13.6	0.0
Prop In Lane	0.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	515				285	855	0	431	613	521
V/C Ratio(X)	0.00	0.00	0.00				0.18	0.46	0.00	0.00	0.82	0.00
Avail Cap(c_a), veh/h	0	0	515				372	945	0	595	945	803
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.1				11.4	9.4	0.0	0.0	16.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.3	0.4	0.0	0.0	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.4	4.0	0.0	0.0	7.3	0.0
LnGrp Delay(d),s/veh	0.0	0.0	11.1				11.7	9.8	0.0	0.0	19.4	0.0
LnGrp LOS			B				B	A			B	
Approach Vol, veh/h		1						448			502	
Approach Delay, s/veh		11.1						10.0			19.4	
Approach LOS		B						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	0.0	29.8			7.2	22.7
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	28.0			5.5	28.0
Max Q Clear Time (g_c+I1), s		2.0	0.0	9.9			3.0	15.6
Green Ext Time (p_c), s		0.0	0.0	2.3			0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.907			0.996			0.981	
Flt Protected		0.966			0.990		0.950			0.950		
Satd. Flow (prot)	0	1769	0	0	1706	0	1805	1892	0	1805	3541	0
Flt Permitted		0.966			0.990		0.950			0.950		
Satd. Flow (perm)	0	1769	0	0	1706	0	1805	1892	0	1805	3541	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	81	4	31	8	5	29	15	623	19	27	703	103
Future Volume (vph)	81	4	31	8	5	29	15	623	19	27	703	103
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	87	4	33	9	5	31	16	670	20	29	756	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	124	0	0	45	0	16	690	0	29	867	0

Intersection Summary

Intersection	
Int Delay, s/veh	22.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	81	4	31	8	5	29	15	623	19	27	703	103
Future Vol, veh/h	81	4	31	8	5	29	15	623	19	27	703	103
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	87	4	33	9	5	31	16	670	20	29	756	111

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1600	1592	434	1150	1637	680	867	0	0	690	0	0
Stage 1	870	870	-	712	712	-	-	-	-	-	-	-
Stage 2	730	722	-	438	925	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 79	108	576	166	102	454	785	-	-	914	-	-
Stage 1	317	372	-	427	439	-	-	-	-	-	-	-
Stage 2	417	434	-	573	351	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 68	102	576	145	97	454	785	-	-	914	-	-
Mov Cap-2 Maneuver	~ 68	102	-	145	97	-	-	-	-	-	-	-
Stage 1	311	360	-	418	430	-	-	-	-	-	-	-
Stage 2	376	425	-	516	340	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	$ 312.1	22.9	0.2	0.3
HCM LOS	F	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	785	-	-	246	90	914	-	-
HCM Lane V/C Ratio	0.021	-	-	0.184	1.386	0.032	-	-
HCM Control Delay (s)	9.7	-	-	22.9	$ 312.1	9.1	-	-
HCM Lane LOS	A	-	-	C	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	9.3	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.929				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1470	2869	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1470	2869	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									178			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

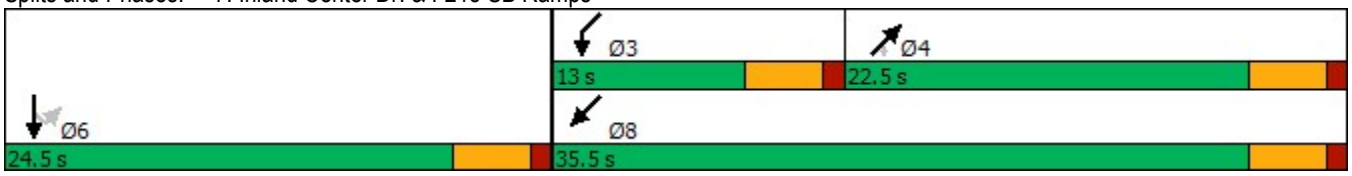
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	236	350	333	0	445	260	322	525	0
Future Volume (vph)	0	0	0	236	350	333	0	445	260	322	525	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	262	389	370	0	494	289	358	583	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	236	785	0	0	494	289	358	583	0

Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	236	350	445	260	322	525
Future Volume (vph)	236	350	445	260	322	525
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	24.5	24.5	22.5	22.5	13.0	35.5
Total Split (%)	40.8%	40.8%	37.5%	37.5%	21.7%	59.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	20.1	20.1	13.0	13.0	8.5	26.1
Actuated g/C Ratio	0.36	0.36	0.24	0.24	0.15	0.47
v/c Ratio	0.44	0.75	0.43	0.58	0.79	0.36
Control Delay	17.7	22.5	18.7	12.6	38.9	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.7	22.5	18.7	12.6	38.9	9.8
LOS	B	C	B	B	D	A
Approach Delay		21.4	16.4			20.9
Approach LOS		C	B			C

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 55.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 19.8	Intersection LOS: B
Intersection Capacity Utilization 63.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	236	785	494	289	358	583
v/c Ratio	0.44	0.75	0.43	0.58	0.79	0.36
Control Delay	17.7	22.5	18.7	12.6	38.9	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.7	22.5	18.7	12.6	38.9	9.8
Queue Length 50th (ft)	62	121	50	30	59	58
Queue Length 95th (ft)	137	#235	74	88	#132	87
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	534	1043	1608	620	455	1927
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.75	0.31	0.47	0.79	0.30

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	236	350	333	0	445	260	322	525	0
Future Volume (veh/h)	0	0	0	236	350	333	0	445	260	322	525	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				262	389	370	0	494	289	358	583	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				577	606	515	0	1235	384	448	1652	0
Arrive On Green				0.36	0.36	0.36	0.00	0.25	0.25	0.15	0.48	0.00
Sat Flow, veh/h				1619	1700	1445	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				262	389	370	0	494	289	358	583	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1445	0	1638	1530	1478	1710	0
Q Serve(g_s), s				7.0	10.7	12.4	0.0	4.7	9.8	6.6	6.0	0.0
Cycle Q Clear(g_c), s				7.0	10.7	12.4	0.0	4.7	9.8	6.6	6.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				577	606	515	0	1235	384	448	1652	0
V/C Ratio(X)				0.45	0.64	0.72	0.00	0.40	0.75	0.80	0.35	0.00
Avail Cap(c_a), veh/h				577	606	515	0	1577	491	448	1890	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				13.9	15.1	15.6	0.0	17.5	19.4	23.0	9.0	0.0
Incr Delay (d2), s/veh				2.6	5.2	8.4	0.0	0.2	4.8	9.9	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.5	5.8	6.1	0.0	2.1	4.6	3.3	2.8	0.0
LnGrp Delay(d),s/veh				16.4	20.2	24.0	0.0	17.7	24.2	32.9	9.2	0.0
LnGrp LOS				B	C	C		B	C	C	A	
Approach Vol, veh/h					1021			783			941	
Approach Delay, s/veh					20.6			20.1			18.2	
Approach LOS					C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	18.6		24.5		31.6
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			8.5	18.0		20.0		31.0
Max Q Clear Time (g_c+I1), s			8.6	11.8		14.4		8.0
Green Ext Time (p_c), s			0.0	2.3		2.7		4.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.6
HCM 2010 LOS	B

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.973	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1664	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1664	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18	313									244
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

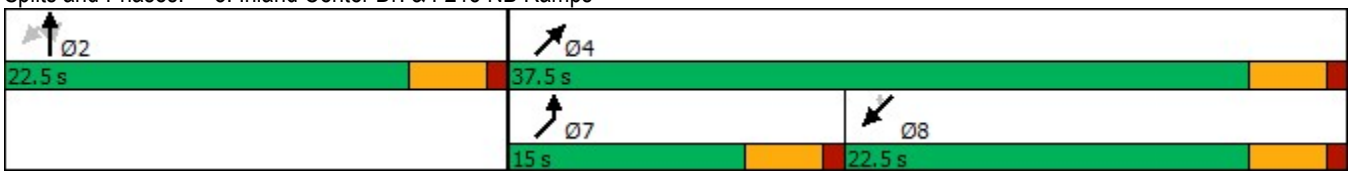
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	262	267	340	0	0	0	216	460	0	0	576	248
Future Volume (vph)	262	267	340	0	0	0	216	460	0	0	576	248
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	301	307	391	0	0	0	248	529	0	0	662	285
Shared Lane Traffic (%)			17%									
Lane Group Flow (vph)	301	373	325	0	0	0	248	529	0	0	662	285

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	262	267	340	216	460	576	248
Future Volume (vph)	262	267	340	216	460	576	248
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	15.0	37.5	22.5	22.5
Total Split (%)	37.5%	37.5%	37.5%	25.0%	62.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	18.1	18.1	18.1	10.5	29.3	14.2	14.2
Actuated g/C Ratio	0.32	0.32	0.32	0.19	0.52	0.25	0.25
v/c Ratio	0.58	0.68	0.48	0.82	0.30	0.42	0.50
Control Delay	22.4	25.1	5.4	49.2	8.1	18.3	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.4	25.1	5.4	49.2	8.1	18.3	7.5
LOS	C	C	A	D	A	B	A
Approach Delay		17.9			21.2	15.0	
Approach LOS		B			C	B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 56.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 63.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	301	373	325	248	529	662	285
v/c Ratio	0.58	0.68	0.48	0.82	0.30	0.42	0.50
Control Delay	22.4	25.1	5.4	49.2	8.1	18.3	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.4	25.1	5.4	49.2	8.1	18.3	7.5
Queue Length 50th (ft)	84	108	3	82	47	54	11
Queue Length 95th (ft)	158	#227	50	#194	69	72	55
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	517	545	678	302	2009	1984	656
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.68	0.48	0.82	0.26	0.33	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	262	267	340	0	0	0	216	460	0	0	576	248
Future Volume (veh/h)	262	267	340	0	0	0	216	460	0	0	576	248
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	301	370	349				248	529	0	0	662	285
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	520	578	491				292	1774	0	0	1598	395
Arrive On Green	0.32	0.32	0.32				0.18	0.52	0.00	0.00	0.26	0.26
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	301	370	349				248	529	0	0	662	285
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	8.7	9.9	11.3				8.3	4.9	0.0	0.0	5.0	9.5
Cycle Q Clear(g_c), s	8.7	9.9	11.3				8.3	4.9	0.0	0.0	5.0	9.5
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	520	578	491				292	1774	0	0	1598	395
V/C Ratio(X)	0.58	0.64	0.71				0.85	0.30	0.00	0.00	0.41	0.72
Avail Cap(c_a), veh/h	520	578	491				303	2012	0	0	1987	491
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	16.3	16.8				22.2	7.7	0.0	0.0	17.3	19.0
Incr Delay (d2), s/veh	4.7	5.4	8.5				19.3	0.1	0.0	0.0	0.2	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	5.7	5.9				5.3	2.3	0.0	0.0	2.1	4.5
LnGrp Delay(d),s/veh	20.5	21.7	25.2				41.6	7.8	0.0	0.0	17.5	22.9
LnGrp LOS	C	C	C				D	A			B	C
Approach Vol, veh/h		1020						777			947	
Approach Delay, s/veh		22.5						18.6			19.1	
Approach LOS		C						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		22.5		33.6			14.6	19.0
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		18.0		33.0			10.5	18.0
Max Q Clear Time (g_c+I1), s		13.3		6.9			10.3	11.5
Green Ext Time (p_c), s		2.1		3.8			0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Notes

Scenario Report

Scenario:	EX_PM
Command:	EX_PM
Volume:	EX_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.446
Loss Time (sec):	0	Average Delay (sec/veh):	18.0
Optimal Cycle:	34	Level Of Service:	B

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				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 1	1	0	1	0 1	1	0	1	0 0	1	0	1	0 0	1	0
Volume Module:																
Base Vol:	21	735	115		103	489	67		87	165	9		138	179	90	
Growth 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	
Initial Bse:	21	735	115		103	489	67		87	165	9		138	179	90	
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	735	115		103	489	67		87	165	9		138	179	90	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	21	735	115		103	489	67		87	165	9		138	179	90	
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	735	115		103	489	67		87	165	9		138	179	90	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.93	0.93		0.95	0.93	0.93		0.38	0.99	0.99		0.50	0.95	0.95	
Lanes:	1.00	1.73	0.27		1.00	1.76	0.24		1.00	0.95	0.05		1.00	0.67	0.33	
Final Sat.:	1805	3059	479		1805	3118	427		724	1787	97		958	1201	604	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.24	0.24		0.06	0.16	0.16		0.12	0.09	0.09		0.14	0.15	0.15	
Crit Moves:		****				****								****		
Green/Cycle:	0.05	0.54	0.54		0.13	0.62	0.62		0.33	0.33	0.33		0.33	0.33	0.33	
Volume/Cap:	0.25	0.45	0.45		0.45	0.25	0.25		0.36	0.28	0.28		0.43	0.45	0.45	
Uniform Del:	46.0	14.0	14.0		40.3	8.6	8.6		25.2	24.4	24.4		25.9	26.1	26.1	
IncremntDel:	1.6	0.2	0.2		1.4	0.1	0.1		0.9	0.2	0.2		0.9	0.5	0.5	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
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	
Delay/Veh:	47.6	14.2	14.2		41.7	8.6	8.6		26.1	24.7	24.7		26.9	26.6	26.6	
User DelAdj:	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:	47.6	14.2	14.2		41.7	8.6	8.6		26.1	24.7	24.7		26.9	26.6	26.6	
LOS by Move:	D	B	B		D	A	A		C	C	C		C	C	C	
HCM2kAvgQ:	1	8	8		3	4	4		2	4	4		4	7	7	

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.307
Loss Time (sec):	0	Average Delay (sec/veh):	8.8
Optimal Cycle:	27	Level Of Service:	A

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			Protected			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	0 0	0	0	1! 0	0	1	0 1	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	43	0	46	46	350	0	0	348	69
Growth 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
Initial Bse:	0	0	0	43	0	46	46	350	0	0	348	69
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	43	0	46	46	350	0	0	348	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	43	0	46	46	350	0	0	348	69
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	43	0	46	46	350	0	0	348	69
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	1.00	0.82	0.95	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	0.48	0.00	0.52	1.00	1.00	0.00	0.00	0.83	0.17
Final Sat.:	0	0	0	757	0	810	1805	1900	0	0	1551	307
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.03	0.18	0.00	0.00	0.22	0.22
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.19	0.00	0.19	0.08	0.82	0.00	0.00	0.73	0.73
Volume/Cap:	0.00	0.00	0.00	0.31	0.00	0.31	0.31	0.23	0.00	0.00	0.31	0.31
Uniform Del:	0.0	0.0	0.0	35.2	0.0	35.2	43.1	2.1	0.0	0.0	4.6	4.6
IncremntDel:	0.0	0.0	0.0	0.6	0.0	0.6	1.2	0.1	0.0	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	35.8	0.0	35.8	44.3	2.2	0.0	0.0	4.8	4.8
User DelAdj:	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	35.8	0.0	35.8	44.3	2.2	0.0	0.0	4.8	4.8
LOS by Move:	A	A	A	D	A	D	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	0	3	2	2	0	0	4	4

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.266
Loss Time (sec):	0	Average Delay (sec/veh):	0.1
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	1 0	1	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	403	0	0	505	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	403	0	0	505	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	0	0	0	0	0	0	403	0	0	505	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	403	0	0	505	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	0	0	0	0	0	0	403	0	0	505	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	1900	0	0	0	0	0	1900	0	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.27	0.00
Crit Moves:											****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.27	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.266
Loss Time (sec):	0	Average Delay (sec/veh):	0.1
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Volume Module:																			
Base Vol:	0	0	0	0	0	0	0	403	0	0	505	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	403	0	0	505	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	0	0	0	0	0	0	403	0	0	505	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	403	0	0	505	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	0	0	0	0	0	0	403	0	0	505	0
Saturation Flow Module:																			
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	0	0	1900	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:																			
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.27	0.00
Crit Moves:											****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.27	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.410
Loss Time (sec):	0	Average Delay (sec/veh):	13.4
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	0	1	1	0	0	1	0	1	0	1	0	1
Volume Module:																			
Base Vol:	0	0	1	264	0	53	46	357	0	0	452	316
Growth 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
Initial Bse:	0	0	1	264	0	53	46	357	0	0	452	316
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	1	264	0	53	46	357	0	0	452	316
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	1	264	0	53	46	357	0	0	452	316
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	1	264	0	53	46	357	0	0	452	316
Saturation Flow Module:																			
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	0	0	1644	1805	0	1615	1805	1900	0	1900	1900	1615
Capacity Analysis Module:																			
Vol/Sat:	0.00	0.00	0.00	0.15	0.00	0.03	0.03	0.19	0.00	0.00	0.24	0.20
Crit Moves:				****	****			****			****	
Green/Cycle:	0.00	0.00	0.00	0.36	0.00	0.36	0.64	0.64	0.00	0.00	0.58	0.58
Volume/Cap:	0.00	0.00	0.00	0.41	0.00	0.09	0.09	0.29	0.00	0.00	0.41	0.34
Uniform Del:	0.0	0.0	49.9	24.3	0.0	21.4	7.6	7.9	0.0	0.0	11.6	11.0
IncremntDel:	0.0	0.0	85.5	0.4	0.0	0.1	0.1	0.1	0.0	0.0	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	135.4	24.7	0.0	21.5	7.7	8.0	0.0	0.0	11.8	11.2
User DelAdj:	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	135.4	24.7	0.0	21.5	7.7	8.0	0.0	0.0	11.8	11.2
LOS by Move:	A	A	F	C	A	C	A	A	A	A	B	B
HCM2kAvgQ:	0	0	0	6	0	1	1	5	0	0	8	5

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.417
Loss Time (sec): 0 Average Delay (sec/veh): 5.7
Optimal Cycle: 25 Level Of Service: A

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	1! 0	1	0	0 1	0	1	0
Volume Module:												
Base Vol:	8	5	29	81	4	31	15	623	19	27	703	103
Growth 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
Initial Bse:	8	5	29	81	4	31	15	623	19	27	703	103
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:	8	5	29	81	4	31	15	623	19	27	703	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	5	29	81	4	31	15	623	19	27	703	103
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:	8	5	29	81	4	31	15	623	19	27	703	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.78	0.78	0.78	0.33	1.00	1.00	0.35	0.93	0.93
Lanes:	0.19	0.12	0.69	0.70	0.03	0.27	1.00	0.97	0.03	1.00	1.74	0.26
Final Sat.:	314	196	1139	1041	51	398	631	1836	56	657	3089	453
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.08	0.08	0.08	0.02	0.34	0.34	0.04	0.23	0.23
Crit Moves:					****			****				
Green/Cycle:	0.19	0.19	0.19	0.19	0.19	0.19	0.81	0.81	0.81	0.81	0.81	0.81
Volume/Cap:	0.14	0.14	0.14	0.42	0.42	0.42	0.03	0.42	0.42	0.05	0.28	0.28
Uniform Del:	33.9	33.9	33.9	35.9	35.9	35.9	1.8	2.6	2.6	1.8	2.3	2.3
IncremntDel:	0.2	0.2	0.2	1.0	1.0	1.0	0.0	0.2	0.2	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	34.2	34.2	34.2	36.9	36.9	36.9	1.8	2.8	2.8	1.9	2.3	2.3
User DelAdj:	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:	34.2	34.2	34.2	36.9	36.9	36.9	1.8	2.8	2.8	1.9	2.3	2.3
LOS by Move:	C	C	C	D	D	D	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	4	4	4	0	6	6	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.461
Loss Time (sec): 0 Average Delay (sec/veh): 21.1
Optimal Cycle: 35 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	1	2	0 2
Volume Module:												
Base Vol:	0	0	0	236	350	333	0	445	260	322	525	0
Growth 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
Initial Bse:	0	0	0	236	350	333	0	445	260	322	525	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	0	0	236	350	333	0	445	260	322	525	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	236	350	333	0	445	260	322	525	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	0	0	236	350	333	0	445	260	322	525	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.02	0.98	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1641	1682	1600	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.21	0.21	0.00	0.09	0.16	0.09	0.15	0.00
Crit Moves:					****				****	****		
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.45	0.00	0.35	0.35	0.20	0.55	0.00
Volume/Cap:	0.00	0.00	0.00	0.32	0.46	0.46	0.00	0.25	0.46	0.46	0.27	0.00
Uniform Del:	0.0	0.0	0.0	17.6	19.0	19.0	0.0	23.2	25.2	35.3	11.9	0.0
IncremntDel:	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.1	0.6	0.5	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	17.6	19.2	19.2	0.0	23.2	25.8	35.8	12.0	0.0
User DelAdj:	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	17.6	19.2	19.2	0.0	23.2	25.8	35.8	12.0	0.0
LOS by Move:	A	A	A	B	B	B	A	C	C	D	B	A
HCM2kAvgQ:	0	0	0	5	8	8	0	4	6	5	4	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	0	Average Delay (sec/veh):	21.4
Optimal Cycle:	34	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	262	267	340	0	0	0	216	460	0	0	576	248
Growth 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
Initial Bse:	262	267	340	0	0	0	216	460	0	0	576	248
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:	262	267	340	0	0	0	216	460	0	0	576	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	262	267	340	0	0	0	216	460	0	0	576	248
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:	262	267	340	0	0	0	216	460	0	0	576	248
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.88	1.12	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1531	1950	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.16	0.17	0.17	0.00	0.00	0.00	0.12	0.13	0.00	0.00	0.08	0.15
Crit Moves:		****					****					****
Green/Cycle:	0.39	0.39	0.39	0.00	0.00	0.00	0.27	0.61	0.00	0.00	0.34	0.34
Volume/Cap:	0.42	0.45	0.45	0.00	0.00	0.00	0.45	0.21	0.00	0.00	0.24	0.45
Uniform Del:	22.2	22.6	22.6	0.0	0.0	0.0	30.5	8.7	0.0	0.0	23.5	25.5
IncremntDel:	0.4	0.2	0.2	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	22.7	22.8	22.8	0.0	0.0	0.0	31.2	8.7	0.0	0.0	23.6	26.1
User DelAdj:	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:	22.7	22.8	22.8	0.0	0.0	0.0	31.2	8.7	0.0	0.0	23.6	26.1
LOS by Move:	C	C	C	A	A	A	C	A	A	A	C	C
HCM2kAvgQ:	6	7	7	0	0	0	6	3	0	0	3	6

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

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Appendix F

Opening Year (2020) Without Related Projects Without Project Conditions
Intersection Analysis Worksheets

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.987			0.994			0.946	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3352	0	1615	3376	0	1615	1789	0	1615	1703	0
Flt Permitted	0.950			0.950			0.444			0.691		
Satd. Flow (perm)	1615	3352	0	1615	3376	0	755	1789	0	1175	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			14			2			30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

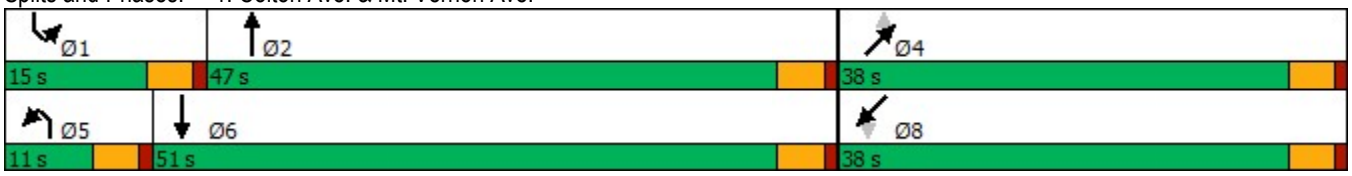
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	13	546	83	40	495	48	29	81	3	139	118	66
Future Volume (vph)	13	546	83	40	495	48	29	81	3	139	118	66
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	16	658	100	48	596	58	35	98	4	167	142	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	758	0	48	654	0	35	102	0	167	222	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	13	546	40	495	29	81	139	118
Future Volume (vph)	13	546	40	495	29	81	139	118
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	47.0	15.0	51.0	38.0	38.0	38.0	38.0
Total Split (%)	11.0%	47.0%	15.0%	51.0%	38.0%	38.0%	38.0%	38.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	6.1	45.2	7.8	50.8	16.6	16.6	16.6	16.6
Actuated g/C Ratio	0.08	0.58	0.10	0.65	0.21	0.21	0.21	0.21
v/c Ratio	0.13	0.39	0.30	0.30	0.22	0.27	0.67	0.58
Control Delay	41.1	12.2	41.0	8.0	29.5	27.3	42.8	30.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.1	12.2	41.0	8.0	29.5	27.3	42.8	30.3
LOS	D	B	D	A	C	C	D	C
Approach Delay		12.8		10.2		27.9		35.7
Approach LOS		B		B		C		D

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 78.4	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 17.4	Intersection LOS: B
Intersection Capacity Utilization 52.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.



Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	16	758	48	654	35	102	167	222
v/c Ratio	0.13	0.39	0.30	0.30	0.22	0.27	0.67	0.58
Control Delay	41.1	12.2	41.0	8.0	29.5	27.3	42.8	30.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.1	12.2	41.0	8.0	29.5	27.3	42.8	30.3
Queue Length 50th (ft)	8	110	23	56	15	42	78	87
Queue Length 95th (ft)	27	184	56	142	38	78	132	142
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	136	1941	220	2190	328	780	511	758
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.39	0.22	0.30	0.11	0.13	0.33	0.29

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	13	546	83	40	495	48	29	81	3	139	118	66
Future Volume (veh/h)	13	546	83	40	495	48	29	81	3	139	118	66
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	16	658	100	48	596	58	35	98	4	167	142	80
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	30	1669	253	66	1835	178	209	394	16	305	248	140
Arrive On Green	0.02	0.56	0.56	0.04	0.58	0.58	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1619	2978	452	1619	3150	306	1053	1718	70	1175	1083	610
Grp Volume(v), veh/h	16	377	381	48	323	331	35	0	102	167	0	222
Grp Sat Flow(s),veh/h/ln	1619	1710	1720	1619	1710	1746	1053	0	1788	1175	0	1692
Q Serve(g_s), s	0.8	9.9	10.0	2.3	7.8	7.8	2.4	0.0	3.7	10.8	0.0	9.3
Cycle Q Clear(g_c), s	0.8	9.9	10.0	2.3	7.8	7.8	11.7	0.0	3.7	14.5	0.0	9.3
Prop In Lane	1.00		0.26	1.00		0.18	1.00		0.04	1.00		0.36
Lane Grp Cap(c), veh/h	30	958	964	66	996	1017	209	0	410	305	0	388
V/C Ratio(X)	0.53	0.39	0.39	0.72	0.32	0.33	0.17	0.00	0.25	0.55	0.00	0.57
Avail Cap(c_a), veh/h	132	958	964	213	996	1017	410	0	750	529	0	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.8	9.9	9.9	37.8	8.6	8.6	32.5	0.0	25.1	31.1	0.0	27.3
Incr Delay (d2), s/veh	13.5	1.2	1.2	13.7	0.9	0.9	0.4	0.0	0.3	1.5	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.9	5.0	1.3	3.8	3.9	0.7	0.0	1.9	3.6	0.0	4.5
LnGrp Delay(d),s/veh	52.3	11.1	11.1	51.5	9.4	9.4	32.8	0.0	25.4	32.6	0.0	28.6
LnGrp LOS	D	B	B	D	A	A	C		C	C		C
Approach Vol, veh/h		774			702			137			389	
Approach Delay, s/veh		12.0			12.3			27.3			30.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	49.2		22.8	6.0	51.0		22.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	42.5		33.5	6.5	46.5		33.5
Max Q Clear Time (g_c+I1), s	4.3	12.0		13.7	2.8	9.8		16.5
Green Ext Time (p_c), s	0.0	5.4		0.6	0.0	4.5		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.912				0.964	
Flt Protected	0.983		0.950			
Satd. Flow (prot)	1524	0	1615	1800	1735	0
Flt Permitted	0.983		0.950			
Satd. Flow (perm)	1524	0	1615	1800	1735	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	103				24	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	59	111	117	144	231	84
Future Volume (vph)	59	111	117	144	231	84
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	82	154	163	200	321	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	0	163	200	438	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	59	117	144	231
Future Volume (vph)	59	117	144	231
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	28.6	22.4	61.4	39.0
Total Split (%)	31.8%	24.9%	68.2%	43.3%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	24.6	12.5	40.0	23.0
Actuated g/C Ratio	0.33	0.17	0.54	0.31
v/c Ratio	0.41	0.60	0.21	0.79
Control Delay	15.6	39.7	8.6	33.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.6	39.7	8.6	33.1
LOS	B	D	A	C
Approach Delay	15.6		22.5	33.1
Approach LOS	B		C	C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 73.9	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 25.4	Intersection LOS: C
Intersection Capacity Utilization 48.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.

Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	236	163	200	438
v/c Ratio	0.41	0.60	0.21	0.79
Control Delay	15.6	39.7	8.6	33.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.6	39.7	8.6	33.1
Queue Length 50th (ft)	43	68	42	169
Queue Length 95th (ft)	88	113	55	210
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	576	400	1417	840
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.41	0.41	0.14	0.52

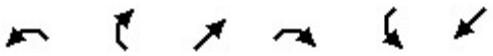
Intersection Summary

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	59	111	117	144	231	84
Future Volume (veh/h)	59	111	117	144	231	84
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	82	154	162	200	321	117
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	189	356	202	899	386	141
Arrive On Green	0.36	0.36	0.12	0.50	0.31	0.31
Sat Flow, veh/h	520	976	1619	1800	1260	459
Grp Volume(v), veh/h	237	0	162	200	0	438
Grp Sat Flow(s),veh/h/ln	1502	0	1619	1800	0	1719
Q Serve(g_s), s	7.9	0.0	6.4	4.1	0.0	15.7
Cycle Q Clear(g_c), s	7.9	0.0	6.4	4.1	0.0	15.7
Prop In Lane	0.35	0.65	1.00			0.27
Lane Grp Cap(c), veh/h	547	0	202	899	0	527
V/C Ratio(X)	0.43	0.00	0.80	0.22	0.00	0.83
Avail Cap(c_a), veh/h	547	0	438	1549	0	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.9	0.0	28.1	9.3	0.0	21.3
Incr Delay (d2), s/veh	2.5	0.0	7.1	0.1	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	3.3	2.1	0.0	7.9
LnGrp Delay(d),s/veh	18.3	0.0	35.3	9.4	0.0	24.8
LnGrp LOS	B		D	A		C
Approach Vol, veh/h	237			362	438	
Approach Delay, s/veh	18.3			21.0	24.8	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				37.5		28.6	12.8	24.8
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				56.9		24.1	17.9	34.5
Max Q Clear Time (g_c+I1), s				6.1		9.9	8.4	17.7
Green Ext Time (p_c), s				1.3		0.6	0.3	2.6

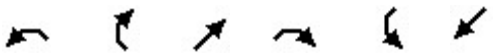
Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1900	0	1900	1900
Flt Permitted						
Satd. Flow (perm)	1900	0	1900	0	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	317	0	0	286
Future Volume (vph)	0	0	317	0	0	286
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	345	0	0	311
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	345	0	0	311

Intersection Summary

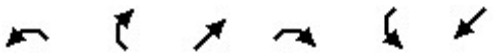
Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	317	0	0	286
Future Vol, veh/h	0	0	317	0	0	286
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	345	0	0	311

Major/Minor	Minor2		Major2	
Conflicting Flow All	311	311	0	0
Stage 1	311	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	607	734	-	-
Stage 1	662	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	734	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

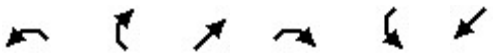
Approach	NE	SW
HCM Control Delay, s		0
HCM LOS	-	

Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	317	0	0	286
Future Volume (vph)	0	0	317	0	0	286
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	345	0	0	311
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	345	0	0	311

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	317	0	0	286
Future Vol, veh/h	0	0	317	0	0	286
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	0	345	0	0	311

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	345	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	702	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	702	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt						0.850						0.850
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1615	0	1615	0	1530	1615	1800	0	1615	1800	1530
Flt Permitted		0.950		0.950			0.312			0.450		
Satd. Flow (perm)	0	1615	0	1615	0	1530	530	1800	0	765	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						88						570
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

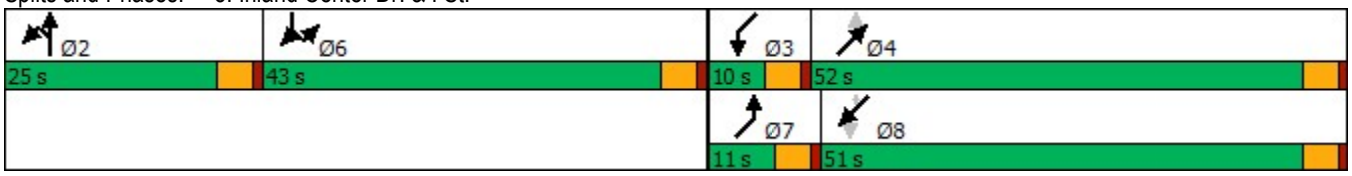
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1	0	0	217	0	27	53	263	1	4	259	450
Future Volume (vph)	1	0	0	217	0	27	53	263	1	4	259	450
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1	0	0	275	0	34	67	333	1	5	328	570
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	275	0	34	67	334	0	5	328	570

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Configurations								
Traffic Volume (vph)	0	217	27	53	263	4	259	450
Future Volume (vph)	0	217	27	53	263	4	259	450
Turn Type	NA	Prot	Prot	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	2	6	6	7	4	3	8	
Permitted Phases				4		8		8
Detector Phase	2	6	6	7	4	3	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	25.0	43.0	43.0	11.0	52.0	10.0	51.0	51.0
Total Split (%)	19.2%	33.1%	33.1%	8.5%	40.0%	7.7%	39.2%	39.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	21.7	21.2	21.2	33.0	32.0	29.4	25.3	25.3
Actuated g/C Ratio	0.24	0.23	0.23	0.36	0.35	0.32	0.28	0.28
v/c Ratio	0.00	0.73	0.08	0.25	0.53	0.02	0.65	0.68
Control Delay	37.0	46.0	0.4	21.0	27.5	18.8	36.5	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	46.0	0.4	21.0	27.5	18.8	36.5	7.1
LOS	D	D	A	C	C	B	D	A
Approach Delay	37.0				26.4		17.8	
Approach LOS	D				C		B	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 90.6	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 24.4	Intersection LOS: C
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Group Flow (vph)	1	275	34	67	334	5	328	570
v/c Ratio	0.00	0.73	0.08	0.25	0.53	0.02	0.65	0.68
Control Delay	37.0	46.0	0.4	21.0	27.5	18.8	36.5	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	46.0	0.4	21.0	27.5	18.8	36.5	7.1
Queue Length 50th (ft)	0	149	0	24	140	2	168	0
Queue Length 95th (ft)	5	233	0	51	251	9	250	27
Internal Link Dist (ft)	133				59		387	
Turn Bay Length (ft)				110		50		
Base Capacity (vph)	386	724	735	275	996	302	975	1090
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.38	0.05	0.24	0.34	0.02	0.34	0.52

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	217	0	27	53	263	1	4	259	450
Future Volume (veh/h)	1	0	0	217	0	27	53	263	1	4	259	450
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	0	0	275	0	34	67	333	1	5	328	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	672	0	0	0	0	0	324	547	2	296	451	383
Arrive On Green	0.42	0.00	0.00	0.00	0.00	0.00	0.06	0.30	0.30	0.01	0.25	0.00
Sat Flow, veh/h	1619	0	0		0		1619	1794	5	1619	1800	1530
Grp Volume(v), veh/h	1	0	0		0.0		67	0	334	5	328	0
Grp Sat Flow(s),veh/h/ln	1619	0	0				1619	0	1799	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.0				1.5	0.0	7.8	0.1	8.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				1.5	0.0	7.8	0.1	8.2	0.0
Prop In Lane	1.00		0.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	672	0	0				324	0	548	296	451	383
V/C Ratio(X)	0.00	0.00	0.00				0.21	0.00	0.61	0.02	0.73	0.00
Avail Cap(c_a), veh/h	672	0	0				439	0	1730	465	1695	1441
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.5	0.0	0.0				12.9	0.0	14.7	13.9	17.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.3	0.0	1.1	0.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.7	0.0	4.1	0.1	4.4	0.0
LnGrp Delay(d),s/veh	8.5	0.0	0.0				13.2	0.0	15.8	14.0	19.2	0.0
LnGrp LOS	A						B		B	B	B	
Approach Vol, veh/h		1						401			333	
Approach Delay, s/veh		8.5						15.3			19.1	
Approach LOS		A						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		25.0	4.8	19.6			7.5	16.9
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		20.5	5.5	47.5			6.5	46.5
Max Q Clear Time (g_c+I1), s		2.0	2.1	9.8			3.5	10.2
Green Ext Time (p_c), s		0.0	0.0	2.2			0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.893			0.997			0.987	
Flt Protected		0.961			0.994		0.950			0.950		
Satd. Flow (prot)	0	1782	0	0	1687	0	1805	1894	0	1805	3563	0
Flt Permitted		0.961			0.994		0.950			0.950		
Satd. Flow (perm)	0	1782	0	0	1687	0	1805	1894	0	1805	3563	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	85	0	18	5	3	30	23	441	8	16	713	65
Future Volume (vph)	85	0	18	5	3	30	23	441	8	16	713	65
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	106	0	23	6	4	38	29	551	10	20	891	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	48	0	29	561	0	20	972	0

Intersection Summary

Intersection	
Int Delay, s/veh	31.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	85	0	18	5	3	30	23	441	8	16	713	65
Future Vol, veh/h	85	0	18	5	3	30	23	441	8	16	713	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	106	0	23	6	4	38	29	551	10	20	891	81

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1607	1591	486	1100	1626	556	972	0	0	561	0	0
Stage 1	972	972	-	614	614	-	-	-	-	-	-	-
Stage 2	635	619	-	486	1012	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 78	108	533	180	103	534	717	-	-	1020	-	-
Stage 1	275	333	-	483	486	-	-	-	-	-	-	-
Stage 2	470	483	-	537	319	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 67	102	533	165	97	534	717	-	-	1020	-	-
Mov Cap-2 Maneuver	~ 67	102	-	165	97	-	-	-	-	-	-	-
Stage 1	264	326	-	464	467	-	-	-	-	-	-	-
Stage 2	416	464	-	504	313	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	$ 423.6	18	0.5	0.2
HCM LOS	F	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	717	-	-	324	79	1020	-	-
HCM Lane V/C Ratio	0.04	-	-	0.147	1.63	0.02	-	-
HCM Control Delay (s)	10.2	-	-	18	$ 423.6	8.6	-	-
HCM Lane LOS	B	-	-	C	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	10.7	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.933				0.850			
Flt Protected				0.950	0.999					0.950		
Satd. Flow (prot)	0	0	0	1470	2884	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.999					0.950		
Satd. Flow (perm)	0	0	0	1470	2884	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									267			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

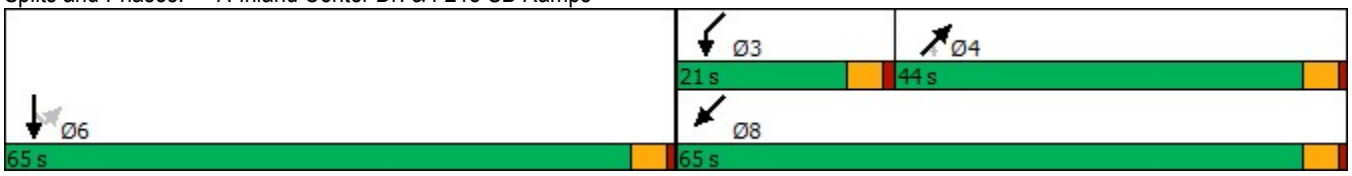
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	128	311	262	0	302	247	123	530	0
Future Volume (vph)	0	0	0	128	311	262	0	302	247	123	530	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	154	375	316	0	364	298	148	639	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	139	706	0	0	364	298	148	639	0

Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	128	311	302	247	123	530
Future Volume (vph)	128	311	302	247	123	530
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	65.0	65.0	44.0	44.0	21.0	65.0
Total Split (%)	50.0%	50.0%	33.8%	33.8%	16.2%	50.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	60.8	60.8	14.6	14.6	10.3	29.4
Actuated g/C Ratio	0.61	0.61	0.15	0.15	0.10	0.30
v/c Ratio	0.15	0.40	0.50	0.66	0.48	0.63
Control Delay	10.0	11.6	41.5	14.7	48.1	32.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	10.0	11.6	41.5	14.7	48.1	32.9
LOS	A	B	D	B	D	C
Approach Delay		11.3	29.4			35.8
Approach LOS		B	C			D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 99.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 24.9	Intersection LOS: C
Intersection Capacity Utilization 55.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	139	706	364	298	148	639
v/c Ratio	0.15	0.40	0.50	0.66	0.48	0.63
Control Delay	10.0	11.6	41.5	14.7	48.1	32.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	10.0	11.6	41.5	14.7	48.1	32.9
Queue Length 50th (ft)	37	115	78	17	45	182
Queue Length 95th (ft)	79	179	103	73	75	215
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	900	1766	1964	771	492	2094
Starvation Cap Reductn	0	0	0	0	0	360
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.40	0.19	0.39	0.30	0.37

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	128	311	262	0	302	247	123	530	0
Future Volume (veh/h)	0	0	0	128	311	262	0	302	247	123	530	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				154	375	316	0	364	298	148	639	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				921	977	813	0	1154	359	206	1186	0
Arrive On Green				0.57	0.57	0.57	0.00	0.23	0.23	0.07	0.35	0.00
Sat Flow, veh/h				1619	1718	1430	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				154	371	320	0	364	298	148	639	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1448	0	1638	1530	1478	1710	0
Q Serve(g_s), s				4.8	12.8	13.0	0.0	6.5	19.7	5.2	16.0	0.0
Cycle Q Clear(g_c), s				4.8	12.8	13.0	0.0	6.5	19.7	5.2	16.0	0.0
Prop In Lane				1.00		0.99	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				921	967	823	0	1154	359	206	1186	0
V/C Ratio(X)				0.17	0.38	0.39	0.00	0.32	0.83	0.72	0.54	0.00
Avail Cap(c_a), veh/h				921	967	823	0	1824	568	458	1945	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				10.9	12.7	12.7	0.0	33.6	38.7	48.5	27.9	0.0
Incr Delay (d2), s/veh				0.4	1.2	1.4	0.0	0.2	5.8	4.7	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.2	6.3	5.5	0.0	2.9	8.9	2.3	7.6	0.0
LnGrp Delay(d),s/veh				11.3	13.8	14.1	0.0	33.8	44.4	53.2	28.3	0.0
LnGrp LOS				B	B	B		C	D	D	C	
Approach Vol, veh/h					845			662			787	
Approach Delay, s/veh					13.5			38.6			33.0	
Approach LOS					B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			11.9	29.5		65.0		41.4
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			16.5	39.5		60.5		60.5
Max Q Clear Time (g_c+I1), s			7.2	21.7		15.0		18.0
Green Ext Time (p_c), s			0.3	3.3		5.7		5.1

Intersection Summary	
HCM 2010 Ctrl Delay	27.4
HCM 2010 LOS	C

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.978	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1672	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1672	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9	404									50
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

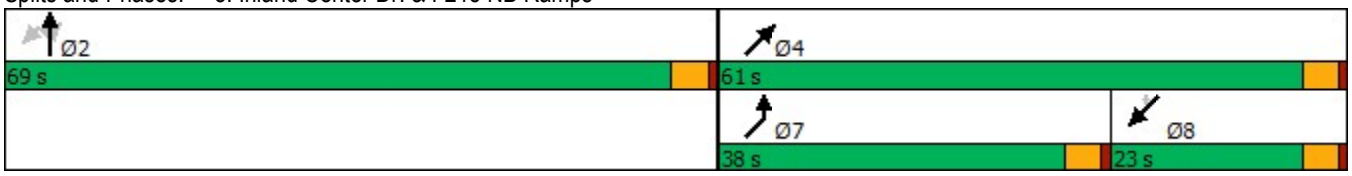
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	408	349	414	0	0	0	188	267	0	0	246	18
Future Volume (vph)	408	349	414	0	0	0	188	267	0	0	246	18
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	510	436	518	0	0	0	235	334	0	0	308	23
Shared Lane Traffic (%)			14%									
Lane Group Flow (vph)	510	509	445	0	0	0	235	334	0	0	308	23

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	408	349	414	188	267	246	18
Future Volume (vph)	408	349	414	188	267	246	18
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	69.0	69.0	69.0	38.0	61.0	23.0	23.0
Total Split (%)	53.1%	53.1%	53.1%	29.2%	46.9%	17.7%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	64.8	64.8	64.8	21.2	36.8	11.1	11.1
Actuated g/C Ratio	0.59	0.59	0.59	0.19	0.33	0.10	0.10
v/c Ratio	0.54	0.52	0.44	0.76	0.29	0.50	0.12
Control Delay	18.1	17.2	3.6	58.5	27.5	50.8	3.5
Queue Delay	0.0	0.0	0.0	0.3	0.1	0.0	0.0
Total Delay	18.1	17.2	3.6	58.8	27.6	50.8	3.5
LOS	B	B	A	E	C	D	A
Approach Delay		13.4			40.5	47.5	
Approach LOS		B			D	D	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 110.7	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 24.7	Intersection LOS: C
Intersection Capacity Utilization 55.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	510	509	445	235	334	308	23
v/c Ratio	0.54	0.52	0.44	0.76	0.29	0.50	0.12
Control Delay	18.1	17.2	3.6	58.5	27.5	50.8	3.5
Queue Delay	0.0	0.0	0.0	0.3	0.1	0.0	0.0
Total Delay	18.1	17.2	3.6	58.8	27.6	50.8	3.5
Queue Length 50th (ft)	204	206	12	158	91	61	0
Queue Length 95th (ft)	323	326	42	219	111	81	2
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	945	983	1018	491	1754	1040	298
Starvation Cap Reductn	0	0	0	44	575	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.52	0.44	0.53	0.28	0.30	0.08

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	408	349	414	0	0	0	188	267	0	0	246	18
Future Volume (veh/h)	408	349	414	0	0	0	188	267	0	0	246	18
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	510	498	477				235	334	0	0	308	22
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	1006	1118	951				269	999	0	0	509	126
Arrive On Green	0.62	0.62	0.62				0.17	0.29	0.00	0.00	0.08	0.08
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	510	498	477				235	334	0	0	308	22
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	18.1	15.0	17.8				14.7	8.0	0.0	0.0	5.0	1.4
Cycle Q Clear(g_c), s	18.1	15.0	17.8				14.7	8.0	0.0	0.0	5.0	1.4
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	1006	1118	951				269	999	0	0	509	126
V/C Ratio(X)	0.51	0.45	0.50				0.87	0.33	0.00	0.00	0.60	0.17
Avail Cap(c_a), veh/h	1006	1118	951				522	1861	0	0	1103	273
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	10.3	10.8				42.2	28.8	0.0	0.0	46.0	44.4
Incr Delay (d2), s/veh	1.8	1.3	1.9				8.6	0.2	0.0	0.0	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	7.9	7.9				7.2	3.8	0.0	0.0	2.2	0.6
LnGrp Delay(d),s/veh	12.7	11.6	12.7				50.8	29.0	0.0	0.0	47.2	45.0
LnGrp LOS	B	B	B				D	C			D	D
Approach Vol, veh/h		1485						569			330	
Approach Delay, s/veh		12.3						38.0			47.0	
Approach LOS		B						D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		69.0		34.8			21.8	13.0
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		64.5		56.5			33.5	18.5
Max Q Clear Time (g_c+I1), s		20.1		10.0			16.7	7.0
Green Ext Time (p_c), s		8.5		2.4			0.6	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Notes

Scenario Report

Scenario:	OY NP_AM
Command:	OY NP_AM
Volume:	OY NP_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.314
Loss Time (sec):	0	Average Delay (sec/veh):	14.8
Optimal Cycle:	27	Level Of Service:	B

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	13	546	83	40	495	48	29	81	3	139	118	66
Growth 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
Initial Bse:	13	546	83	40	495	48	29	81	3	139	118	66
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:	13	546	83	40	495	48	29	81	3	139	118	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	546	83	40	495	48	29	81	3	139	118	66
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:	13	546	83	40	495	48	29	81	3	139	118	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.51	1.00	1.00	0.64	0.95	0.95
Lanes:	1.00	1.74	0.26	1.00	1.82	0.18	1.00	0.96	0.04	1.00	0.64	0.36
Final Sat.:	1805	3071	467	1805	3248	315	965	1823	68	1218	1153	645
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.18	0.02	0.15	0.15	0.03	0.04	0.04	0.11	0.10	0.10
Crit Moves:		****		****						****		
Green/Cycle:	0.03	0.57	0.57	0.07	0.61	0.61	0.36	0.36	0.36	0.36	0.36	0.36
Volume/Cap:	0.25	0.31	0.31	0.31	0.25	0.25	0.08	0.12	0.12	0.31	0.28	0.28
Uniform Del:	47.5	11.5	11.5	44.2	9.1	9.1	20.9	21.2	21.2	22.9	22.6	22.6
IncremntDel:	2.5	0.1	0.1	1.4	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	50.0	11.5	11.5	45.6	9.1	9.1	21.0	21.3	21.3	23.3	22.8	22.8
User DelAdj:	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:	50.0	11.5	11.5	45.6	9.1	9.1	21.0	21.3	21.3	23.3	22.8	22.8
LOS by Move:	D	B	B	D	A	A	C	C	C	C	C	C
HCM2kAvgQ:	1	5	5	1	4	4	1	2	2	3	4	4

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.344
Loss Time (sec): 0 Average Delay (sec/veh): 19.3
Optimal Cycle: 28 Level Of Service: B

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			Protected			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	0 0	0	1! 0	0	1	0 1	0 0	0	0 0	1 0
Volume Module:												
Base Vol:	0	0	0	59	0	111	117	144	0	0	231	84
Growth 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
Initial Bse:	0	0	0	59	0	111	117	144	0	0	231	84
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	59	0	111	117	144	0	0	231	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	59	0	111	117	144	0	0	231	84
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	59	0	111	117	144	0	0	231	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	1.00	0.83	0.95	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	0.35	0.00	0.65	1.00	1.00	0.00	0.00	0.73	0.27
Final Sat.:	0	0	0	548	0	1031	1805	1900	0	0	1343	488
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.11	0.06	0.08	0.00	0.00	0.17	0.17
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.31	0.00	0.31	0.19	0.69	0.00	0.00	0.50	0.50
Volume/Cap:	0.00	0.00	0.00	0.34	0.00	0.34	0.34	0.11	0.00	0.00	0.34	0.34
Uniform Del:	0.0	0.0	0.0	26.5	0.0	26.5	35.2	5.3	0.0	0.0	15.1	15.1
IncremntDel:	0.0	0.0	0.0	0.4	0.0	0.4	0.6	0.0	0.0	0.0	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	26.9	0.0	26.9	35.8	5.3	0.0	0.0	15.4	15.4
User DelAdj:	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	26.9	0.0	26.9	35.8	5.3	0.0	0.0	15.4	15.4
LOS by Move:	A	A	A	C	A	C	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	4	3	1	0	0	6	6

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.167
Loss Time (sec): 0 Average Delay (sec/veh): 0.0
Optimal Cycle: 22 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	317	0	0	286	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	317	0	0	286	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	0	0	0	0	0	0	317	0	0	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	317	0	0	286	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	0	0	0	0	0	0	317	0	0	286	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	1900	0	0	0	0	0	1900	0	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.15	0.00
Crit Moves:								****				
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.15	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.167
Loss Time (sec): 0 Average Delay (sec/veh): 0.0
Optimal Cycle: 22 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	317	0	0	286	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	317	0	0	286	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	0	0	0	0	0	0	317	0	0	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	317	0	0	286	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	0	0	0	0	0	0	317	0	0	286	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	0	0	1900	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.15	0.00
Crit Moves:								****				
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.15	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.429
Loss Time (sec): 0 Average Delay (sec/veh): 11.6
Optimal Cycle: 40 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	1	0	1
Volume Module:												
Base Vol:	1	0	0	217	0	27	53	263	1	4	259	450
Growth 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
Initial Bse:	1	0	0	217	0	27	53	263	1	4	259	450
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:	1	0	0	217	0	27	53	263	1	4	259	450
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	217	0	27	53	263	1	4	259	450
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:	1	0	0	217	0	27	53	263	1	4	259	450
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	0.95	1.00	0.85
Lanes:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1805	0	0	1805	0	1615	1805	1891	7	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.02	0.03	0.14	0.14	0.00	0.14	0.28
Crit Moves:	****			****			****					****
Green/Cycle:	0.00	0.00	0.00	0.28	0.00	0.28	0.72	0.71	0.71	0.66	0.65	0.65
Volume/Cap:	0.43	0.00	0.00	0.43	0.00	0.06	0.07	0.20	0.20	0.01	0.21	0.43
Uniform Del:	49.9	0.0	0.0	29.4	0.0	26.3	4.3	5.0	5.0	5.8	7.1	8.5
IncremntDel:	93.5	0.0	0.0	0.6	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	143.4	0.0	0.0	30.0	0.0	26.4	4.3	5.1	5.1	5.8	7.2	8.8
User DelAdj:	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:	143.4	0.0	0.0	30.0	0.0	26.4	4.3	5.1	5.1	5.8	7.2	8.8
LOS by Move:	F	A	A	C	A	C	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	6	0	1	1	3	3	0	3	7

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.308
Loss Time (sec): 0 Average Delay (sec/veh): 6.3
Optimal Cycle: 21 Level Of Service: A

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	1! 0	0	1	0 0 1	0	1	0 1 0
Volume Module:												
Base Vol:	5	3	30	85	0	18	23	441	8	16	713	65
Growth 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
Initial Bse:	5	3	30	85	0	18	23	441	8	16	713	65
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:	5	3	30	85	0	18	23	441	8	16	713	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	3	30	85	0	18	23	441	8	16	713	65
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:	5	3	30	85	0	18	23	441	8	16	713	65
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.76	1.00	0.76	0.33	1.00	1.00	0.44	0.94	0.94
Lanes:	0.13	0.08	0.79	0.83	0.00	0.17	1.00	0.98	0.02	1.00	1.83	0.17
Final Sat.:	218	131	1307	1191	0	252	635	1861	34	828	3265	298
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.07	0.00	0.07	0.04	0.24	0.24	0.02	0.22	0.22
Crit Moves:				****				****				
Green/Cycle:	0.23	0.23	0.23	0.23	0.00	0.23	0.77	0.77	0.77	0.77	0.77	0.77
Volume/Cap:	0.10	0.10	0.10	0.31	0.00	0.31	0.05	0.31	0.31	0.03	0.28	0.28
Uniform Del:	30.2	30.2	30.2	31.8	0.0	31.8	2.8	3.5	3.5	2.7	3.4	3.4
IncremntDel:	0.1	0.1	0.1	0.5	0.0	0.5	0.0	0.1	0.1	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	30.3	30.3	30.3	32.3	0.0	32.3	2.8	3.6	3.6	2.7	3.5	3.5
User DelAdj:	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:	30.3	30.3	30.3	32.3	0.0	32.3	2.8	3.6	3.6	2.7	3.5	3.5
LOS by Move:	C	C	C	C	A	C	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	3	0	3	0	4	4	0	4	4

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.320
Loss Time (sec): 0 Average Delay (sec/veh): 29.8
Optimal Cycle: 30 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0 0	1	1	0 1 0	0	0	3 0 1	2	0	2 0 0
Volume Module:												
Base Vol:	0	0	0	128	311	262	0	302	247	123	530	0
Growth 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
Initial Bse:	0	0	0	128	311	262	0	302	247	123	530	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	0	0	128	311	262	0	302	247	123	530	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	128	311	262	0	302	247	123	530	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	0	0	128	311	262	0	302	247	123	530	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.87	0.87	0.87	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.09	0.91	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1658	1800	1516	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.17	0.17	0.00	0.06	0.15	0.04	0.15	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.46	0.46	0.46	0.00	0.15	0.15	0.39	0.54	0.00
Volume/Cap:	0.00	0.00	0.00	0.17	0.38	0.38	0.00	0.38	0.99	0.09	0.27	0.00
Uniform Del:	0.0	0.0	0.0	16.0	17.8	17.8	0.0	38.0	42.2	19.4	12.3	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.3	54.8	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	16.0	17.9	17.9	0.0	38.3	97.1	19.4	12.3	0.0
User DelAdj:	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	16.0	17.9	17.9	0.0	38.3	97.1	19.4	12.3	0.0
LOS by Move:	A	A	A	B	B	B	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	2	6	6	0	3	12	1	5	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.392
Loss Time (sec):	0	Average Delay (sec/veh):	17.5
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	408	349	414	0	0	0	188	267	0	0	246	18
Growth 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
Initial Bse:	408	349	414	0	0	0	188	267	0	0	246	18
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:	408	349	414	0	0	0	188	267	0	0	246	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	408	349	414	0	0	0	188	267	0	0	246	18
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:	408	349	414	0	0	0	188	267	0	0	246	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.91	1.09	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1597	1895	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.25	0.22	0.22	0.00	0.00	0.00	0.10	0.07	0.00	0.00	0.04	0.01
Crit Moves:	****						****				****	
Green/Cycle:	0.64	0.64	0.64	0.00	0.00	0.00	0.27	0.36	0.00	0.00	0.09	0.09
Volume/Cap:	0.39	0.34	0.34	0.00	0.00	0.00	0.39	0.21	0.00	0.00	0.39	0.12
Uniform Del:	8.5	8.1	8.1	0.0	0.0	0.0	30.1	22.4	0.0	0.0	42.9	41.8
IncremntDel:	0.2	0.1	0.1	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.4	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	8.7	8.2	8.2	0.0	0.0	0.0	30.6	22.5	0.0	0.0	43.3	42.2
User DelAdj:	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:	8.7	8.2	8.2	0.0	0.0	0.0	30.6	22.5	0.0	0.0	43.3	42.2
LOS by Move:	A	A	A	A	A	A	C	C	A	A	D	D
HCM2kAvgQ:	6	5	5	0	0	0	5	3	0	0	2	1

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

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Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.982			0.992			0.950	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3352	0	1615	3358	0	1615	1786	0	1615	1710	0
Flt Permitted	0.950			0.950			0.339			0.547		
Satd. Flow (perm)	1615	3352	0	1615	3358	0	576	1786	0	930	1710	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			26			4			34	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

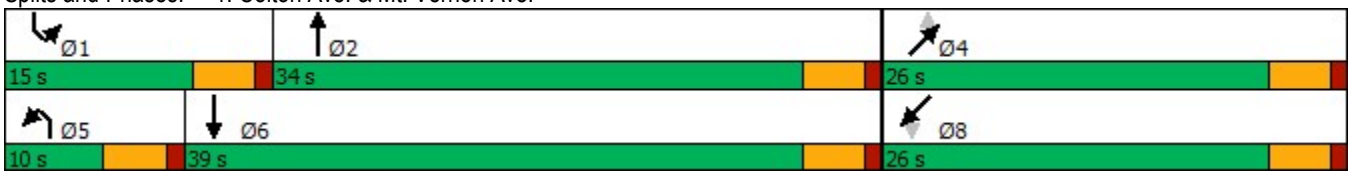
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	22	780	122	109	519	71	92	175	10	146	190	95
Future Volume (vph)	22	780	122	109	519	71	92	175	10	146	190	95
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	23	830	130	116	552	76	98	186	11	155	202	101
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	960	0	116	628	0	98	197	0	155	303	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	22	780	109	519	92	175	146	190
Future Volume (vph)	22	780	109	519	92	175	146	190
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	34.0	15.0	39.0	26.0	26.0	26.0	26.0
Total Split (%)	13.3%	45.3%	20.0%	52.0%	34.7%	34.7%	34.7%	34.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.6	31.3	9.1	38.6	15.7	15.7	15.7	15.7
Actuated g/C Ratio	0.08	0.47	0.14	0.58	0.23	0.23	0.23	0.23
v/c Ratio	0.17	0.61	0.53	0.32	0.73	0.47	0.71	0.71
Control Delay	35.2	17.4	38.7	9.5	55.9	25.8	42.9	31.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	17.4	38.7	9.5	55.9	25.8	42.9	31.0
LOS	D	B	D	A	E	C	D	C
Approach Delay		17.8		14.1		35.8		35.0
Approach LOS		B		B		D		D

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 67.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 22.0	Intersection LOS: C
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.



Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	23	960	116	628	98	197	155	303
v/c Ratio	0.17	0.61	0.53	0.32	0.73	0.47	0.71	0.71
Control Delay	35.2	17.4	38.7	9.5	55.9	25.8	42.9	31.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	17.4	38.7	9.5	55.9	25.8	42.9	31.0
Queue Length 50th (ft)	9	161	46	51	39	71	61	105
Queue Length 95th (ft)	32	257	101	132	#106	127	#124	185
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	134	1577	257	1943	187	584	303	580
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.61	0.45	0.32	0.52	0.34	0.51	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	22	780	122	109	519	71	92	175	10	146	190	95
Future Volume (veh/h)	22	780	122	109	519	71	92	175	10	146	190	95
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	23	830	130	116	552	76	98	186	11	155	202	101
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	42	1279	200	145	1497	206	230	480	28	315	323	161
Arrive On Green	0.03	0.43	0.43	0.09	0.50	0.50	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1619	2964	464	1619	3022	415	978	1683	100	1078	1133	567
Grp Volume(v), veh/h	23	479	481	116	312	316	98	0	197	155	0	303
Grp Sat Flow(s),veh/h/ln	1619	1710	1718	1619	1710	1727	978	0	1782	1078	0	1700
Q Serve(g_s), s	1.0	15.4	15.4	4.9	7.8	7.9	6.7	0.0	6.2	9.4	0.0	10.8
Cycle Q Clear(g_c), s	1.0	15.4	15.4	4.9	7.8	7.9	17.5	0.0	6.2	15.6	0.0	10.8
Prop In Lane	1.00		0.27	1.00		0.24	1.00		0.06	1.00		0.33
Lane Grp Cap(c), veh/h	42	738	742	145	847	855	230	0	508	315	0	484
V/C Ratio(X)	0.55	0.65	0.65	0.80	0.37	0.37	0.43	0.00	0.39	0.49	0.00	0.63
Avail Cap(c_a), veh/h	128	738	742	244	847	855	254	0	550	340	0	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.5	15.6	15.6	31.1	10.8	10.9	29.3	0.0	20.0	26.3	0.0	21.7
Incr Delay (d2), s/veh	10.8	4.4	4.4	9.7	1.2	1.2	1.2	0.0	0.5	1.2	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	8.1	8.1	2.6	3.9	4.0	1.9	0.0	3.1	2.9	0.0	5.3
LnGrp Delay(d),s/veh	44.4	20.0	20.0	40.8	12.1	12.1	30.5	0.0	20.5	27.5	0.0	23.7
LnGrp LOS	D	C	B	D	B	B	C		C	C		C
Approach Vol, veh/h		983			744			295			458	
Approach Delay, s/veh		20.6			16.6			23.8			25.0	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	34.6		24.3	6.3	39.0		24.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	29.5		21.5	5.5	34.5		21.5
Max Q Clear Time (g_c+I1), s	6.9	17.4		19.5	3.0	9.9		17.6
Green Ext Time (p_c), s	0.1	5.0		0.3	0.0	4.1		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.931				0.978	
Flt Protected	0.976		0.950			
Satd. Flow (prot)	1545	0	1615	1800	1760	0
Flt Permitted	0.976		0.950			
Satd. Flow (perm)	1545	0	1615	1800	1760	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	45				14	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

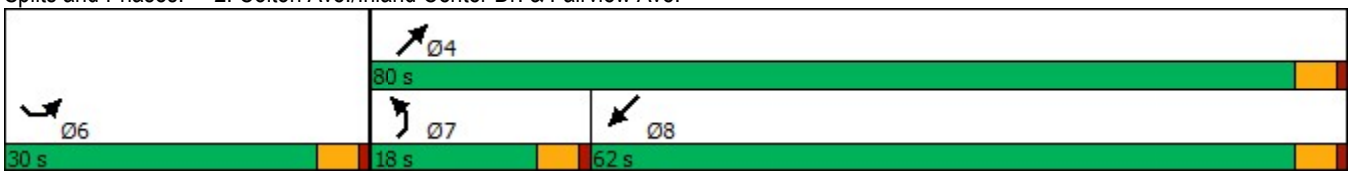
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	46	49	49	371	369	73
Future Volume (vph)	46	49	49	371	369	73
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	51	54	54	412	410	81
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	0	54	412	491	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	46	49	371	369
Future Volume (vph)	46	49	371	369
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	30.0	18.0	80.0	62.0
Total Split (%)	27.3%	16.4%	72.7%	56.4%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	26.8	8.0	32.1	25.0
Actuated g/C Ratio	0.39	0.12	0.47	0.37
v/c Ratio	0.17	0.29	0.49	0.75
Control Delay	13.6	36.3	13.1	27.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.6	36.3	13.1	27.1
LOS	B	D	B	C
Approach Delay	13.6		15.8	27.1
Approach LOS	B		B	C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 68.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 46.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	105	54	412	491
v/c Ratio	0.17	0.29	0.49	0.75
Control Delay	13.6	36.3	13.1	27.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.6	36.3	13.1	27.1
Queue Length 50th (ft)	18	23	106	187
Queue Length 95th (ft)	64	63	162	310
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	633	335	1734	1474
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.16	0.24	0.33

Intersection Summary

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	46	49	49	371	369	73
Future Volume (veh/h)	46	49	49	371	369	73
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	51	54	54	412	410	81
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	292	309	78	832	502	99
Arrive On Green	0.40	0.40	0.05	0.46	0.34	0.34
Sat Flow, veh/h	734	777	1619	1800	1461	289
Grp Volume(v), veh/h	106	0	54	412	0	491
Grp Sat Flow(s),veh/h/ln	1526	0	1619	1800	0	1749
Q Serve(g_s), s	2.9	0.0	2.1	10.2	0.0	16.4
Cycle Q Clear(g_c), s	2.9	0.0	2.1	10.2	0.0	16.4
Prop In Lane	0.48	0.51	1.00			0.16
Lane Grp Cap(c), veh/h	607	0	78	832	0	601
V/C Ratio(X)	0.17	0.00	0.69	0.50	0.00	0.82
Avail Cap(c_a), veh/h	607	0	341	2119	0	1568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.5	0.0	30.1	12.0	0.0	19.2
Incr Delay (d2), s/veh	0.6	0.0	10.4	0.5	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.2	5.1	0.0	8.4
LnGrp Delay(d),s/veh	13.1	0.0	40.5	12.5	0.0	22.0
LnGrp LOS	B		D	B		C
Approach Vol, veh/h	106			466	491	
Approach Delay, s/veh	13.1			15.7	22.0	
Approach LOS	B			B	C	

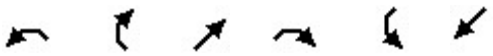
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				34.1		30.0	7.6	26.5
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				75.5		25.5	13.5	57.5
Max Q Clear Time (g_c+I1), s				12.2		4.9	4.1	18.4
Green Ext Time (p_c), s				2.9		0.3	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

Notes

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1900	0	1900	1900
Flt Permitted						
Satd. Flow (perm)	1900	0	1900	0	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	428	0	0	536
Future Volume (vph)	0	0	428	0	0	536
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	465	0	0	583
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	465	0	0	583

Intersection Summary

Intersection	
Int Delay, s/veh	0

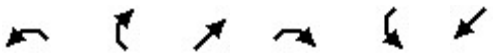
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	428	0	0	536
Future Vol, veh/h	0	0	428	0	0	536
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	465	0	0	583

Major/Minor	Minor2		Major2	
Conflicting Flow All	583	583	0	0
Stage 1	583	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 427	516	-	-
Stage 1	502	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	516	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s		0
HCM LOS	-	

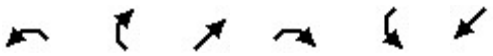
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	428	0	0	536
Future Volume (vph)	0	0	428	0	0	536
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	465	0	0	583
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	465	0	0	583

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	428	0	0	536
Future Vol, veh/h	0	0	428	0	0	536
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	0	465	0	0	583

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	465	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	602	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	602	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.865				0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1470	0	1615	0	1530	1615	1800	0	1700	1800	1530
Flt Permitted				0.950			0.153					
Satd. Flow (perm)	0	1470	0	1615	0	1530	260	1800	0	1700	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		312				88						352
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

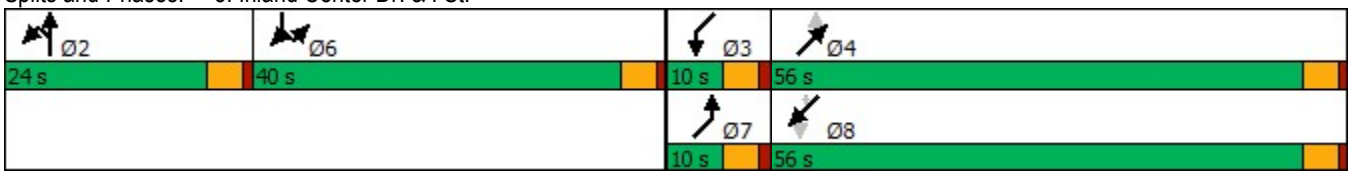
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	1	280	0	56	49	379	0	0	480	335
Future Volume (vph)	0	0	1	280	0	56	49	379	0	0	480	335
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	1	311	0	62	54	421	0	0	533	372
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	311	0	62	54	421	0	0	533	372

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR	Ø3
Lane Configurations								
Traffic Volume (vph)	0	280	56	49	379	480	335	
Future Volume (vph)	0	280	56	49	379	480	335	
Turn Type	NA	Prot	Prot	pm+pt	NA	NA	Perm	
Protected Phases	2	6	6	7	4	8		3
Permitted Phases				4			8	
Detector Phase	2	6	6	7	4	8	8	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5	9.5
Total Split (s)	24.0	40.0	40.0	10.0	56.0	56.0	56.0	10.0
Total Split (%)	18.5%	30.8%	30.8%	7.7%	43.1%	43.1%	43.1%	8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	20.6	25.6	25.6	45.8	45.8	38.3	38.3	
Actuated g/C Ratio	0.19	0.24	0.24	0.43	0.43	0.36	0.36	
v/c Ratio	0.00	0.80	0.14	0.29	0.54	0.82	0.48	
Control Delay	0.0	56.1	3.9	21.9	25.1	43.2	5.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.0	56.1	3.9	21.9	25.1	43.2	5.6	
LOS	A	E	A	C	C	D	A	
Approach Delay					24.8	27.7		
Approach LOS					C	C		

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 106.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 31.1	Intersection LOS: C
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1	311	62	54	421	533	372
v/c Ratio	0.00	0.80	0.14	0.29	0.54	0.82	0.48
Control Delay	0.0	56.1	3.9	21.9	25.1	43.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.0	56.1	3.9	21.9	25.1	43.2	5.6
Queue Length 50th (ft)	0	208	0	21	205	335	9
Queue Length 95th (ft)	0	347	18	49	334	525	77
Internal Link Dist (ft)	133				59	387	
Turn Bay Length (ft)				110			
Base Capacity (vph)	536	570	597	186	973	922	955
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.55	0.10	0.29	0.43	0.58	0.39

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	1	280	0	56	49	379	0	0	480	335
Future Volume (veh/h)	0	0	1	280	0	56	49	379	0	0	480	335
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	0	0	1	311	0	62	54	421	0	0	533	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	0	496	0	0	0	290	897	0	433	664	564
Arrive On Green	0.00	0.00	0.34	0.00	0.00	0.00	0.05	0.50	0.00	0.00	0.37	0.00
Sat Flow, veh/h	0	0	1445		0		1619	1800	0	1619	1800	1530
Grp Volume(v), veh/h	0	0	1		0.0		54	421	0	0	533	0
Grp Sat Flow(s),veh/h/ln	0	0	1445				1619	1800	0	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.0				1.1	8.7	0.0	0.0	15.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				1.1	8.7	0.0	0.0	15.1	0.0
Prop In Lane	0.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	496				290	897	0	433	664	564
V/C Ratio(X)	0.00	0.00	0.00				0.19	0.47	0.00	0.00	0.80	0.00
Avail Cap(c_a), veh/h	0	0	496				365	1631	0	587	1631	1386
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	12.3				11.5	9.3	0.0	0.0	16.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.3	0.4	0.0	0.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.5	4.3	0.0	0.0	7.8	0.0
LnGrp Delay(d),s/veh	0.0	0.0	12.3				11.8	9.7	0.0	0.0	18.4	0.0
LnGrp LOS			B				B	A			B	
Approach Vol, veh/h		1						475			533	
Approach Delay, s/veh		12.3						9.9			18.4	
Approach LOS		B						A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		24.0	0.0	32.8			7.4	25.5
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.5	5.5	51.5			5.5	51.5
Max Q Clear Time (g_c+I1), s		2.0	0.0	10.7			3.1	17.1
Green Ext Time (p_c), s		0.0	0.0	2.9			0.0	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.905			0.995			0.981	
Flt Protected		0.966			0.991		0.950			0.950		
Satd. Flow (prot)	0	1769	0	0	1704	0	1805	1890	0	1805	3541	0
Flt Permitted		0.966			0.991		0.950			0.950		
Satd. Flow (perm)	0	1769	0	0	1704	0	1805	1890	0	1805	3541	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary

Area Type: Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	86	4	33	8	5	31	16	661	20	29	746	109
Future Volume (vph)	86	4	33	8	5	31	16	661	20	29	746	109
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	92	4	35	9	5	33	17	711	22	31	802	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	0	0	47	0	17	733	0	31	919	0

Intersection Summary

Intersection	
Int Delay, s/veh	35

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	86	4	33	8	5	31	16	661	20	29	746	109
Future Vol, veh/h	86	4	33	8	5	31	16	661	20	29	746	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	92	4	35	9	5	33	17	711	22	31	802	117

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1698	1690	460	1221	1737	722	919	0	0	733	0	0
Stage 1	923	923	-	756	756	-	-	-	-	-	-	-
Stage 2	775	767	-	465	981	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 67	94	554	148	88	430	751	-	-	881	-	-
Stage 1	294	351	-	403	419	-	-	-	-	-	-	-
Stage 2	394	414	-	552	330	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 56	89	554	128	83	430	751	-	-	881	-	-
Mov Cap-2 Maneuver	~ 56	89	-	128	83	-	-	-	-	-	-	-
Stage 1	287	339	-	394	409	-	-	-	-	-	-	-
Stage 2	351	404	-	492	318	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s$	484.8	25.1	0.2	0.3
HCM LOS	F	D		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	751	-	-	226	75	881	-	-
HCM Lane V/C Ratio	0.023	-	-	0.209	1.763	0.035	-	-
HCM Control Delay (s)	9.9	-	-	25.1	$ 484.8	9.2	-	-
HCM Lane LOS	A	-	-	D	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	11.5	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.929				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1470	2869	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1470	2869	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									226			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

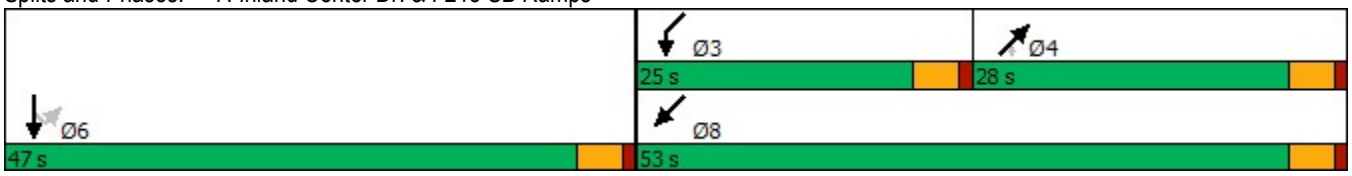
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	250	371	353	0	472	276	342	557	0
Future Volume (vph)	0	0	0	250	371	353	0	472	276	342	557	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	278	412	392	0	524	307	380	619	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	250	832	0	0	524	307	380	619	0

Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	250	371	472	276	342	557
Future Volume (vph)	250	371	472	276	342	557
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	47.0	47.0	28.0	28.0	25.0	53.0
Total Split (%)	47.0%	47.0%	28.0%	28.0%	25.0%	53.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	42.8	42.8	17.4	17.4	16.3	38.3
Actuated g/C Ratio	0.48	0.48	0.19	0.19	0.18	0.43
v/c Ratio	0.36	0.61	0.55	0.64	0.71	0.43
Control Delay	18.5	21.3	35.3	16.6	43.1	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.4
Total Delay	18.5	21.3	35.3	16.6	43.1	19.1
LOS	B	C	D	B	D	B
Approach Delay		20.6	28.4			28.3
Approach LOS		C	C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 90.1	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 25.5	Intersection LOS: C
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	250	832	524	307	380	619
v/c Ratio	0.36	0.61	0.55	0.64	0.71	0.43
Control Delay	18.5	21.3	35.3	16.6	43.1	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.4
Total Delay	18.5	21.3	35.3	16.6	43.1	19.1
Queue Length 50th (ft)	95	187	99	40	105	125
Queue Length 95th (ft)	191	304	140	128	163	167
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	697	1362	1289	568	675	1852
Starvation Cap Reductn	0	0	0	0	0	669
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.61	0.41	0.54	0.56	0.52

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	250	371	353	0	472	276	342	557	0
Future Volume (veh/h)	0	0	0	250	371	353	0	472	276	342	557	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				278	412	392	0	524	307	380	619	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				752	789	671	0	1145	356	459	1496	0
Arrive On Green				0.46	0.46	0.46	0.00	0.23	0.23	0.16	0.44	0.00
Sat Flow, veh/h				1619	1700	1445	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				278	412	392	0	524	307	380	619	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1445	0	1638	1530	1478	1710	0
Q Serve(g_s), s				10.2	15.7	18.3	0.0	8.4	17.6	11.4	11.4	0.0
Cycle Q Clear(g_c), s				10.2	15.7	18.3	0.0	8.4	17.6	11.4	11.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				752	789	671	0	1145	356	459	1496	0
V/C Ratio(X)				0.37	0.52	0.58	0.00	0.46	0.86	0.83	0.41	0.00
Avail Cap(c_a), veh/h				752	789	671	0	1261	393	662	1812	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				15.9	17.3	18.0	0.0	30.1	33.7	37.5	17.7	0.0
Incr Delay (d2), s/veh				1.4	2.5	3.7	0.0	0.3	16.3	5.8	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.8	7.9	8.0	0.0	3.8	9.0	5.0	5.4	0.0
LnGrp Delay(d),s/veh				17.3	19.8	21.7	0.0	30.4	50.0	43.3	17.9	0.0
LnGrp LOS				B	B	C		C	D	D	B	
Approach Vol, veh/h					1082			831			999	
Approach Delay, s/veh					19.8			37.7			27.5	
Approach LOS					B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			18.7	25.8		47.0		44.5
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			20.5	23.5		42.5		48.5
Max Q Clear Time (g_c+I1), s			13.4	19.6		20.3		13.4
Green Ext Time (p_c), s			0.8	1.7		6.5		4.8

Intersection Summary	
HCM 2010 Ctrl Delay	27.6
HCM 2010 LOS	C

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.973	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1664	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1664	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11	283									189
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

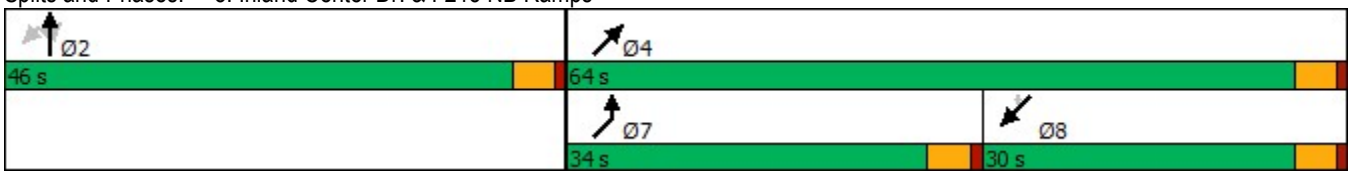
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	278	283	361	0	0	0	229	488	0	0	611	263
Future Volume (vph)	278	283	361	0	0	0	229	488	0	0	611	263
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	320	325	415	0	0	0	263	561	0	0	702	302
Shared Lane Traffic (%)			17%									
Lane Group Flow (vph)	320	396	344	0	0	0	263	561	0	0	702	302

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	278	283	361	229	488	611	263
Future Volume (vph)	278	283	361	229	488	611	263
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	46.0	46.0	46.0	34.0	64.0	30.0	30.0
Total Split (%)	41.8%	41.8%	41.8%	30.9%	58.2%	27.3%	27.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	42.0	42.0	42.0	20.6	44.9	19.8	19.8
Actuated g/C Ratio	0.44	0.44	0.44	0.21	0.47	0.21	0.21
v/c Ratio	0.45	0.54	0.43	0.76	0.35	0.55	0.65
Control Delay	23.9	25.0	6.7	50.6	16.3	36.2	20.8
Queue Delay	0.0	0.0	0.0	0.4	0.2	0.0	0.0
Total Delay	23.9	25.0	6.7	51.0	16.6	36.2	20.8
LOS	C	C	A	D	B	D	C
Approach Delay		18.8			27.6	31.5	
Approach LOS		B			C	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 96	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 25.7	Intersection LOS: C
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	320	396	344	263	561	702	302
v/c Ratio	0.45	0.54	0.43	0.76	0.35	0.55	0.65
Control Delay	23.9	25.0	6.7	50.6	16.3	36.2	20.8
Queue Delay	0.0	0.0	0.0	0.4	0.2	0.0	0.0
Total Delay	23.9	25.0	6.7	51.0	16.6	36.2	20.8
Queue Length 50th (ft)	135	180	23	152	108	111	59
Queue Length 95th (ft)	250	325	93	242	138	151	149
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	706	733	794	501	2143	1663	549
Starvation Cap Reductn	0	0	0	42	863	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.54	0.43	0.57	0.44	0.42	0.55

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	278	283	361	0	0	0	229	488	0	0	611	263
Future Volume (veh/h)	278	283	361	0	0	0	229	488	0	0	611	263
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	320	392	370				263	561	0	0	702	302
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	705	784	666				300	1608	0	0	1472	364
Arrive On Green	0.44	0.44	0.44				0.19	0.47	0.00	0.00	0.24	0.24
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	320	392	370				263	561	0	0	702	302
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	13.3	15.0	17.2				15.1	9.9	0.0	0.0	9.3	17.9
Cycle Q Clear(g_c), s	13.3	15.0	17.2				15.1	9.9	0.0	0.0	9.3	17.9
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	705	784	666				300	1608	0	0	1472	364
V/C Ratio(X)	0.45	0.50	0.56				0.88	0.35	0.00	0.00	0.48	0.83
Avail Cap(c_a), veh/h	705	784	666				501	2135	0	0	1656	409
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	19.4	20.0				37.8	16.0	0.0	0.0	31.2	34.5
Incr Delay (d2), s/veh	2.1	2.3	3.3				9.3	0.1	0.0	0.0	0.2	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	7.9	7.8				7.5	4.7	0.0	0.0	4.0	8.8
LnGrp Delay(d),s/veh	21.0	21.7	23.4				47.1	16.1	0.0	0.0	31.5	46.8
LnGrp LOS	C	C	C				D	B			C	D
Approach Vol, veh/h		1082						824			1004	
Approach Delay, s/veh		22.1						26.0			36.1	
Approach LOS		C						C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		46.0		49.3			22.2	27.2
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		41.5		59.5			29.5	25.5
Max Q Clear Time (g_c+I1), s		19.2		11.9			17.1	19.9
Green Ext Time (p_c), s		5.0		4.4			0.6	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C

Notes

Scenario Report

Scenario:	OY NP_PM
Command:	OY NP_PM
Volume:	OY NP_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.473
Loss Time (sec):	0	Average Delay (sec/veh):	18.3
Optimal Cycle:	35	Level Of Service:	B

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	22	780	122	109	519	71	92	175	10	146	190	95
Growth 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
Initial Bse:	22	780	122	109	519	71	92	175	10	146	190	95
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:	22	780	122	109	519	71	92	175	10	146	190	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	780	122	109	519	71	92	175	10	146	190	95
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:	22	780	122	109	519	71	92	175	10	146	190	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.93	0.93	0.36	0.99	0.99	0.49	0.95	0.95
Lanes:	1.00	1.73	0.27	1.00	1.76	0.24	1.00	0.95	0.05	1.00	0.67	0.33
Final Sat.:	1805	3059	479	1805	3118	427	686	1783	102	929	1203	602
Capacity Analysis Module:												
Vol/Sat:	0.01	0.25	0.25	0.06	0.17	0.17	0.13	0.10	0.10	0.16	0.16	0.16
Crit Moves:		****		****							****	
Green/Cycle:	0.05	0.54	0.54	0.13	0.62	0.62	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.27	0.47	0.47	0.47	0.27	0.27	0.40	0.29	0.29	0.47	0.47	0.47
Uniform Del:	46.1	14.3	14.3	40.5	8.6	8.6	25.6	24.6	24.6	26.3	26.4	26.4
IncremntDel:	1.8	0.2	0.2	1.5	0.1	0.1	1.2	0.3	0.3	1.1	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	47.9	14.5	14.5	42.0	8.7	8.7	26.8	24.9	24.9	27.5	27.0	27.0
User DelAdj:	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:	47.9	14.5	14.5	42.0	8.7	8.7	26.8	24.9	24.9	27.5	27.0	27.0
LOS by Move:	D	B	B	D	A	A	C	C	C	C	C	C
HCM2kAvgQ:	1	9	9	4	4	4	3	4	4	4	7	7

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.326
Loss Time (sec): 0 Average Delay (sec/veh): 9.0
Optimal Cycle: 28 Level Of Service: A

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	46	0	49	49	371	0	0	369	73
Growth 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
Initial Bse:	0	0	0	46	0	49	49	371	0	0	369	73
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	46	0	49	49	371	0	0	369	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	46	0	49	49	371	0	0	369	73
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	46	0	49	49	371	0	0	369	73
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	1.00	0.82	0.95	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	0.48	0.00	0.52	1.00	1.00	0.00	0.00	0.83	0.17
Final Sat.:	0	0	0	756	0	806	1805	1900	0	0	1551	307
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.03	0.20	0.00	0.00	0.24	0.24
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.19	0.00	0.19	0.08	0.81	0.00	0.00	0.73	0.73
Volume/Cap:	0.00	0.00	0.00	0.33	0.00	0.33	0.33	0.24	0.00	0.00	0.33	0.33
Uniform Del:	0.0	0.0	0.0	35.2	0.0	35.2	43.2	2.2	0.0	0.0	4.8	4.8
IncremntDel:	0.0	0.0	0.0	0.7	0.0	0.7	1.3	0.1	0.0	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	35.9	0.0	35.9	44.4	2.2	0.0	0.0	4.9	4.9
User DelAdj:	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	35.9	0.0	35.9	44.4	2.2	0.0	0.0	4.9	4.9
LOS by Move:	A	A	A	D	A	D	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	0	3	2	3	0	0	5	5

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.282
Loss Time (sec): 0 Average Delay (sec/veh): 0.1
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	1 0	1	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	428	0	0	536	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	428	0	0	536	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	0	0	0	0	0	0	428	0	0	536	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	428	0	0	536	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	0	0	0	0	0	0	428	0	0	536	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	1900	0	0	0	0	0	1900	0	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.28	0.00
Crit Moves:											****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.28	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.282
Loss Time (sec): 0 Average Delay (sec/veh): 0.1
Optimal Cycle: 26 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	428	0	0	536	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	428	0	0	536	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	0	0	0	0	0	0	428	0	0	536	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	428	0	0	536	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	0	0	0	0	0	0	428	0	0	536	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	0	0	1900	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.28	0.00
Crit Moves:											****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.28	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.436
Loss Time (sec): 0 Average Delay (sec/veh): 13.6
Optimal Cycle: 40 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	0	1	0	1
Volume Module:												
Base Vol:	0	0	1	280	0	56	49	379	0	0	480	335
Growth 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
Initial Bse:	0	0	1	280	0	56	49	379	0	0	480	335
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	1	280	0	56	49	379	0	0	480	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	1	280	0	56	49	379	0	0	480	335
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	1	280	0	56	49	379	0	0	480	335
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	0	0	1644	1805	0	1615	1805	1900	0	1900	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.03	0.03	0.20	0.00	0.00	0.25	0.21
Crit Moves:				****	****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.36	0.00	0.36	0.64	0.64	0.00	0.00	0.58	0.58
Volume/Cap:	0.00	0.00	0.00	0.44	0.00	0.10	0.10	0.31	0.00	0.00	0.44	0.36
Uniform Del:	0.0	0.0	49.9	24.5	0.0	21.5	7.8	8.0	0.0	0.0	11.8	11.1
IncremntDel:	0.0	0.0	96.4	0.5	0.0	0.1	0.1	0.1	0.0	0.0	0.3	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	146.3	25.0	0.0	21.5	7.9	8.1	0.0	0.0	12.1	11.4
User DelAdj:	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	146.3	25.0	0.0	21.5	7.9	8.1	0.0	0.0	12.1	11.4
LOS by Move:	A	A	F	C	A	C	A	A	A	A	B	B
HCM2kAvgQ:	0	0	0	7	0	1	1	5	0	0	8	5

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.442
Loss Time (sec): 0 Average Delay (sec/veh): 5.8
Optimal Cycle: 26 Level Of Service: A

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	1! 0	0	1	0 0 1	0	1	0 1 0
Volume Module:												
Base Vol:	8	5	31	86	4	33	16	661	20	29	746	109
Growth 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
Initial Bse:	8	5	31	86	4	33	16	661	20	29	746	109
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:	8	5	31	86	4	33	16	661	20	29	746	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	5	31	86	4	33	16	661	20	29	746	109
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:	8	5	31	86	4	33	16	661	20	29	746	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.79	0.79	0.79	0.32	1.00	1.00	0.33	0.93	0.93
Lanes:	0.18	0.11	0.71	0.70	0.03	0.27	1.00	0.97	0.03	1.00	1.75	0.25
Final Sat.:	300	187	1161	1044	49	400	600	1837	56	621	3090	451
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.08	0.08	0.08	0.03	0.36	0.36	0.05	0.24	0.24
Crit Moves:					****			****				
Green/Cycle:	0.19	0.19	0.19	0.19	0.19	0.19	0.81	0.81	0.81	0.81	0.81	0.81
Volume/Cap:	0.14	0.14	0.14	0.44	0.44	0.44	0.03	0.44	0.44	0.06	0.30	0.30
Uniform Del:	34.0	34.0	34.0	36.1	36.1	36.1	1.8	2.7	2.7	1.8	2.3	2.3
IncremntDel:	0.2	0.2	0.2	1.1	1.1	1.1	0.0	0.2	0.2	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	34.2	34.2	34.2	37.2	37.2	37.2	1.8	2.9	2.9	1.9	2.3	2.3
User DelAdj:	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:	34.2	34.2	34.2	37.2	37.2	37.2	1.8	2.9	2.9	1.9	2.3	2.3
LOS by Move:	C	C	C	D	D	D	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	4	4	4	0	6	6	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.489
Loss Time (sec): 0 Average Delay (sec/veh): 21.3
Optimal Cycle: 36 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0 0	1	1	0 1 0	0	0	3 0 1	2	0	2 0 0
Volume Module:												
Base Vol:	0	0	0	250	371	353	0	472	276	342	557	0
Growth 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
Initial Bse:	0	0	0	250	371	353	0	472	276	342	557	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	0	0	250	371	353	0	472	276	342	557	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	371	353	0	472	276	342	557	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	0	0	250	371	353	0	472	276	342	557	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.02	0.98	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1641	1682	1600	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.22	0.22	0.00	0.09	0.17	0.10	0.15	0.00
Crit Moves:					****				****	****		
Green/Cycle:	0.00	0.00	0.00	0.45	0.45	0.45	0.00	0.35	0.35	0.20	0.55	0.00
Volume/Cap:	0.00	0.00	0.00	0.34	0.49	0.49	0.00	0.26	0.49	0.49	0.28	0.00
Uniform Del:	0.0	0.0	0.0	17.8	19.3	19.3	0.0	23.3	25.5	35.5	12.0	0.0
IncremntDel:	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.1	0.7	0.5	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	17.8	19.5	19.5	0.0	23.4	26.2	36.0	12.1	0.0
User DelAdj:	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	17.8	19.5	19.5	0.0	23.4	26.2	36.0	12.1	0.0
LOS by Move:	A	A	A	B	B	B	A	C	C	D	B	A
HCM2kAvgQ:	0	0	0	5	8	8	0	4	7	5	5	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.475
Loss Time (sec):	0	Average Delay (sec/veh):	21.6
Optimal Cycle:	35	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	278	283	361	0	0	0	229	488	0	0	611	263
Growth 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
Initial Bse:	278	283	361	0	0	0	229	488	0	0	611	263
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:	278	283	361	0	0	0	229	488	0	0	611	263
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	283	361	0	0	0	229	488	0	0	611	263
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:	278	283	361	0	0	0	229	488	0	0	611	263
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.88	1.12	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1530	1951	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.17	0.19	0.19	0.00	0.00	0.00	0.13	0.14	0.00	0.00	0.09	0.16
Crit Moves:		****					****					****
Green/Cycle:	0.39	0.39	0.39	0.00	0.00	0.00	0.27	0.61	0.00	0.00	0.34	0.34
Volume/Cap:	0.44	0.47	0.47	0.00	0.00	0.00	0.47	0.22	0.00	0.00	0.26	0.47
Uniform Del:	22.5	22.9	22.9	0.0	0.0	0.0	30.8	8.8	0.0	0.0	23.7	25.8
IncremntDel:	0.5	0.3	0.3	0.0	0.0	0.0	0.7	0.1	0.0	0.0	0.1	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	23.0	23.1	23.1	0.0	0.0	0.0	31.5	8.8	0.0	0.0	23.7	26.4
User DelAdj:	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:	23.0	23.1	23.1	0.0	0.0	0.0	31.5	8.8	0.0	0.0	23.7	26.4
LOS by Move:	C	C	C	A	A	A	C	A	A	A	C	C
HCM2kAvgQ:	6	8	8	0	0	0	6	3	0	0	4	7

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

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Appendix G

Opening Year (2020) Without Related Projects With Project Conditions
Intersection Analysis Worksheets

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.987			0.995			0.946	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3352	0	1615	3376	0	1615	1791	0	1615	1703	0
Flt Permitted	0.950			0.950			0.446			0.684		
Satd. Flow (perm)	1615	3352	0	1615	3376	0	758	1791	0	1163	1703	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			14			2			30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

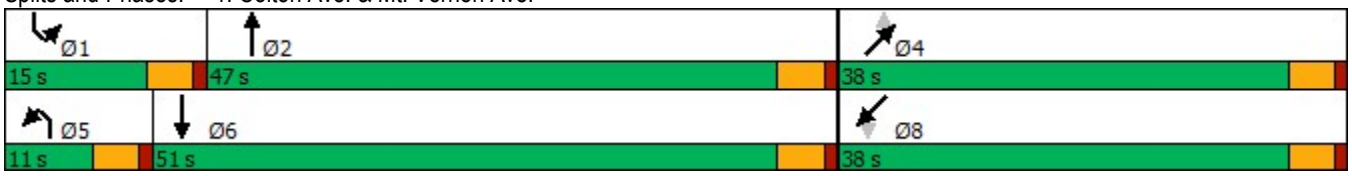
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	13	546	86	43	495	48	29	91	3	139	119	66
Future Volume (vph)	13	546	86	43	495	48	29	91	3	139	119	66
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	16	658	104	52	596	58	35	110	4	167	143	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	762	0	52	654	0	35	114	0	167	223	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	13	546	43	495	29	91	139	119
Future Volume (vph)	13	546	43	495	29	91	139	119
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	47.0	15.0	51.0	38.0	38.0	38.0	38.0
Total Split (%)	11.0%	47.0%	15.0%	51.0%	38.0%	38.0%	38.0%	38.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	6.1	45.2	7.9	50.9	17.0	17.0	17.0	17.0
Actuated g/C Ratio	0.08	0.57	0.10	0.65	0.22	0.22	0.22	0.22
v/c Ratio	0.13	0.39	0.32	0.30	0.21	0.29	0.67	0.57
Control Delay	41.2	12.4	41.5	8.1	29.3	27.7	42.5	30.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	12.4	41.5	8.1	29.3	27.7	42.5	30.1
LOS	D	B	D	A	C	C	D	C
Approach Delay		13.0		10.6		28.1		35.4
Approach LOS		B		B		C		D

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 78.9	
Natural Cycle: 55	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 17.6	Intersection LOS: B
Intersection Capacity Utilization 53.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.



Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	16	762	52	654	35	114	167	223
v/c Ratio	0.13	0.39	0.32	0.30	0.21	0.29	0.67	0.57
Control Delay	41.2	12.4	41.5	8.1	29.3	27.7	42.5	30.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	12.4	41.5	8.1	29.3	27.7	42.5	30.1
Queue Length 50th (ft)	8	112	25	56	15	48	79	88
Queue Length 95th (ft)	27	186	60	143	37	86	133	144
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	135	1930	219	2181	328	776	503	754
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.39	0.24	0.30	0.11	0.15	0.33	0.30

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	13	546	86	43	495	48	29	91	3	139	119	66
Future Volume (veh/h)	13	546	86	43	495	48	29	91	3	139	119	66
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	16	658	104	52	596	58	35	110	4	167	143	80
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	30	1639	259	69	1820	177	216	407	15	303	256	143
Arrive On Green	0.02	0.55	0.55	0.04	0.58	0.58	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1619	2960	467	1619	3150	306	1052	1726	63	1162	1086	607
Grp Volume(v), veh/h	16	380	382	52	323	331	35	0	114	167	0	223
Grp Sat Flow(s),veh/h/ln	1619	1710	1718	1619	1710	1746	1052	0	1789	1162	0	1693
Q Serve(g_s), s	0.8	10.3	10.3	2.6	7.9	7.9	2.4	0.0	4.2	11.0	0.0	9.3
Cycle Q Clear(g_c), s	0.8	10.3	10.3	2.6	7.9	7.9	11.8	0.0	4.2	15.2	0.0	9.3
Prop In Lane	1.00		0.27	1.00		0.18	1.00		0.04	1.00		0.36
Lane Grp Cap(c), veh/h	30	947	951	69	988	1009	216	0	422	303	0	399
V/C Ratio(X)	0.53	0.40	0.40	0.75	0.33	0.33	0.16	0.00	0.27	0.55	0.00	0.56
Avail Cap(c_a), veh/h	131	947	951	211	988	1009	405	0	745	513	0	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.1	10.3	10.3	38.1	8.8	8.9	32.2	0.0	25.1	31.3	0.0	27.1
Incr Delay (d2), s/veh	13.6	1.3	1.3	15.0	0.9	0.9	0.3	0.0	0.3	1.6	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.1	5.2	1.4	3.9	4.0	0.7	0.0	2.1	3.7	0.0	4.5
LnGrp Delay(d),s/veh	52.7	11.6	11.6	53.2	9.7	9.7	32.6	0.0	25.4	32.9	0.0	28.3
LnGrp LOS	D	B	B	D	A	A	C		C	C		C
Approach Vol, veh/h		778			706			149			390	
Approach Delay, s/veh		12.4			12.9			27.1			30.2	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	49.1		23.5	6.0	51.0		23.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	42.5		33.5	6.5	46.5		33.5
Max Q Clear Time (g_c+I1), s	4.6	12.3		13.8	2.8	9.9		17.2
Green Ext Time (p_c), s	0.0	5.4		0.7	0.0	4.5		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.912				0.964	
Flt Protected	0.983		0.950			
Satd. Flow (prot)	1524	0	1615	1800	1735	0
Flt Permitted	0.983		0.950			
Satd. Flow (perm)	1524	0	1615	1800	1735	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	103				23	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	59	111	117	159	233	84
Future Volume (vph)	59	111	117	159	233	84
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	82	154	163	221	324	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	0	163	221	441	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	59	117	159	233
Future Volume (vph)	59	117	159	233
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	28.6	22.4	61.4	39.0
Total Split (%)	31.8%	24.9%	68.2%	43.3%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	24.6	12.5	40.3	23.1
Actuated g/C Ratio	0.33	0.17	0.54	0.31
v/c Ratio	0.41	0.60	0.23	0.79
Control Delay	15.7	39.6	8.7	33.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.7	39.6	8.7	33.4
LOS	B	D	A	C
Approach Delay	15.7		21.8	33.4
Approach LOS	B		C	C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 74.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 25.3	Intersection LOS: C
Intersection Capacity Utilization 48.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.

Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	236	163	221	441
v/c Ratio	0.41	0.60	0.23	0.79
Control Delay	15.7	39.6	8.7	33.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	15.7	39.6	8.7	33.4
Queue Length 50th (ft)	44	69	48	171
Queue Length 95th (ft)	88	113	60	212
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	575	398	1413	838
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.41	0.41	0.16	0.53

Intersection Summary

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	59	111	117	159	233	84
Future Volume (veh/h)	59	111	117	159	233	84
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	82	154	162	221	324	117
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	189	355	202	901	389	141
Arrive On Green	0.36	0.36	0.12	0.50	0.31	0.31
Sat Flow, veh/h	520	976	1619	1800	1263	456
Grp Volume(v), veh/h	237	0	162	221	0	441
Grp Sat Flow(s),veh/h/ln	1502	0	1619	1800	0	1719
Q Serve(g_s), s	7.9	0.0	6.5	4.6	0.0	15.8
Cycle Q Clear(g_c), s	7.9	0.0	6.5	4.6	0.0	15.8
Prop In Lane	0.35	0.65	1.00			0.27
Lane Grp Cap(c), veh/h	546	0	202	901	0	530
V/C Ratio(X)	0.43	0.00	0.80	0.25	0.00	0.83
Avail Cap(c_a), veh/h	546	0	437	1545	0	895
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	28.2	9.4	0.0	21.4
Incr Delay (d2), s/veh	2.5	0.0	7.2	0.1	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.3	2.3	0.0	8.0
LnGrp Delay(d),s/veh	18.5	0.0	35.4	9.6	0.0	24.8
LnGrp LOS	B		D	A		C
Approach Vol, veh/h	237			383	441	
Approach Delay, s/veh	18.5			20.5	24.8	
Approach LOS	B			C	C	

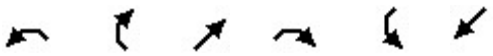
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				37.7		28.6	12.8	24.9
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				56.9		24.1	17.9	34.5
Max Q Clear Time (g_c+I1), s				6.6		9.9	8.5	17.8
Green Ext Time (p_c), s				1.4		0.6	0.3	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C

Notes

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.910		0.997			
Flt Protected	0.984				0.950	
Satd. Flow (prot)	1701	0	1894	0	1805	1900
Flt Permitted	0.984				0.950	
Satd. Flow (perm)	1701	0	1894	0	1805	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	2	4	325	8	69	286
Future Volume (vph)	2	4	325	8	69	286
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	2	4	353	9	75	311
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	0	362	0	75	311

Intersection Summary

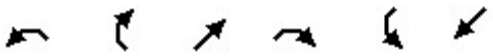
Intersection	
Int Delay, s/veh	7.1

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	2	4	325	8	69	286
Future Vol, veh/h	2	4	325	8	69	286
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	4	353	9	75	311

Major/Minor	Minor2		Major2	
Conflicting Flow All	461	311	0	0
Stage 1	461	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	500	734	-	-
Stage 1	569	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	734	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

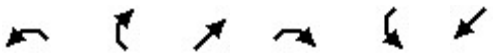
Approach	NE	SW
HCM Control Delay, s	14.6	
HCM LOS	B	

Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	734	-	-
HCM Lane V/C Ratio	0.493	-	-
HCM Control Delay (s)	14.6	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	2.8	-	-



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.865	0.997			
Flt Protected						
Satd. Flow (prot)	0	1644	1894	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1644	1894	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	4	321	8	0	355
Future Volume (vph)	0	4	321	8	0	355
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	4	349	9	0	386
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	4	358	0	0	386

Intersection Summary

Intersection	
Int Delay, s/veh	0.1

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	4	321	8	0	355
Future Vol, veh/h	0	4	321	8	0	355
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	4	349	9	0	386

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	354	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	694	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	694	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	10.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	694	-
HCM Lane V/C Ratio	-	-	0.006	-
HCM Control Delay (s)	-	-	10.2	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt						0.850						0.850
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1615	0	1615	0	1530	1615	1800	0	1615	1800	1530
Flt Permitted		0.950		0.950			0.249			0.446		
Satd. Flow (perm)	0	1615	0	1615	0	1530	423	1800	0	758	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						88						570
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

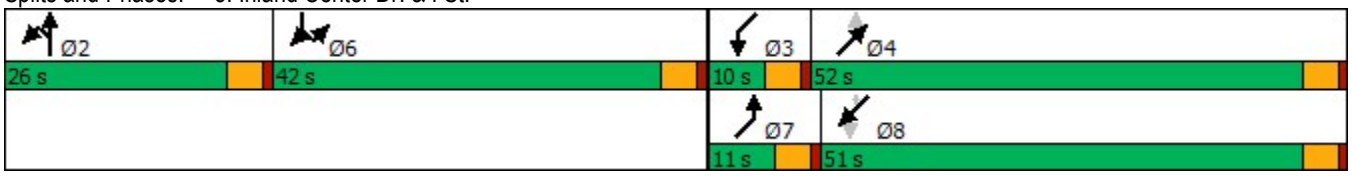
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1	0	0	217	0	32	54	271	1	4	323	450
Future Volume (vph)	1	0	0	217	0	32	54	271	1	4	323	450
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1	0	0	275	0	41	68	343	1	5	409	570
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	275	0	41	68	344	0	5	409	570

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Configurations								
Traffic Volume (vph)	0	217	32	54	271	4	323	450
Future Volume (vph)	0	217	32	54	271	4	323	450
Turn Type	NA	Prot	Prot	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	2	6	6	7	4	3	8	
Permitted Phases				4		8		8
Detector Phase	2	6	6	7	4	3	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	26.0	42.0	42.0	11.0	52.0	10.0	51.0	51.0
Total Split (%)	20.0%	32.3%	32.3%	8.5%	40.0%	7.7%	39.2%	39.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	22.7	22.6	22.6	38.6	37.6	35.0	30.9	30.9
Actuated g/C Ratio	0.23	0.23	0.23	0.39	0.38	0.35	0.31	0.31
v/c Ratio	0.00	0.75	0.10	0.28	0.50	0.02	0.73	0.66
Control Delay	41.0	50.3	0.5	21.8	27.1	18.8	39.3	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	50.3	0.5	21.8	27.1	18.8	39.3	6.3
LOS	D	D	A	C	C	B	D	A
Approach Delay	41.0				26.2		20.1	
Approach LOS	D				C		C	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 98.7	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 26.0	Intersection LOS: C
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Group Flow (vph)	1	275	41	68	344	5	409	570
v/c Ratio	0.00	0.75	0.10	0.28	0.50	0.02	0.73	0.66
Control Delay	41.0	50.3	0.5	21.8	27.1	18.8	39.3	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	50.3	0.5	21.8	27.1	18.8	39.3	6.3
Queue Length 50th (ft)	1	164	0	25	152	2	230	0
Queue Length 95th (ft)	6	251	0	53	266	9	326	24
Internal Link Dist (ft)	133				59		387	
Turn Bay Length (ft)				110		50		
Base Capacity (vph)	371	648	666	248	921	319	895	1047
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.42	0.06	0.27	0.37	0.02	0.46	0.54

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	217	0	32	54	271	1	4	323	450
Future Volume (veh/h)	1	0	0	217	0	32	54	271	1	4	323	450
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	0	0	275	0	41	68	343	1	5	409	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	642	0	0	0	0	0	306	623	2	326	531	451
Arrive On Green	0.40	0.00	0.00	0.00	0.00	0.00	0.06	0.35	0.35	0.01	0.30	0.00
Sat Flow, veh/h	1619	0	0		0		1619	1794	5	1619	1800	1530
Grp Volume(v), veh/h	1	0	0		0.0		68	0	344	5	409	0
Grp Sat Flow(s),veh/h/ln	1619	0	0				1619	0	1799	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.0				1.5	0.0	8.4	0.1	11.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				1.5	0.0	8.4	0.1	11.2	0.0
Prop In Lane	1.00		0.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	642	0	0				306	0	625	326	531	451
V/C Ratio(X)	0.00	0.00	0.00				0.22	0.00	0.55	0.02	0.77	0.00
Avail Cap(c_a), veh/h	642	0	0				405	0	1577	479	1545	1313
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.9	0.0	0.0				12.9	0.0	14.3	13.5	17.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.4	0.0	0.8	0.0	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.7	0.0	4.2	0.1	5.9	0.0
LnGrp Delay(d),s/veh	9.9	0.0	0.0				13.3	0.0	15.0	13.6	19.8	0.0
LnGrp LOS	A						B		B	B	B	
Approach Vol, veh/h		1						412			414	
Approach Delay, s/veh		9.9						14.7			19.8	
Approach LOS		A						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		26.0	4.9	23.3			7.7	20.5
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		21.5	5.5	47.5			6.5	46.5
Max Q Clear Time (g_c+I1), s		2.0	2.1	10.4			3.5	13.2
Green Ext Time (p_c), s		0.0	0.0	2.3			0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.893			0.997			0.988	
Flt Protected		0.961			0.994		0.950			0.950		
Satd. Flow (prot)	0	1782	0	0	1687	0	1805	1894	0	1805	3567	0
Flt Permitted		0.961			0.994		0.950			0.950		
Satd. Flow (perm)	0	1782	0	0	1687	0	1805	1894	0	1805	3567	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	85	0	18	5	3	30	23	449	8	16	777	65
Future Volume (vph)	85	0	18	5	3	30	23	449	8	16	777	65
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	106	0	23	6	4	38	29	561	10	20	971	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	48	0	29	571	0	20	1052	0

Intersection Summary

Intersection	
Int Delay, s/veh	40.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↔			↔		↰	↱		↰	↑↱	
Traffic Vol, veh/h	85	0	18	5	3	30	23	449	8	16	777	65
Future Vol, veh/h	85	0	18	5	3	30	23	449	8	16	777	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	106	0	23	6	4	38	29	561	10	20	971	81

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1697	1681	526	1150	1716	566	1052	0	0	571	0	0
Stage 1	1052	1052	-	624	624	-	-	-	-	-	-	-
Stage 2	645	629	-	526	1092	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 67	96	502	166	91	528	669	-	-	1012	-	-
Stage 1	246	306	-	477	481	-	-	-	-	-	-	-
Stage 2	464	478	-	508	293	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 57	90	502	151	85	528	669	-	-	1012	-	-
Mov Cap-2 Maneuver	~ 57	90	-	151	85	-	-	-	-	-	-	-
Stage 1	235	300	-	456	460	-	-	-	-	-	-	-
Stage 2	409	457	-	476	287	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s$	565.2	19.1	0.5	0.2
HCM LOS	F	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	669	-	-	303	67	1012	-	-
HCM Lane V/C Ratio	0.043	-	-	0.157	1.922	0.02	-	-
HCM Control Delay (s)	10.6	-	-	19.1	$ 565.2	8.6	-	-
HCM Lane LOS	B	-	-	C	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	11.8	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.929				0.850			
Flt Protected				0.950	0.999					0.950		
Satd. Flow (prot)	0	0	0	1470	2871	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.999					0.950		
Satd. Flow (perm)	0	0	0	1470	2871	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									264			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

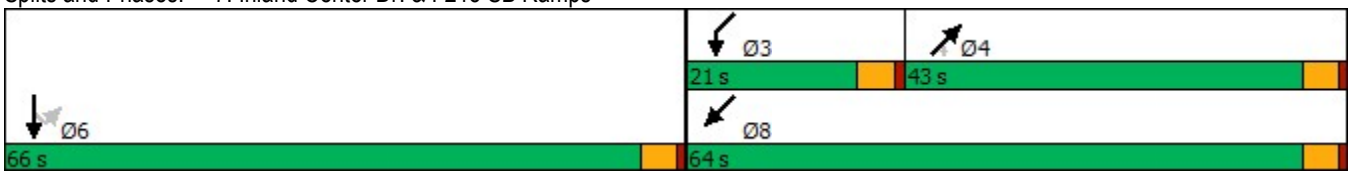
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	128	311	288	0	306	251	123	568	0
Future Volume (vph)	0	0	0	128	311	288	0	306	251	123	568	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	154	375	347	0	369	302	148	684	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	139	737	0	0	369	302	148	684	0

Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	128	311	306	251	123	568
Future Volume (vph)	128	311	306	251	123	568
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	66.0	66.0	43.0	43.0	21.0	64.0
Total Split (%)	50.8%	50.8%	33.1%	33.1%	16.2%	49.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	61.8	61.8	14.9	14.9	10.4	29.8
Actuated g/C Ratio	0.61	0.61	0.15	0.15	0.10	0.30
v/c Ratio	0.15	0.42	0.51	0.67	0.49	0.68
Control Delay	10.1	11.9	41.9	15.6	48.9	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	10.1	11.9	41.9	15.6	48.9	34.6
LOS	B	B	D	B	D	C
Approach Delay		11.6	30.1			37.1
Approach LOS		B	C			D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 100.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 25.7	Intersection LOS: C
Intersection Capacity Utilization 68.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	139	737	369	302	148	684
v/c Ratio	0.15	0.42	0.51	0.67	0.49	0.68
Control Delay	10.1	11.9	41.9	15.6	48.9	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	10.1	11.9	41.9	15.6	48.9	34.6
Queue Length 50th (ft)	38	123	80	22	46	201
Queue Length 95th (ft)	80	192	105	79	76	234
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	902	1762	1888	750	485	2031
Starvation Cap Reductn	0	0	0	0	0	360
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.42	0.20	0.40	0.31	0.41

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	128	311	288	0	306	251	123	568	0
Future Volume (veh/h)	0	0	0	128	311	288	0	306	251	123	568	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				154	375	347	0	369	302	148	684	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				922	968	823	0	1161	362	205	1188	0
Arrive On Green				0.57	0.57	0.57	0.00	0.24	0.24	0.07	0.35	0.00
Sat Flow, veh/h				1619	1700	1445	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				154	375	347	0	369	302	148	684	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1445	0	1638	1530	1478	1710	0
Q Serve(g_s), s				4.9	13.2	14.7	0.0	6.7	20.3	5.3	17.6	0.0
Cycle Q Clear(g_c), s				4.9	13.2	14.7	0.0	6.7	20.3	5.3	17.6	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				922	968	823	0	1161	362	205	1188	0
V/C Ratio(X)				0.17	0.39	0.42	0.00	0.32	0.84	0.72	0.58	0.00
Avail Cap(c_a), veh/h				922	968	823	0	1751	545	452	1884	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				11.1	12.9	13.2	0.0	34.1	39.2	49.2	28.8	0.0
Incr Delay (d2), s/veh				0.4	1.2	1.6	0.0	0.2	6.9	4.8	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.3	6.5	6.2	0.0	3.1	9.3	2.3	8.3	0.0
LnGrp Delay(d),s/veh				11.5	14.0	14.8	0.0	34.2	46.2	54.0	29.2	0.0
LnGrp LOS				B	B	B		C	D	D	C	
Approach Vol, veh/h					876			671			832	
Approach Delay, s/veh					13.9			39.6			33.6	
Approach LOS					B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			12.0	30.0		66.0		42.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			16.5	38.5		61.5		59.5
Max Q Clear Time (g_c+I1), s			7.3	22.3		16.7		19.6
Green Ext Time (p_c), s			0.3	3.2		6.1		5.5

Intersection Summary	
HCM 2010 Ctrl Delay	28.0
HCM 2010 LOS	C

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.978	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1672	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1672	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9	396									50
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

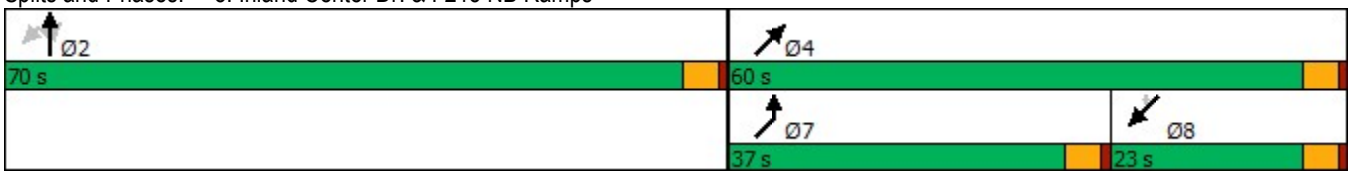
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	441	349	414	0	0	0	191	268	0	0	251	18
Future Volume (vph)	441	349	414	0	0	0	191	268	0	0	251	18
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	551	436	518	0	0	0	239	335	0	0	314	23
Shared Lane Traffic (%)			14%									
Lane Group Flow (vph)	551	509	445	0	0	0	239	335	0	0	314	23

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	441	349	414	191	268	251	18
Future Volume (vph)	441	349	414	191	268	251	18
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	70.0	70.0	70.0	37.0	60.0	23.0	23.0
Total Split (%)	53.8%	53.8%	53.8%	28.5%	46.2%	17.7%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	65.8	65.8	65.8	21.7	37.5	11.3	11.3
Actuated g/C Ratio	0.59	0.59	0.59	0.19	0.33	0.10	0.10
v/c Ratio	0.58	0.52	0.44	0.77	0.29	0.51	0.12
Control Delay	19.5	17.5	3.8	59.5	27.8	51.6	3.6
Queue Delay	0.0	0.0	0.0	0.5	0.1	0.0	0.0
Total Delay	19.5	17.5	3.8	60.0	27.9	51.6	3.6
LOS	B	B	A	E	C	D	A
Approach Delay		14.1			41.3	48.3	
Approach LOS		B			D	D	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 112.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 25.4	Intersection LOS: C
Intersection Capacity Utilization 68.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	551	509	445	239	335	314	23
v/c Ratio	0.58	0.52	0.44	0.77	0.29	0.51	0.12
Control Delay	19.5	17.5	3.8	59.5	27.8	51.6	3.6
Queue Delay	0.0	0.0	0.0	0.5	0.1	0.0	0.0
Total Delay	19.5	17.5	3.8	60.0	27.9	51.6	3.6
Queue Length 50th (ft)	233	210	14	164	93	63	0
Queue Length 95th (ft)	364	332	46	225	112	84	2
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	945	983	1015	469	1697	1024	295
Starvation Cap Reductn	0	0	0	50	587	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.52	0.44	0.57	0.30	0.31	0.08

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	441	349	414	0	0	0	191	268	0	0	251	18
Future Volume (veh/h)	441	349	414	0	0	0	191	268	0	0	251	18
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	551	498	477				239	335	0	0	314	22
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	1005	1117	950				273	1005	0	0	513	127
Arrive On Green	0.62	0.62	0.62				0.17	0.29	0.00	0.00	0.08	0.08
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	551	498	477				239	335	0	0	314	22
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	20.6	15.3	18.1				15.2	8.1	0.0	0.0	5.2	1.4
Cycle Q Clear(g_c), s	20.6	15.3	18.1				15.2	8.1	0.0	0.0	5.2	1.4
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	1005	1117	950				273	1005	0	0	513	127
V/C Ratio(X)	0.55	0.45	0.50				0.88	0.33	0.00	0.00	0.61	0.17
Avail Cap(c_a), veh/h	1005	1117	950				499	1799	0	0	1086	268
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	10.5	11.0				42.8	29.2	0.0	0.0	46.7	45.0
Incr Delay (d2), s/veh	2.2	1.3	1.9				8.8	0.2	0.0	0.0	1.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	8.0	8.1				7.4	3.8	0.0	0.0	2.2	0.6
LnGrp Delay(d),s/veh	13.6	11.8	12.9				51.6	29.4	0.0	0.0	47.9	45.7
LnGrp LOS	B	B	B				D	C			D	D
Approach Vol, veh/h		1526						574			336	
Approach Delay, s/veh		12.8						38.6			47.8	
Approach LOS		B						D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		70.0		35.5			22.3	13.2
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		65.5		55.5			32.5	18.5
Max Q Clear Time (g_c+I1), s		22.6		10.1			17.2	7.2
Green Ext Time (p_c), s		8.7		2.4			0.6	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	23.7
HCM 2010 LOS	C

Notes

Scenario Report

Scenario:	OY+P_AM
Command:	OY+P_AM
Volume:	OY+P_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.319
Loss Time (sec):	0	Average Delay (sec/veh):	15.0
Optimal Cycle:	27	Level Of Service:	B

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	13	546	86	43	495	48	29	91	3	139	119	66
Growth 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
Initial Bse:	13	546	86	43	495	48	29	91	3	139	119	66
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:	13	546	86	43	495	48	29	91	3	139	119	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	546	86	43	495	48	29	91	3	139	119	66
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:	13	546	86	43	495	48	29	91	3	139	119	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.51	1.00	1.00	0.63	0.95	0.95
Lanes:	1.00	1.73	0.27	1.00	1.82	0.18	1.00	0.97	0.03	1.00	0.64	0.36
Final Sat.:	1805	3056	481	1805	3248	315	965	1830	60	1191	1156	641
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.18	0.02	0.15	0.15	0.03	0.05	0.05	0.12	0.10	0.10
Crit Moves:		****		****						****		
Green/Cycle:	0.03	0.56	0.56	0.07	0.61	0.61	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.25	0.32	0.32	0.32	0.25	0.25	0.08	0.14	0.14	0.32	0.28	0.28
Uniform Del:	47.5	11.8	11.8	43.9	9.2	9.2	20.7	21.2	21.2	22.8	22.4	22.4
IncremntDel:	2.6	0.1	0.1	1.4	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	50.1	11.9	11.9	45.2	9.2	9.2	20.8	21.3	21.3	23.2	22.7	22.7
User DelAdj:	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:	50.1	11.9	11.9	45.2	9.2	9.2	20.8	21.3	21.3	23.2	22.7	22.7
LOS by Move:	D	B	B	D	A	A	C	C	C	C	C	C
HCM2kAvgQ:	1	5	5	2	4	4	1	2	2	3	4	4

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.346
Loss Time (sec):	0	Average Delay (sec/veh):	19.0
Optimal Cycle:	28	Level Of Service:	B

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	59	0	111	117	159	0	0	233	84
Growth 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
Initial Bse:	0	0	0	59	0	111	117	159	0	0	233	84
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	59	0	111	117	159	0	0	233	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	59	0	111	117	159	0	0	233	84
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	59	0	111	117	159	0	0	233	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	1.00	0.83	0.95	1.00	1.00	1.00	0.96	0.96
Lanes:	0.00	0.00	0.00	0.35	0.00	0.65	1.00	1.00	0.00	0.00	0.74	0.26
Final Sat.:	0	0	0	548	0	1031	1805	1900	0	0	1346	485
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.11	0.06	0.08	0.00	0.00	0.17	0.17
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.31	0.00	0.31	0.19	0.69	0.00	0.00	0.50	0.50
Volume/Cap:	0.00	0.00	0.00	0.35	0.00	0.35	0.35	0.12	0.00	0.00	0.35	0.35
Uniform Del:	0.0	0.0	0.0	26.6	0.0	26.6	35.3	5.3	0.0	0.0	15.1	15.1
IncremntDel:	0.0	0.0	0.0	0.4	0.0	0.4	0.6	0.0	0.0	0.0	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	27.0	0.0	27.0	35.9	5.3	0.0	0.0	15.3	15.3
User DelAdj:	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	27.0	0.0	27.0	35.9	5.3	0.0	0.0	15.3	15.3
LOS by Move:	A	A	A	C	A	C	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	4	3	2	0	0	6	6

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.179
Loss Time (sec):	0	Average Delay (sec/veh):	0.5
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	0 1	0	1	0 1 0
Volume Module:												
Base Vol:	2	0	4	0	0	0	0	325	8	69	286	0
Growth 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
Initial Bse:	2	0	4	0	0	0	0	325	8	69	286	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:	2	0	4	0	0	0	0	325	8	69	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	4	0	0	0	0	325	8	69	286	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:	2	0	4	0	0	0	0	325	8	69	286	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.66	1.00	1.00
Lanes:	0.33	0.00	0.67	0.00	0.00	0.00	0.00	0.98	0.02	1.00	1.00	0.00
Final Sat.:	567	0	1134	0	0	0	0	1849	46	1254	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.06	0.15	0.00
Crit Moves:	****							****				
Green/Cycle:	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.98	0.98	0.98	0.98	0.00
Volume/Cap:	0.18	0.00	0.18	0.00	0.00	0.00	0.00	0.18	0.18	0.06	0.15	0.00
Uniform Del:	48.2	0.0	48.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	2.6	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	50.8	0.0	50.8	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
User DelAdj:	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:	50.8	0.0	50.8	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
LOS by Move:	D	A	D	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.189
Loss Time (sec): 0 Average Delay (sec/veh): 0.4
Optimal Cycle: 23 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	1	0
Volume Module:												
Base Vol:	0	0	4	0	0	0	0	321	8	0	355	0
Growth 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
Initial Bse:	0	0	4	0	0	0	0	321	8	0	355	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	0	4	0	0	0	0	321	8	0	355	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	4	0	0	0	0	321	8	0	355	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	0	4	0	0	0	0	321	8	0	355	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.98	0.02	0.00	1.00	0.00
Final Sat.:	0	0	1644	0	0	0	0	1848	46	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.19	0.00
Crit Moves:			****								****	
Green/Cycle:	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.99	0.99	0.00	0.99	0.00
Volume/Cap:	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.19	0.00
Uniform Del:	0.0	0.0	48.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	53.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
User DelAdj:	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	53.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
LOS by Move:	A	A	D	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	0	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.429
Loss Time (sec): 0 Average Delay (sec/veh): 11.5
Optimal Cycle: 40 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	1	0	1
Volume Module:												
Base Vol:	1	0	0	217	0	32	54	271	1	4	323	450
Growth 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
Initial Bse:	1	0	0	217	0	32	54	271	1	4	323	450
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:	1	0	0	217	0	32	54	271	1	4	323	450
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	217	0	32	54	271	1	4	323	450
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:	1	0	0	217	0	32	54	271	1	4	323	450
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	0.95	1.00	0.85
Lanes:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1805	0	0	1805	0	1615	1805	1891	7	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.02	0.03	0.14	0.14	0.00	0.17	0.28
Crit Moves:	****			****			****					****
Green/Cycle:	0.00	0.00	0.00	0.28	0.00	0.28	0.72	0.71	0.71	0.66	0.65	0.65
Volume/Cap:	0.43	0.00	0.00	0.43	0.00	0.07	0.07	0.20	0.20	0.01	0.26	0.43
Uniform Del:	49.9	0.0	0.0	29.5	0.0	26.4	4.4	5.0	5.0	5.8	7.4	8.5
IncremntDel:	93.7	0.0	0.0	0.6	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	143.6	0.0	0.0	30.0	0.0	26.5	4.4	5.1	5.1	5.8	7.5	8.8
User DelAdj:	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:	143.6	0.0	0.0	30.0	0.0	26.5	4.4	5.1	5.1	5.8	7.5	8.8
LOS by Move:	F	A	A	C	A	C	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	6	0	1	1	3	3	0	4	7

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.313
Loss Time (sec): 0 Average Delay (sec/veh): 6.2
Optimal Cycle: 21 Level Of Service: A

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	1! 0	0	1	0 0 1	0	1	0 1 0
Volume Module:												
Base Vol:	5	3	30	85	0	18	23	449	8	16	777	65
Growth 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
Initial Bse:	5	3	30	85	0	18	23	449	8	16	777	65
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:	5	3	30	85	0	18	23	449	8	16	777	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	3	30	85	0	18	23	449	8	16	777	65
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:	5	3	30	85	0	18	23	449	8	16	777	65
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.76	1.00	0.76	0.31	1.00	1.00	0.43	0.94	0.94
Lanes:	0.13	0.08	0.79	0.83	0.00	0.17	1.00	0.98	0.02	1.00	1.85	0.15
Final Sat.:	218	131	1307	1191	0	252	595	1861	33	823	3291	275
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.07	0.00	0.07	0.04	0.24	0.24	0.02	0.24	0.24
Crit Moves:				****				****				
Green/Cycle:	0.23	0.23	0.23	0.23	0.00	0.23	0.77	0.77	0.77	0.77	0.77	0.77
Volume/Cap:	0.10	0.10	0.10	0.31	0.00	0.31	0.05	0.31	0.31	0.03	0.31	0.31
Uniform Del:	30.5	30.5	30.5	32.1	0.0	32.1	2.7	3.4	3.4	2.7	3.4	3.4
IncremntDel:	0.1	0.1	0.1	0.5	0.0	0.5	0.0	0.1	0.1	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	30.6	30.6	30.6	32.6	0.0	32.6	2.8	3.6	3.6	2.7	3.5	3.5
User DelAdj:	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:	30.6	30.6	30.6	32.6	0.0	32.6	2.8	3.6	3.6	2.7	3.5	3.5
LOS by Move:	C	C	C	C	A	C	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	3	0	3	0	4	4	0	4	4

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.338
Loss Time (sec): 0 Average Delay (sec/veh): 31.8
Optimal Cycle: 31 Level Of Service: C

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			Protected			Protected		
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	0 0 0	1	1	0 1 0	0	0	3 0 1	2	0	2 0 0
Volume Module:												
Base Vol:	0	0	0	128	311	288	0	306	251	123	568	0
Growth 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
Initial Bse:	0	0	0	128	311	288	0	306	251	123	568	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	0	0	128	311	288	0	306	251	123	568	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	128	311	288	0	306	251	123	568	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	0	0	128	311	288	0	306	251	123	568	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.87	0.87	0.87	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.04	0.96	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1654	1718	1591	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.18	0.18	0.00	0.06	0.16	0.04	0.16	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.46	0.46	0.46	0.00	0.15	0.15	0.40	0.54	0.00
Volume/Cap:	0.00	0.00	0.00	0.17	0.40	0.40	0.00	0.40	1.05	0.09	0.29	0.00
Uniform Del:	0.0	0.0	0.0	16.1	18.1	18.1	0.0	38.5	42.6	18.9	12.3	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.3	70.9	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	16.1	18.2	18.2	0.0	38.9	113.4	18.9	12.4	0.0
User DelAdj:	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	16.1	18.2	18.2	0.0	38.9	113.4	18.9	12.4	0.0
LOS by Move:	A	A	A	B	B	B	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	2	6	6	0	3	13	1	5	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.415
Loss Time (sec):	0	Average Delay (sec/veh):	17.3
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0	0 0	0	1	0 2	0 0	0	0 4 0 1
Volume Module:												
Base Vol:	441	349	414	0	0	0	191	268	0	0	251	18
Growth 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
Initial Bse:	441	349	414	0	0	0	191	268	0	0	251	18
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:	441	349	414	0	0	0	191	268	0	0	251	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	441	349	414	0	0	0	191	268	0	0	251	18
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:	441	349	414	0	0	0	191	268	0	0	251	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.91	1.09	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1597	1895	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.27	0.22	0.22	0.00	0.00	0.00	0.11	0.07	0.00	0.00	0.04	0.01
Crit Moves:	****						****				****	
Green/Cycle:	0.66	0.66	0.66	0.00	0.00	0.00	0.25	0.34	0.00	0.00	0.09	0.09
Volume/Cap:	0.42	0.33	0.33	0.00	0.00	0.00	0.42	0.22	0.00	0.00	0.42	0.13
Uniform Del:	8.1	7.5	7.5	0.0	0.0	0.0	31.0	23.4	0.0	0.0	43.2	42.1
IncremntDel:	0.3	0.1	0.1	0.0	0.0	0.0	0.6	0.1	0.0	0.0	0.5	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	8.3	7.6	7.6	0.0	0.0	0.0	31.7	23.5	0.0	0.0	43.7	42.5
User DelAdj:	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	7.6	7.6	0.0	0.0	0.0	31.7	23.5	0.0	0.0	43.7	42.5
LOS by Move:	A	A	A	A	A	A	C	C	A	A	D	D
HCM2kAvgQ:	6	5	5	0	0	0	5	3	0	0	2	1

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

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Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.980			0.982			0.992			0.951	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3352	0	1615	3358	0	1615	1786	0	1615	1712	0
Flt Permitted	0.950			0.950			0.323			0.547		
Satd. Flow (perm)	1615	3352	0	1615	3358	0	549	1786	0	930	1712	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			26			4			33	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

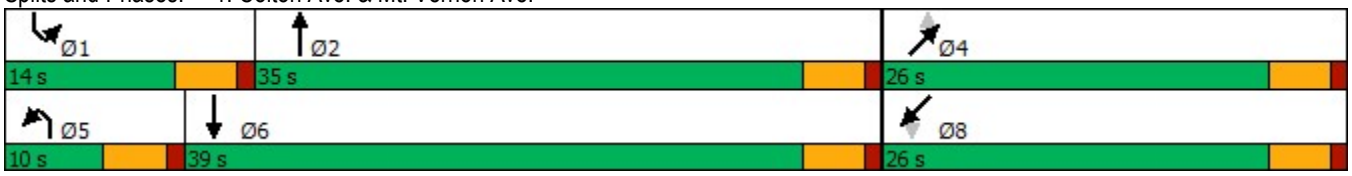
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	22	780	122	109	519	71	92	176	10	148	199	97
Future Volume (vph)	22	780	122	109	519	71	92	176	10	148	199	97
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	23	830	130	116	552	76	98	187	11	157	212	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	960	0	116	628	0	98	198	0	157	315	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	22	780	109	519	92	176	148	199
Future Volume (vph)	22	780	109	519	92	176	148	199
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	35.0	14.0	39.0	26.0	26.0	26.0	26.0
Total Split (%)	13.3%	46.7%	18.7%	52.0%	34.7%	34.7%	34.7%	34.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.6	32.1	8.6	38.9	16.3	16.3	16.3	16.3
Actuated g/C Ratio	0.08	0.47	0.13	0.57	0.24	0.24	0.24	0.24
v/c Ratio	0.17	0.60	0.57	0.33	0.75	0.46	0.70	0.72
Control Delay	35.5	17.0	42.0	9.7	59.0	25.5	42.0	31.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	17.0	42.0	9.7	59.0	25.5	42.0	31.6
LOS	D	B	D	A	E	C	D	C
Approach Delay		17.5		14.7		36.6		35.1
Approach LOS		B		B		D		D

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 68	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 22.3	Intersection LOS: C
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.



Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	23	960	116	628	98	198	157	315
v/c Ratio	0.17	0.60	0.57	0.33	0.75	0.46	0.70	0.72
Control Delay	35.5	17.0	42.0	9.7	59.0	25.5	42.0	31.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	17.0	42.0	9.7	59.0	25.5	42.0	31.6
Queue Length 50th (ft)	10	165	48	55	39	72	62	112
Queue Length 95th (ft)	32	250	#111	132	#110	128	#128	194
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	132	1595	229	1931	176	577	299	573
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.60	0.51	0.33	0.56	0.34	0.53	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	22	780	122	109	519	71	92	176	10	148	199	97
Future Volume (veh/h)	22	780	122	109	519	71	92	176	10	148	199	97
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	23	830	130	116	552	76	98	187	11	157	212	103
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	42	1275	200	144	1492	205	226	488	29	318	332	161
Arrive On Green	0.03	0.43	0.43	0.09	0.49	0.49	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1619	2964	464	1619	3022	415	968	1683	99	1077	1145	556
Grp Volume(v), veh/h	23	479	481	116	312	316	98	0	198	157	0	315
Grp Sat Flow(s),veh/h/ln	1619	1710	1718	1619	1710	1727	968	0	1783	1077	0	1702
Q Serve(g_s), s	1.0	15.7	15.7	5.0	8.0	8.0	7.0	0.0	6.3	9.7	0.0	11.4
Cycle Q Clear(g_c), s	1.0	15.7	15.7	5.0	8.0	8.0	18.4	0.0	6.3	16.0	0.0	11.4
Prop In Lane	1.00		0.27	1.00		0.24	1.00		0.06	1.00		0.33
Lane Grp Cap(c), veh/h	42	736	739	144	844	853	226	0	517	318	0	494
V/C Ratio(X)	0.55	0.65	0.65	0.80	0.37	0.37	0.43	0.00	0.38	0.49	0.00	0.64
Avail Cap(c_a), veh/h	126	736	739	217	844	853	239	0	541	333	0	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.1	16.0	16.0	31.7	11.1	11.1	29.9	0.0	20.1	26.5	0.0	21.9
Incr Delay (d2), s/veh	11.0	4.4	4.4	12.1	1.2	1.2	1.3	0.0	0.5	1.2	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	8.2	8.3	2.7	4.0	4.1	1.9	0.0	3.1	3.0	0.0	5.7
LnGrp Delay(d),s/veh	45.1	20.4	20.4	43.8	12.4	12.4	31.2	0.0	20.6	27.6	0.0	24.4
LnGrp LOS	D	C	C	D	B	B	C		C	C		C
Approach Vol, veh/h		983			744			296			472	
Approach Delay, s/veh		21.0			17.3			24.1			25.5	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	35.0		25.1	6.3	39.5		25.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.5	30.5		21.5	5.5	34.5		21.5
Max Q Clear Time (g_c+I1), s	7.0	17.7		20.4	3.0	10.0		18.0
Green Ext Time (p_c), s	0.1	5.1		0.2	0.0	4.1		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.931				0.978	
Flt Protected	0.976		0.950			
Satd. Flow (prot)	1545	0	1615	1800	1760	0
Flt Permitted	0.976		0.950			
Satd. Flow (perm)	1545	0	1615	1800	1760	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	45				13	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

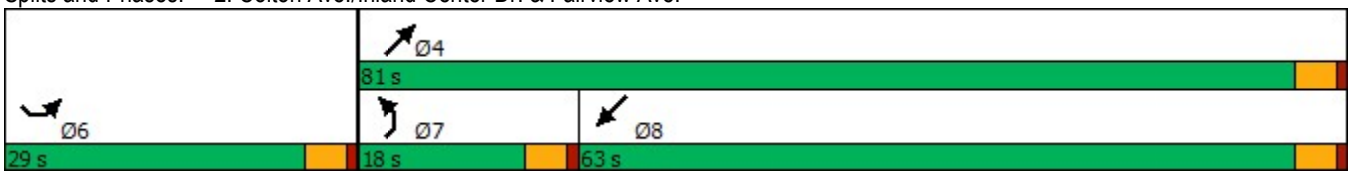
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	46	49	49	373	382	73
Future Volume (vph)	46	49	49	373	382	73
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	51	54	54	414	424	81
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	0	54	414	505	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	46	49	373	382
Future Volume (vph)	46	49	373	382
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	29.0	18.0	81.0	63.0
Total Split (%)	26.4%	16.4%	73.6%	57.3%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	25.8	8.0	32.5	25.4
Actuated g/C Ratio	0.38	0.12	0.48	0.37
v/c Ratio	0.17	0.28	0.48	0.76
Control Delay	14.0	36.0	12.5	26.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.0	36.0	12.5	26.6
LOS	B	D	B	C
Approach Delay	14.0		15.2	26.6
Approach LOS	B		B	C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 67.8	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 47.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	105	54	414	505
v/c Ratio	0.17	0.28	0.48	0.76
Control Delay	14.0	36.0	12.5	26.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.0	36.0	12.5	26.6
Queue Length 50th (ft)	18	22	103	190
Queue Length 95th (ft)	65	63	157	315
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	616	338	1747	1492
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.16	0.24	0.34

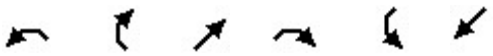
Intersection Summary

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	46	49	49	373	382	73
Future Volume (veh/h)	46	49	49	373	382	73
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	51	54	54	414	424	81
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	283	300	78	850	519	99
Arrive On Green	0.39	0.39	0.05	0.47	0.35	0.35
Sat Flow, veh/h	734	777	1619	1800	1470	281
Grp Volume(v), veh/h	106	0	54	414	0	505
Grp Sat Flow(s),veh/h/ln	1526	0	1619	1800	0	1750
Q Serve(g_s), s	2.9	0.0	2.1	10.0	0.0	16.7
Cycle Q Clear(g_c), s	2.9	0.0	2.1	10.0	0.0	16.7
Prop In Lane	0.48	0.51	1.00			0.16
Lane Grp Cap(c), veh/h	589	0	78	850	0	618
V/C Ratio(X)	0.18	0.00	0.69	0.49	0.00	0.82
Avail Cap(c_a), veh/h	589	0	344	2169	0	1613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	29.7	11.5	0.0	18.7
Incr Delay (d2), s/veh	0.7	0.0	10.3	0.4	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.2	5.0	0.0	8.5
LnGrp Delay(d),s/veh	13.5	0.0	40.0	11.9	0.0	21.4
LnGrp LOS	B		D	B		C
Approach Vol, veh/h	106			468	505	
Approach Delay, s/veh	13.5			15.2	21.4	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				34.5		29.0	7.6	26.9
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				76.5		24.5	13.5	58.5
Max Q Clear Time (g_c+I1), s				12.0		4.9	4.1	18.7
Green Ext Time (p_c), s				2.9		0.2	0.1	3.8

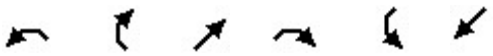
Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.905					
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1694	0	1900	0	1805	1900
Flt Permitted	0.985				0.950	
Satd. Flow (perm)	1694	0	1900	0	1805	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	13	30	429	1	9	536
Future Volume (vph)	13	30	429	1	9	536
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	14	33	466	1	10	583
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	0	467	0	10	583

Intersection Summary

Intersection	
Int Delay, s/veh	21.3

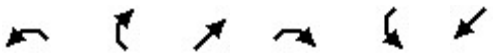
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	13	30	429	1	9	536
Future Vol, veh/h	13	30	429	1	9	536
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	33	466	1	10	583

Major/Minor	Minor2		Major2	
Conflicting Flow All	603	583	0	0
Stage 1	603	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 416	516	-	-
Stage 1	492	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	516	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s	48.2	
HCM LOS	E	

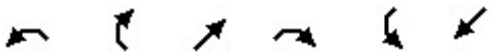
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	516	-	-
HCM Lane V/C Ratio	0.906	-	-
HCM Control Delay (s)	48.2	-	-
HCM Lane LOS	E	-	-
HCM 95th %tile Q(veh)	10.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1644	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1644	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	30	458	1	0	545
Future Volume (vph)	0	30	458	1	0	545
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	33	498	1	0	592
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	33	499	0	0	592

Intersection Summary

Intersection	
Int Delay, s/veh	0.3

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	30	458	1	0	545
Future Vol, veh/h	0	30	458	1	0	545
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	33	498	1	0	592

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	499	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	576	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	576	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	11.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	576	-
HCM Lane V/C Ratio	-	-	0.057	-
HCM Control Delay (s)	-	-	11.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.865				0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1470	0	1615	0	1530	1615	1800	0	1700	1800	1530
Flt Permitted				0.950			0.148					
Satd. Flow (perm)	0	1470	0	1615	0	1530	252	1800	0	1700	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		283				88						346
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

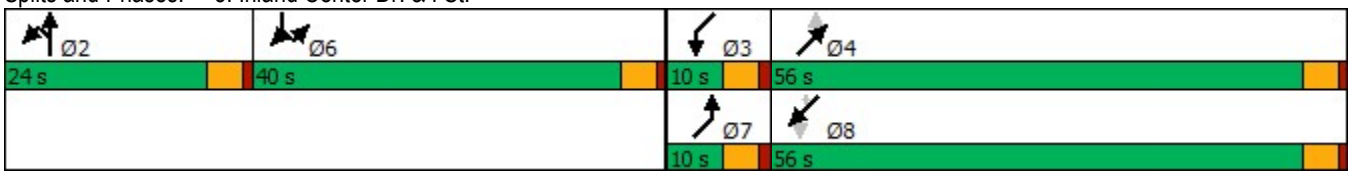
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	1	280	0	57	53	435	0	0	488	335
Future Volume (vph)	0	0	1	280	0	57	53	435	0	0	488	335
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	1	311	0	63	59	483	0	0	542	372
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	311	0	63	59	483	0	0	542	372

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR	Ø3
Lane Configurations								
Traffic Volume (vph)	0	280	57	53	435	488	335	
Future Volume (vph)	0	280	57	53	435	488	335	
Turn Type	NA	Prot	Prot	pm+pt	NA	NA	Perm	
Protected Phases	2	6	6	7	4	8		3
Permitted Phases				4			8	
Detector Phase	2	6	6	7	4	8	8	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5	9.5
Total Split (s)	24.0	40.0	40.0	10.0	56.0	56.0	56.0	10.0
Total Split (%)	18.5%	30.8%	30.8%	7.7%	43.1%	43.1%	43.1%	8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	20.6	25.7	25.7	46.3	46.3	38.9	38.9	
Actuated g/C Ratio	0.19	0.24	0.24	0.43	0.43	0.36	0.36	
v/c Ratio	0.00	0.80	0.14	0.32	0.62	0.83	0.48	
Control Delay	0.0	56.3	4.1	22.7	27.2	43.7	5.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.0	56.3	4.1	22.7	27.2	43.7	5.9	
LOS	A	E	A	C	C	D	A	
Approach Delay					26.7	28.3		
Approach LOS					C	C		

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 106.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 31.8	Intersection LOS: C
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1	311	63	59	483	542	372
v/c Ratio	0.00	0.80	0.14	0.32	0.62	0.83	0.48
Control Delay	0.0	56.3	4.1	22.7	27.2	43.7	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.0	56.3	4.1	22.7	27.2	43.7	5.9
Queue Length 50th (ft)	0	210	0	23	247	344	12
Queue Length 95th (ft)	0	347	19	53	397	538	82
Internal Link Dist (ft)	133				59	387	
Turn Bay Length (ft)				110			
Base Capacity (vph)	511	566	593	183	969	916	948
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.55	0.11	0.32	0.50	0.59	0.39

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	1	280	0	57	53	435	0	0	488	335
Future Volume (veh/h)	0	0	1	280	0	57	53	435	0	0	488	335
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	0	0	1	311	0	63	59	483	0	0	542	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	0	490	0	0	0	292	909	0	396	672	571
Arrive On Green	0.00	0.00	0.34	0.00	0.00	0.00	0.05	0.50	0.00	0.00	0.37	0.00
Sat Flow, veh/h	0	0	1445		0		1619	1800	0	1619	1800	1530
Grp Volume(v), veh/h	0	0	1		0.0		59	483	0	0	542	0
Grp Sat Flow(s),veh/h/ln	0	0	1445				1619	1800	0	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.0				1.2	10.5	0.0	0.0	15.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				1.2	10.5	0.0	0.0	15.5	0.0
Prop In Lane	0.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	490				292	909	0	396	672	571
V/C Ratio(X)	0.00	0.00	0.00				0.20	0.53	0.00	0.00	0.81	0.00
Avail Cap(c_a), veh/h	0	0	490				361	1611	0	548	1611	1369
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	12.6				11.6	9.6	0.0	0.0	16.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.3	0.5	0.0	0.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.5	5.2	0.0	0.0	8.1	0.0
LnGrp Delay(d),s/veh	0.0	0.0	12.6				11.9	10.1	0.0	0.0	18.5	0.0
LnGrp LOS			B				B	B			B	
Approach Vol, veh/h		1						542			542	
Approach Delay, s/veh		12.6						10.3			18.5	
Approach LOS		B						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		24.0	0.0	33.5			7.6	26.0
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.5	5.5	51.5			5.5	51.5
Max Q Clear Time (g_c+I1), s		2.0	0.0	12.5			3.2	17.5
Green Ext Time (p_c), s		0.0	0.0	3.5			0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.905			0.996			0.981	
Flt Protected		0.966			0.991		0.950			0.950		
Satd. Flow (prot)	0	1769	0	0	1704	0	1805	1892	0	1805	3541	0
Flt Permitted		0.966			0.991		0.950			0.950		
Satd. Flow (perm)	0	1769	0	0	1704	0	1805	1892	0	1805	3541	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary

Area Type: Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	86	4	33	8	5	31	16	717	20	29	754	109
Future Volume (vph)	86	4	33	8	5	31	16	717	20	29	754	109
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	92	4	35	9	5	33	17	771	22	31	811	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	0	0	47	0	17	793	0	31	928	0

Intersection Summary

Intersection	
Int Delay, s/veh	40.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	86	4	33	8	5	31	16	717	20	29	754	109
Future Vol, veh/h	86	4	33	8	5	31	16	717	20	29	754	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	92	4	35	9	5	33	17	771	22	31	811	117

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1767	1759	464	1286	1806	782	928	0	0	793	0	0
Stage 1	932	932	-	816	816	-	-	-	-	-	-	-
Stage 2	835	827	-	470	990	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 60	86	550	133	80	397	745	-	-	837	-	-
Stage 1	291	348	-	374	393	-	-	-	-	-	-	-
Stage 2	365	389	-	548	327	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 50	81	550	114	75	397	745	-	-	837	-	-
Mov Cap-2 Maneuver	~ 50	81	-	114	75	-	-	-	-	-	-	-
Stage 1	284	335	-	365	384	-	-	-	-	-	-	-
Stage 2	322	380	-	487	315	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	$ 587.3	27.8	0.2	0.3
HCM LOS	F	D		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	745	-	-	205	67	837	-	-
HCM Lane V/C Ratio	0.023	-	-	0.231	1.974	0.037	-	-
HCM Control Delay (s)	9.9	-	-	27.8	$ 587.3	9.5	-	-
HCM Lane LOS	A	-	-	D	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	12.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.929				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1470	2869	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1470	2869	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									230			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

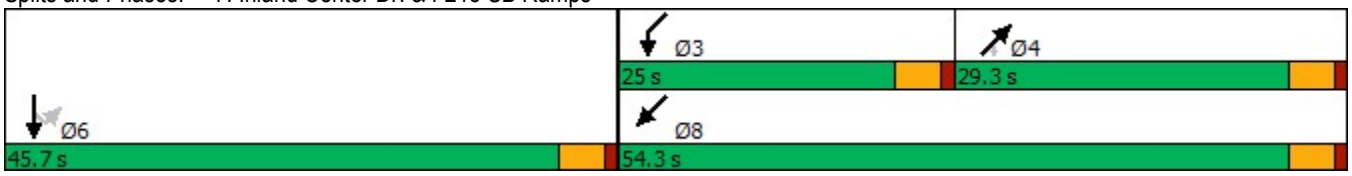
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	250	371	356	0	499	305	342	562	0
Future Volume (vph)	0	0	0	250	371	356	0	499	305	342	562	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	278	412	396	0	554	339	380	624	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	250	836	0	0	554	339	380	624	0

Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	250	371	499	305	342	562
Future Volume (vph)	250	371	499	305	342	562
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	45.7	45.7	29.3	29.3	25.0	54.3
Total Split (%)	45.7%	45.7%	29.3%	29.3%	25.0%	54.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	41.5	41.5	18.2	18.2	16.3	39.0
Actuated g/C Ratio	0.46	0.46	0.20	0.20	0.18	0.44
v/c Ratio	0.37	0.63	0.56	0.69	0.71	0.42
Control Delay	19.4	22.3	34.4	19.0	42.9	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	19.4	22.3	34.4	19.0	42.9	18.3
LOS	B	C	C	B	D	B
Approach Delay		21.6	28.5			27.6
Approach LOS		C	C			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 89.6	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 25.7	Intersection LOS: C
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	250	836	554	339	380	624
v/c Ratio	0.37	0.63	0.56	0.69	0.71	0.42
Control Delay	19.4	22.3	34.4	19.0	42.9	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	19.4	22.3	34.4	19.0	42.9	18.3
Queue Length 50th (ft)	96	189	103	53	104	123
Queue Length 95th (ft)	195	313	145	152	163	164
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	681	1330	1371	592	680	1916
Starvation Cap Reductn	0	0	0	0	0	689
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.63	0.40	0.57	0.56	0.51

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	250	371	356	0	499	305	342	562	0
Future Volume (veh/h)	0	0	0	250	371	356	0	499	305	342	562	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				278	412	396	0	554	339	380	624	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				724	760	646	0	1235	385	459	1557	0
Arrive On Green				0.45	0.45	0.45	0.00	0.25	0.25	0.16	0.46	0.00
Sat Flow, veh/h				1619	1700	1445	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				278	412	396	0	554	339	380	624	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1445	0	1638	1530	1478	1710	0
Q Serve(g_s), s				10.6	16.3	19.2	0.0	8.8	19.6	11.5	11.2	0.0
Cycle Q Clear(g_c), s				10.6	16.3	19.2	0.0	8.8	19.6	11.5	11.2	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				724	760	646	0	1235	385	459	1557	0
V/C Ratio(X)				0.38	0.54	0.61	0.00	0.45	0.88	0.83	0.40	0.00
Avail Cap(c_a), veh/h				724	760	646	0	1322	412	658	1848	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				17.0	18.6	19.4	0.0	29.1	33.2	37.7	16.7	0.0
Incr Delay (d2), s/veh				1.5	2.8	4.3	0.0	0.3	18.6	6.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.0	8.1	8.4	0.0	4.0	10.3	5.1	5.3	0.0
LnGrp Delay(d),s/veh				18.6	21.4	23.7	0.0	29.4	51.8	43.7	16.9	0.0
LnGrp LOS				B	C	C		C	D	D	B	
Approach Vol, veh/h					1086			893			1004	
Approach Delay, s/veh					21.5			37.9			27.0	
Approach LOS					C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			18.8	27.7		45.7		46.5
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			20.5	24.8		41.2		49.8
Max Q Clear Time (g_c+I1), s			13.5	21.6		21.2		13.2
Green Ext Time (p_c), s			0.8	1.5		6.3		4.9

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.973	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1664	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1664	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11	290									188
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

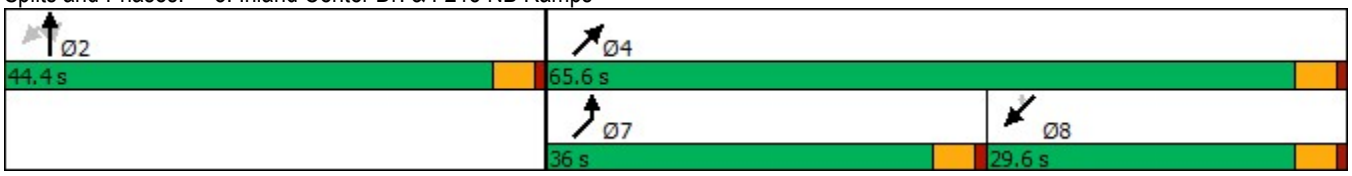
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	282	283	361	0	0	0	252	492	0	0	612	263
Future Volume (vph)	282	283	361	0	0	0	252	492	0	0	612	263
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	324	325	415	0	0	0	290	566	0	0	703	302
Shared Lane Traffic (%)			17%									
Lane Group Flow (vph)	324	396	344	0	0	0	290	566	0	0	703	302

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	282	283	361	252	492	612	263
Future Volume (vph)	282	283	361	252	492	612	263
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	44.4	44.4	44.4	36.0	65.6	29.6	29.6
Total Split (%)	40.4%	40.4%	40.4%	32.7%	59.6%	26.9%	26.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	40.4	40.4	40.4	22.1	46.4	19.8	19.8
Actuated g/C Ratio	0.42	0.42	0.42	0.23	0.48	0.21	0.21
v/c Ratio	0.48	0.56	0.44	0.78	0.34	0.55	0.65
Control Delay	25.5	26.6	6.8	50.1	15.4	36.2	21.1
Queue Delay	0.0	0.0	0.0	0.6	0.2	0.0	0.0
Total Delay	25.5	26.6	6.8	50.6	15.6	36.2	21.1
LOS	C	C	A	D	B	D	C
Approach Delay		19.9			27.5	31.7	
Approach LOS		B			C	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 95.9	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 26.1	Intersection LOS: C
Intersection Capacity Utilization 67.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	324	396	344	290	566	703	302
v/c Ratio	0.48	0.56	0.44	0.78	0.34	0.55	0.65
Control Delay	25.5	26.6	6.8	50.1	15.4	36.2	21.1
Queue Delay	0.0	0.0	0.0	0.6	0.2	0.0	0.0
Total Delay	25.5	26.6	6.8	50.6	15.6	36.2	21.1
Queue Length 50th (ft)	142	186	21	167	106	111	60
Queue Length 95th (ft)	260	333	91	261	134	152	151
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	679	707	780	536	2205	1640	543
Starvation Cap Reductn	0	0	0	62	907	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.56	0.44	0.61	0.44	0.43	0.56

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	282	283	361	0	0	0	252	492	0	0	612	263
Future Volume (veh/h)	282	283	361	0	0	0	252	492	0	0	612	263
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	324	392	370				290	566	0	0	703	302
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	679	755	641				328	1663	0	0	1465	362
Arrive On Green	0.42	0.42	0.42				0.20	0.49	0.00	0.00	0.24	0.24
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	324	392	370				290	566	0	0	703	302
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	13.8	15.4	17.6				16.6	9.7	0.0	0.0	9.3	17.9
Cycle Q Clear(g_c), s	13.8	15.4	17.6				16.6	9.7	0.0	0.0	9.3	17.9
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	679	755	641				328	1663	0	0	1465	362
V/C Ratio(X)	0.48	0.52	0.58				0.89	0.34	0.00	0.00	0.48	0.83
Avail Cap(c_a), veh/h	679	755	641				536	2196	0	0	1633	404
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	20.5	21.2				36.9	15.1	0.0	0.0	31.3	34.6
Incr Delay (d2), s/veh	2.4	2.5	3.8				10.0	0.1	0.0	0.0	0.2	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	8.2	8.1				8.3	4.6	0.0	0.0	4.0	8.9
LnGrp Delay(d),s/veh	22.5	23.1	24.9				46.8	15.2	0.0	0.0	31.5	47.5
LnGrp LOS	C	C	C				D	B			C	D
Approach Vol, veh/h		1086						856			1005	
Approach Delay, s/veh		23.5						25.9			36.3	
Approach LOS		C						C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		44.4		50.8			23.8	27.0
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		39.9		61.1			31.5	25.1
Max Q Clear Time (g_c+I1), s		19.6		11.7			18.6	19.9
Green Ext Time (p_c), s		4.9		4.4			0.7	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

Notes

Scenario Report

Scenario:	OY+P_PM
Command:	OY+P_PM
Volume:	OY+P_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.479
Loss Time (sec):	0	Average Delay (sec/veh):	18.4
Optimal Cycle:	36	Level Of Service:	B

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	22	780	122	109	519	71	92	176	10	148	199	97
Growth 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
Initial Bse:	22	780	122	109	519	71	92	176	10	148	199	97
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:	22	780	122	109	519	71	92	176	10	148	199	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	780	122	109	519	71	92	176	10	148	199	97
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:	22	780	122	109	519	71	92	176	10	148	199	97
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.93	0.93	0.36	0.99	0.99	0.49	0.95	0.95
Lanes:	1.00	1.73	0.27	1.00	1.76	0.24	1.00	0.95	0.05	1.00	0.67	0.33
Final Sat.:	1805	3059	479	1805	3118	427	676	1783	101	937	1215	592
Capacity Analysis Module:												
Vol/Sat:	0.01	0.25	0.25	0.06	0.17	0.17	0.14	0.10	0.10	0.16	0.16	0.16
Crit Moves:		****		****							****	
Green/Cycle:	0.04	0.53	0.53	0.13	0.61	0.61	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.27	0.48	0.48	0.48	0.27	0.27	0.40	0.29	0.29	0.46	0.48	0.48
Uniform Del:	46.2	14.7	14.7	40.6	9.0	9.0	25.1	24.0	24.0	25.7	25.9	25.9
IncremntDel:	1.8	0.2	0.2	1.6	0.1	0.1	1.1	0.2	0.2	1.1	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	48.0	14.9	14.9	42.2	9.0	9.0	26.2	24.3	24.3	26.8	26.5	26.5
User DelAdj:	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:	48.0	14.9	14.9	42.2	9.0	9.0	26.2	24.3	24.3	26.8	26.5	26.5
LOS by Move:	D	B	B	D	A	A	C	C	C	C	C	C
HCM2kAvgQ:	1	9	9	4	4	4	3	4	4	4	7	7

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.333
Loss Time (sec): 0 Average Delay (sec/veh): 8.9
Optimal Cycle: 28 Level Of Service: A

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			Protected			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	0 0	0	0 1!	0 0	1	0 1	0 0	0	0 0	1 0
Volume Module:												
Base Vol:	0	0	0	46	0	49	49	373	0	0	382	73
Growth 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
Initial Bse:	0	0	0	46	0	49	49	373	0	0	382	73
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	46	0	49	49	373	0	0	382	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	46	0	49	49	373	0	0	382	73
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	46	0	49	49	373	0	0	382	73
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	1.00	0.82	0.95	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	0.48	0.00	0.52	1.00	1.00	0.00	0.00	0.84	0.16
Final Sat.:	0	0	0	756	0	806	1805	1900	0	0	1560	298
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.03	0.20	0.00	0.00	0.24	0.24
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.18	0.00	0.18	0.08	0.82	0.00	0.00	0.74	0.74
Volume/Cap:	0.00	0.00	0.00	0.33	0.00	0.33	0.33	0.24	0.00	0.00	0.33	0.33
Uniform Del:	0.0	0.0	0.0	35.6	0.0	35.6	43.3	2.1	0.0	0.0	4.6	4.6
IncremntDel:	0.0	0.0	0.0	0.7	0.0	0.7	1.3	0.1	0.0	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	36.3	0.0	36.3	44.7	2.2	0.0	0.0	4.8	4.8
User DelAdj:	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	36.3	0.0	36.3	44.7	2.2	0.0	0.0	4.8	4.8
LOS by Move:	A	A	A	D	A	D	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	0	3	2	3	0	0	5	5

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.307
Loss Time (sec): 0 Average Delay (sec/veh): 2.4
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	0 1	0	1 0	1 0
Volume Module:												
Base Vol:	13	0	30	0	0	0	0	429	1	9	536	0
Growth 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
Initial Bse:	13	0	30	0	0	0	0	429	1	9	536	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:	13	0	30	0	0	0	0	429	1	9	536	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	0	30	0	0	0	0	429	1	9	536	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:	13	0	30	0	0	0	0	429	1	9	536	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	1.00	1.00	0.85	1.00	1.00
Lanes:	0.30	0.00	0.70	0.00	0.00	0.00	0.00	0.99	0.01	1.00	1.00	0.00
Final Sat.:	513	0	1183	0	0	0	0	1896	4	1611	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.23	0.23	0.01	0.28	0.00
Crit Moves:			****								****	
Green/Cycle:	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.92	0.92	0.92	0.92	0.00
Volume/Cap:	0.31	0.00	0.31	0.00	0.00	0.00	0.00	0.25	0.25	0.01	0.31	0.00
Uniform Del:	43.2	0.0	43.2	0.0	0.0	0.0	0.0	0.4	0.4	0.3	0.5	0.0
IncremntDel:	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	44.4	0.0	44.4	0.0	0.0	0.0	0.0	0.5	0.5	0.3	0.6	0.0
User DelAdj:	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:	44.4	0.0	44.4	0.0	0.0	0.0	0.0	0.5	0.5	0.3	0.6	0.0
LOS by Move:	D	A	D	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	2	0	2	0	0	0	0	2	2	0	2	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.305
Loss Time (sec): 0 Average Delay (sec/veh): 1.7
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	1	0	0	1	0	0
Volume Module:												
Base Vol:	0	0	30	0	0	0	0	458	1	0	545	0
Growth 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
Initial Bse:	0	0	30	0	0	0	0	458	1	0	545	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	0	30	0	0	0	0	458	1	0	545	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	30	0	0	0	0	458	1	0	545	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	0	30	0	0	0	0	458	1	0	545	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.99	0.01	0.00	1.00	0.00
Final Sat.:	0	0	1644	0	0	0	0	1896	4	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.24	0.24	0.00	0.29	0.00
Crit Moves:			****								****	
Green/Cycle:	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.94	0.94	0.00	0.94	0.00
Volume/Cap:	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.26	0.26	0.00	0.31	0.00
Uniform Del:	0.0	0.0	45.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.0
IncremntDel:	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	46.8	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.0
User DelAdj:	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	46.8	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.0
LOS by Move:	A	A	D	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	1	0	0	0	0	1	1	0	2	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.442
Loss Time (sec): 0 Average Delay (sec/veh): 13.5
Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	0	1	1	0	0	1	0	1
Volume Module:												
Base Vol:	0	0	1	280	0	57	53	435	0	0	488	335
Growth 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
Initial Bse:	0	0	1	280	0	57	53	435	0	0	488	335
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	1	280	0	57	53	435	0	0	488	335
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	1	280	0	57	53	435	0	0	488	335
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	1	280	0	57	53	435	0	0	488	335
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	0	0	1644	1805	0	1615	1805	1900	0	1900	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.04	0.03	0.23	0.00	0.00	0.26	0.21
Crit Moves:				****	****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.35	0.00	0.35	0.65	0.65	0.00	0.00	0.58	0.58
Volume/Cap:	0.00	0.00	0.00	0.44	0.00	0.10	0.10	0.35	0.00	0.00	0.44	0.36
Uniform Del:	0.0	0.0	49.9	24.9	0.0	21.8	7.7	8.1	0.0	0.0	11.8	11.1
IncremntDel:	0.0	0.0	99.3	0.5	0.0	0.1	0.1	0.2	0.0	0.0	0.3	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	149.2	25.4	0.0	21.9	7.8	8.2	0.0	0.0	12.1	11.3
User DelAdj:	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	149.2	25.4	0.0	21.9	7.8	8.2	0.0	0.0	12.1	11.3
LOS by Move:	A	A	F	C	A	C	A	A	A	A	B	B
HCM2kAvgQ:	0	0	0	7	0	1	1	6	0	0	8	5

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.471
Loss Time (sec): 0 Average Delay (sec/veh): 5.6
Optimal Cycle: 27 Level Of Service: A

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	1! 0	0	1	0 0 1	0	1	0 1 0
Volume Module:												
Base Vol:	8	5	31	86	4	33	16	717	20	29	754	109
Growth 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
Initial Bse:	8	5	31	86	4	33	16	717	20	29	754	109
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:	8	5	31	86	4	33	16	717	20	29	754	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	5	31	86	4	33	16	717	20	29	754	109
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:	8	5	31	86	4	33	16	717	20	29	754	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.79	0.79	0.79	0.32	1.00	1.00	0.31	0.93	0.93
Lanes:	0.18	0.11	0.71	0.70	0.03	0.27	1.00	0.97	0.03	1.00	1.75	0.25
Final Sat.:	300	188	1164	1051	49	403	600	1841	51	583	3094	447
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.08	0.08	0.08	0.03	0.39	0.39	0.05	0.24	0.24
Crit Moves:					****			****				
Green/Cycle:	0.17	0.17	0.17	0.17	0.17	0.17	0.83	0.83	0.83	0.83	0.83	0.83
Volume/Cap:	0.15	0.15	0.15	0.47	0.47	0.47	0.03	0.47	0.47	0.06	0.29	0.29
Uniform Del:	35.1	35.1	35.1	37.2	37.2	37.2	1.5	2.5	2.5	1.6	2.0	2.0
IncremntDel:	0.3	0.3	0.3	1.3	1.3	1.3	0.0	0.2	0.2	0.1	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	35.3	35.3	35.3	38.5	38.5	38.5	1.6	2.7	2.7	1.6	2.0	2.0
User DelAdj:	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:	35.3	35.3	35.3	38.5	38.5	38.5	1.6	2.7	2.7	1.6	2.0	2.0
LOS by Move:	D	D	D	D	D	D	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	4	4	4	0	7	7	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.508
Loss Time (sec): 0 Average Delay (sec/veh): 21.3
Optimal Cycle: 38 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0 0	1	1	0 1 0	0	0	3 0 1	2	0	2 0 0
Volume Module:												
Base Vol:	0	0	0	250	371	356	0	499	305	342	562	0
Growth 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
Initial Bse:	0	0	0	250	371	356	0	499	305	342	562	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	0	0	250	371	356	0	499	305	342	562	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	371	356	0	499	305	342	562	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	0	0	250	371	356	0	499	305	342	562	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.02	0.98	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1641	1675	1607	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.22	0.22	0.00	0.10	0.19	0.10	0.16	0.00
Crit Moves:					****				****	****		
Green/Cycle:	0.00	0.00	0.00	0.44	0.44	0.44	0.00	0.37	0.37	0.19	0.56	0.00
Volume/Cap:	0.00	0.00	0.00	0.35	0.51	0.51	0.00	0.26	0.51	0.51	0.28	0.00
Uniform Del:	0.0	0.0	0.0	18.8	20.4	20.4	0.0	21.8	24.3	36.2	11.3	0.0
IncremntDel:	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.1	0.7	0.6	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	18.8	20.7	20.7	0.0	21.9	25.1	36.8	11.3	0.0
User DelAdj:	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	18.8	20.7	20.7	0.0	21.9	25.1	36.8	11.3	0.0
LOS by Move:	A	A	A	B	C	C	A	C	C	D	B	A
HCM2kAvgQ:	0	0	0	5	9	9	0	4	8	5	5	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.487
Loss Time (sec):	0	Average Delay (sec/veh):	22.0
Optimal Cycle:	36	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	282	283	361	0	0	0	252	492	0	0	612	263
Growth 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
Initial Bse:	282	283	361	0	0	0	252	492	0	0	612	263
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:	282	283	361	0	0	0	252	492	0	0	612	263
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	282	283	361	0	0	0	252	492	0	0	612	263
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:	282	283	361	0	0	0	252	492	0	0	612	263
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.88	1.12	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1530	1951	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.17	0.19	0.19	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.09	0.16
Crit Moves:		****					****					****
Green/Cycle:	0.38	0.38	0.38	0.00	0.00	0.00	0.29	0.62	0.00	0.00	0.33	0.33
Volume/Cap:	0.46	0.49	0.49	0.00	0.00	0.00	0.49	0.22	0.00	0.00	0.26	0.49
Uniform Del:	23.3	23.6	23.6	0.0	0.0	0.0	29.6	8.3	0.0	0.0	24.3	26.5
IncremntDel:	0.5	0.3	0.3	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	23.9	23.9	23.9	0.0	0.0	0.0	30.3	8.4	0.0	0.0	24.4	27.2
User DelAdj:	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:	23.9	23.9	23.9	0.0	0.0	0.0	30.3	8.4	0.0	0.0	24.4	27.2
LOS by Move:	C	C	C	A	A	A	C	A	A	A	C	C
HCM2kAvgQ:	7	8	8	0	0	0	7	3	0	0	4	7

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

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Appendix H

Mitigated Opening Year (2020) Without Related Projects With Project Conditions Intersection Analysis Worksheets

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.893			0.997			0.988	
Flt Protected		0.961			0.994		0.950			0.950		
Satd. Flow (prot)	0	1594	0	0	1509	0	1615	1795	0	1615	3379	0
Flt Permitted		0.731			0.957		0.225			0.363		
Satd. Flow (perm)	0	1213	0	0	1453	0	383	1795	0	617	3379	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			38			2			21	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

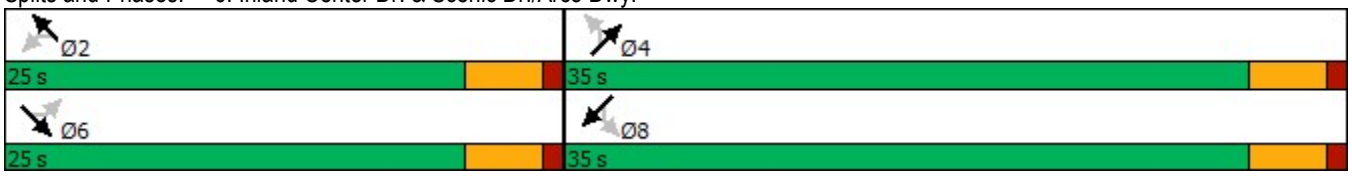
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	85	0	18	5	3	30	23	449	8	16	777	65
Future Volume (vph)	85	0	18	5	3	30	23	449	8	16	777	65
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	106	0	23	6	4	38	29	561	10	20	971	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	48	0	29	571	0	20	1052	0

Intersection Summary

Lane Group	SEL	SET	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	85	0	5	3	23	449	16	777
Future Volume (vph)	85	0	5	3	23	449	16	777
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	25.0	25.0	25.0	25.0	35.0	35.0	35.0	35.0
Total Split (%)	41.7%	41.7%	41.7%	41.7%	58.3%	58.3%	58.3%	58.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	None	None	None	None
Act Effct Green (s)		9.1		9.1	20.3	20.3	20.3	20.3
Actuated g/C Ratio		0.23		0.23	0.52	0.52	0.52	0.52
v/c Ratio		0.42		0.13	0.15	0.61	0.06	0.60
Control Delay		16.7		8.1	7.3	10.0	5.6	8.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		16.7		8.1	7.3	10.0	5.6	8.0
LOS		B		A	A	B	A	A
Approach Delay		16.7		8.1		9.9		8.0
Approach LOS		B		A		A		A

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 39	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 9.2	Intersection LOS: A
Intersection Capacity Utilization 46.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: Inland Center Dr. & Scenic Dr./Arco Dwy.



Lane Group	SET	NWT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	129	48	29	571	20	1052
v/c Ratio	0.42	0.13	0.15	0.61	0.06	0.60
Control Delay	16.7	8.1	7.3	10.0	5.6	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.7	8.1	7.3	10.0	5.6	8.0
Queue Length 50th (ft)	18	2	3	68	2	63
Queue Length 95th (ft)	55	18	12	143	9	114
Internal Link Dist (ft)	19	155		387		266
Turn Bay Length (ft)			50		60	
Base Capacity (vph)	690	828	306	1438	494	2712
Starvation Cap Reductn	0	0	0	0	0	113
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.06	0.09	0.40	0.04	0.40

Intersection Summary

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	85	0	18	5	3	30	23	449	8	16	777	65
Future Volume (veh/h)	85	0	18	5	3	30	23	449	8	16	777	65
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	1700	1700	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	106	0	22	6	4	38	29	561	10	20	971	81
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	385	13	38	147	36	194	400	953	17	483	1727	144
Arrive On Green	0.17	0.00	0.17	0.17	0.17	0.17	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1026	77	229	93	213	1162	488	1763	31	764	3196	267
Grp Volume(v), veh/h	128	0	0	48	0	0	29	0	571	20	519	533
Grp Sat Flow(s),veh/h/ln	1332	0	0	1468	0	0	488	0	1794	764	1710	1753
Q Serve(g_s), s	1.7	0.0	0.0	0.0	0.0	0.0	1.3	0.0	6.6	0.6	6.2	6.2
Cycle Q Clear(g_c), s	2.6	0.0	0.0	0.9	0.0	0.0	7.5	0.0	6.6	7.2	6.2	6.2
Prop In Lane	0.83		0.17	0.12		0.79	1.00		0.02	1.00		0.15
Lane Grp Cap(c), veh/h	436	0	0	377	0	0	400	0	970	483	924	947
V/C Ratio(X)	0.29	0.00	0.00	0.13	0.00	0.00	0.07	0.00	0.59	0.04	0.56	0.56
Avail Cap(c_a), veh/h	1071	0	0	1094	0	0	620	0	1779	828	1695	1738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	0.0	11.0	0.0	0.0	7.1	0.0	4.8	7.2	4.7	4.7
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.6	0.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.4	0.0	0.0	0.2	0.0	3.3	0.1	2.9	2.9
LnGrp Delay(d),s/veh	12.1	0.0	0.0	11.2	0.0	0.0	7.2	0.0	5.3	7.2	5.2	5.2
LnGrp LOS	B			B			A		A	A	A	A
Approach Vol, veh/h		128			48			600			1072	
Approach Delay, s/veh		12.1			11.2			5.4			5.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		9.6		21.1		9.6		21.1
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		20.5		30.5		20.5		30.5
Max Q Clear Time (g_c+I1), s		2.9		9.5		4.6		9.2
Green Ext Time (p_c), s		0.2		4.2		0.5		7.5

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Scenario Report

Scenario:	OY+P_AM
Command:	OY+P_AM
Volume:	OY+P_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.313
Loss Time (sec):	0	Average Delay (sec/veh):	6.2
Optimal Cycle:	21	Level Of Service:	A

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	1! 0	0	1	0 0	1	0	1 0
Volume Module:												
Base Vol:	5	3	30	85	0	18	23	449	8	16	777	65
Growth 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
Initial Bse:	5	3	30	85	0	18	23	449	8	16	777	65
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:	5	3	30	85	0	18	23	449	8	16	777	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	3	30	85	0	18	23	449	8	16	777	65
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:	5	3	30	85	0	18	23	449	8	16	777	65
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.76	1.00	0.76	0.31	1.00	1.00	0.43	0.94	0.94
Lanes:	0.13	0.08	0.79	0.83	0.00	0.17	1.00	0.98	0.02	1.00	1.85	0.15
Final Sat.:	218	131	1307	1191	0	252	595	1861	33	823	3291	275
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.07	0.00	0.07	0.04	0.24	0.24	0.02	0.24	0.24
Crit Moves:				****				****				
Green/Cycle:	0.23	0.23	0.23	0.23	0.00	0.23	0.77	0.77	0.77	0.77	0.77	0.77
Volume/Cap:	0.10	0.10	0.10	0.31	0.00	0.31	0.05	0.31	0.31	0.03	0.31	0.31
Uniform Del:	30.5	30.5	30.5	32.1	0.0	32.1	2.7	3.4	3.4	2.7	3.4	3.4
IncremntDel:	0.1	0.1	0.1	0.5	0.0	0.5	0.0	0.1	0.1	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	30.6	30.6	30.6	32.6	0.0	32.6	2.8	3.6	3.6	2.7	3.5	3.5
User DelAdj:	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:	30.6	30.6	30.6	32.6	0.0	32.6	2.8	3.6	3.6	2.7	3.5	3.5
LOS by Move:	C	C	C	C	A	C	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	3	0	3	0	4	4	0	4	4

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

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to RK ENGINEERING GROUP

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.905			0.996			0.981	
Flt Protected		0.966			0.991		0.950			0.950		
Satd. Flow (prot)	0	1583	0	0	1525	0	1615	1793	0	1615	3355	0
Flt Permitted		0.761			0.932		0.279			0.220		
Satd. Flow (perm)	0	1247	0	0	1434	0	474	1793	0	374	3355	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			33			4			41	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

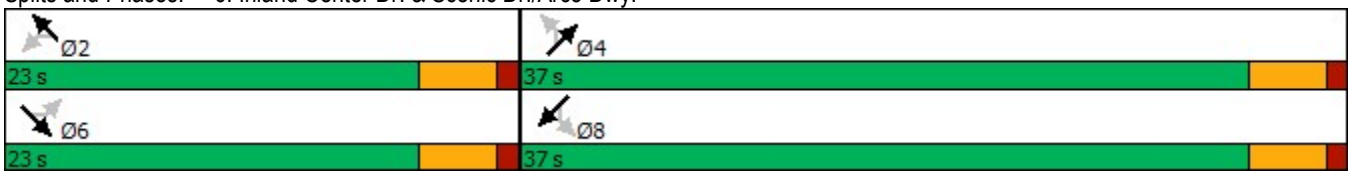
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	86	4	33	8	5	31	16	717	20	29	754	109
Future Volume (vph)	86	4	33	8	5	31	16	717	20	29	754	109
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	92	4	35	9	5	33	17	771	22	31	811	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	0	0	47	0	17	793	0	31	928	0

Intersection Summary

Lane Group	SEL	SET	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	86	4	8	5	16	717	29	754
Future Volume (vph)	86	4	8	5	16	717	29	754
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	23.0	23.0	37.0	37.0	37.0	37.0
Total Split (%)	38.3%	38.3%	38.3%	38.3%	61.7%	61.7%	61.7%	61.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	None	None	None	None
Act Effct Green (s)		9.3		9.3	24.8	24.8	24.8	24.8
Actuated g/C Ratio		0.21		0.21	0.57	0.57	0.57	0.57
v/c Ratio		0.45		0.14	0.06	0.78	0.15	0.48
Control Delay		18.9		10.0	5.4	14.2	6.8	6.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		18.9		10.0	5.4	14.3	6.8	6.4
LOS		B		A	A	B	A	A
Approach Delay		18.9		10.0		14.1		6.4
Approach LOS		B		A		B		A

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 43.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 10.5	Intersection LOS: B
Intersection Capacity Utilization 63.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Inland Center Dr. & Scenic Dr./Arco Dwy.



Lane Group	SET	NWT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	131	47	17	793	31	928
v/c Ratio	0.45	0.14	0.06	0.78	0.15	0.48
Control Delay	18.9	10.0	5.4	14.2	6.8	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.9	10.0	5.4	14.3	6.8	6.4
Queue Length 50th (ft)	22	3	2	120	3	54
Queue Length 95th (ft)	67	24	9	#312	15	113
Internal Link Dist (ft)	19	155		387		266
Turn Bay Length (ft)			50		60	
Base Capacity (vph)	577	662	362	1371	286	2574
Starvation Cap Reductn	0	0	0	10	0	313
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.07	0.05	0.58	0.11	0.41

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	86	4	33	8	5	31	16	717	20	29	754	109
Future Volume (veh/h)	86	4	33	8	5	31	16	717	20	29	754	109
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	1700	1700	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	92	4	35	9	5	33	17	771	22	31	811	117
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	306	22	57	144	46	164	442	1028	29	367	1772	256
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	856	141	363	148	295	1044	548	1742	50	622	3001	433
Grp Volume(v), veh/h	131	0	0	47	0	0	17	0	793	31	462	466
Grp Sat Flow(s),veh/h/ln	1360	0	0	1486	0	0	548	0	1791	622	1710	1724
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.0	0.6	0.0	11.6	1.4	5.4	5.4
Cycle Q Clear(g_c), s	3.1	0.0	0.0	1.0	0.0	0.0	6.0	0.0	11.6	13.0	5.4	5.4
Prop In Lane	0.70		0.27	0.19		0.70	1.00		0.03	1.00		0.25
Lane Grp Cap(c), veh/h	386	0	0	354	0	0	442	0	1058	367	1010	1018
V/C Ratio(X)	0.34	0.00	0.00	0.13	0.00	0.00	0.04	0.00	0.75	0.08	0.46	0.46
Avail Cap(c_a), veh/h	858	0	0	869	0	0	619	0	1634	567	1560	1572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	0.0	13.1	0.0	0.0	5.8	0.0	5.4	10.1	4.1	4.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.1	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	0.4	0.0	0.0	0.1	0.0	5.8	0.2	2.5	2.5
LnGrp Delay(d),s/veh	14.4	0.0	0.0	13.2	0.0	0.0	5.8	0.0	6.5	10.2	4.4	4.4
LnGrp LOS	B			B			A		A	B	A	A
Approach Vol, veh/h		131			47			810			959	
Approach Delay, s/veh		14.4			13.2			6.4			4.6	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		10.1		25.5		10.1		25.5
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.5		32.5		18.5		32.5
Max Q Clear Time (g_c+I1), s		3.0		13.6		5.1		15.0
Green Ext Time (p_c), s		0.1		6.0		0.5		6.1

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Scenario Report

Scenario:	OY+P_PM
Command:	OY+P_PM
Volume:	OY+P_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.471
Loss Time (sec):	0	Average Delay (sec/veh):	5.6
Optimal Cycle:	27	Level Of Service:	A

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	1	0	0	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	8	5	31		86	4	33		16	717	20		29	754	109	
Growth 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	
Initial Bse:	8	5	31		86	4	33		16	717	20		29	754	109	
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:	8	5	31		86	4	33		16	717	20		29	754	109	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	8	5	31		86	4	33		16	717	20		29	754	109	
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:	8	5	31		86	4	33		16	717	20		29	754	109	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.87	0.87	0.87		0.79	0.79	0.79		0.32	1.00	1.00		0.31	0.93	0.93	
Lanes:	0.18	0.11	0.71		0.70	0.03	0.27		1.00	0.97	0.03		1.00	1.75	0.25	
Final Sat.:	300	188	1164		1051	49	403		600	1841	51		583	3094	447	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.03	0.03		0.08	0.08	0.08		0.03	0.39	0.39		0.05	0.24	0.24	
Crit Moves:						****				****						
Green/Cycle:	0.17	0.17	0.17		0.17	0.17	0.17		0.83	0.83	0.83		0.83	0.83	0.83	
Volume/Cap:	0.15	0.15	0.15		0.47	0.47	0.47		0.03	0.47	0.47		0.06	0.29	0.29	
Uniform Del:	35.1	35.1	35.1		37.2	37.2	37.2		1.5	2.5	2.5		1.6	2.0	2.0	
IncremntDel:	0.3	0.3	0.3		1.3	1.3	1.3		0.0	0.2	0.2		0.1	0.1	0.1	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
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	
Delay/Veh:	35.3	35.3	35.3		38.5	38.5	38.5		1.6	2.7	2.7		1.6	2.0	2.0	
User DelAdj:	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:	35.3	35.3	35.3		38.5	38.5	38.5		1.6	2.7	2.7		1.6	2.0	2.0	
LOS by Move:	D	D	D		D	D	D		A	A	A		A	A	A	
HCM2kAvgQ:	1	1	1		4	4	4		0	7	7		0	3	3	

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

Appendix I

Opening Year (2020) With Related Projects Without Project Conditions
Intersection Analysis Worksheets

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.952			0.987			0.996			0.917	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3256	0	1615	3376	0	1615	1793	0	1615	1651	0
Flt Permitted	0.950			0.950			0.163			0.580		
Satd. Flow (perm)	1615	3256	0	1615	3376	0	277	1793	0	986	1651	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		79			17			1			59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

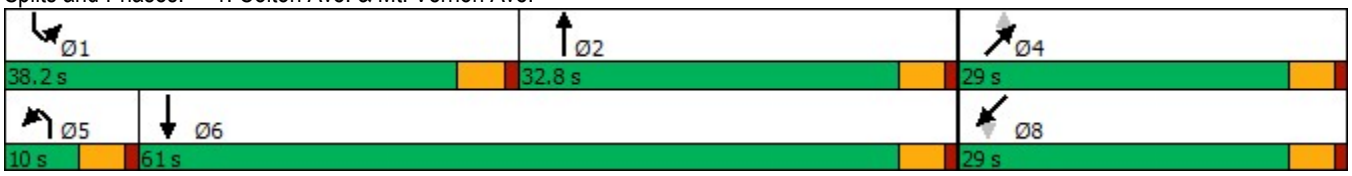
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	13	546	260	474	495	48	29	126	3	214	162	200
Future Volume (vph)	13	546	260	474	495	48	29	126	3	214	162	200
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	16	658	313	571	596	58	35	152	4	258	195	241
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	971	0	571	654	0	35	156	0	258	436	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	13	546	474	495	29	126	214	162
Future Volume (vph)	13	546	474	495	29	126	214	162
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	32.8	38.2	61.0	29.0	29.0	29.0	29.0
Total Split (%)	10.0%	32.8%	38.2%	61.0%	29.0%	29.0%	29.0%	29.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.5	28.3	33.7	62.5	24.5	24.5	24.5	24.5
Actuated g/C Ratio	0.06	0.28	0.34	0.62	0.24	0.24	0.24	0.24
v/c Ratio	0.18	0.99	1.05	0.31	0.52	0.35	1.07	0.97
Control Delay	50.1	60.9	86.1	9.6	63.2	33.8	116.1	69.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	60.9	86.1	9.6	63.2	33.8	116.1	69.6
LOS	D	E	F	A	E	C	F	E
Approach Delay		60.7		45.2		39.2		86.9
Approach LOS		E		D		D		F

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 59.1	Intersection LOS: E
Intersection Capacity Utilization 95.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.



Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	16	971	571	654	35	156	258	436
v/c Ratio	0.18	0.99	1.05	0.31	0.52	0.35	1.07	0.97
Control Delay	50.1	60.9	86.1	9.6	63.2	33.8	116.1	69.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	60.9	86.1	9.6	63.2	33.8	116.1	69.6
Queue Length 50th (ft)	10	302	~399	78	19	82	~183	244
Queue Length 95th (ft)	29	#382	#531	128	#57	128	#301	#383
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	88	978	544	2116	67	440	241	449
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.99	1.05	0.31	0.52	0.35	1.07	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	13	546	260	474	495	48	29	126	3	214	162	200
Future Volume (veh/h)	13	546	260	474	495	48	29	126	3	214	162	200
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	16	658	313	571	596	58	35	152	4	258	195	241
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	29	637	303	546	1896	184	72	428	11	266	180	222
Arrive On Green	0.02	0.28	0.28	0.34	0.60	0.60	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1619	2251	1071	1619	3150	306	866	1746	46	1119	733	907
Grp Volume(v), veh/h	16	500	471	571	323	331	35	0	156	258	0	436
Grp Sat Flow(s),veh/h/ln	1619	1710	1611	1619	1710	1746	866	0	1792	1119	0	1640
Q Serve(g_s), s	1.0	28.3	28.3	33.7	9.3	9.3	0.0	0.0	7.2	17.3	0.0	24.5
Cycle Q Clear(g_c), s	1.0	28.3	28.3	33.7	9.3	9.3	24.5	0.0	7.2	24.5	0.0	24.5
Prop In Lane	1.00		0.66	1.00		0.18	1.00		0.03	1.00		0.55
Lane Grp Cap(c), veh/h	29	484	456	546	1030	1051	72	0	439	266	0	402
V/C Ratio(X)	0.55	1.03	1.03	1.05	0.31	0.31	0.49	0.00	0.36	0.97	0.00	1.09
Avail Cap(c_a), veh/h	89	484	456	546	1030	1051	72	0	439	266	0	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	35.9	35.9	33.2	9.8	9.8	50.0	0.0	31.2	43.5	0.0	37.8
Incr Delay (d2), s/veh	15.3	49.7	50.9	51.2	0.8	0.8	5.0	0.0	0.5	47.2	0.0	69.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	20.0	19.0	22.8	4.5	4.6	1.1	0.0	3.6	10.6	0.0	18.8
LnGrp Delay(d),s/veh	64.0	85.6	86.8	84.4	10.6	10.6	55.0	0.0	31.7	90.7	0.0	107.4
LnGrp LOS	E	F	F	F	B	B	E		C	F		F
Approach Vol, veh/h		987			1225			191			694	
Approach Delay, s/veh		85.8			45.0			36.0			101.2	
Approach LOS		F			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.2	32.8		29.0	6.3	64.7		29.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	33.7	28.3		24.5	5.5	56.5		24.5
Max Q Clear Time (g_c+I1), s	35.7	30.3		26.5	3.0	11.3		26.5
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.6		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		70.0
HCM 2010 LOS		E

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.912				0.980	
Flt Protected	0.983		0.950			
Satd. Flow (prot)	1524	0	1615	1800	1764	0
Flt Permitted	0.983		0.950			
Satd. Flow (perm)	1524	0	1615	1800	1764	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	96				14	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

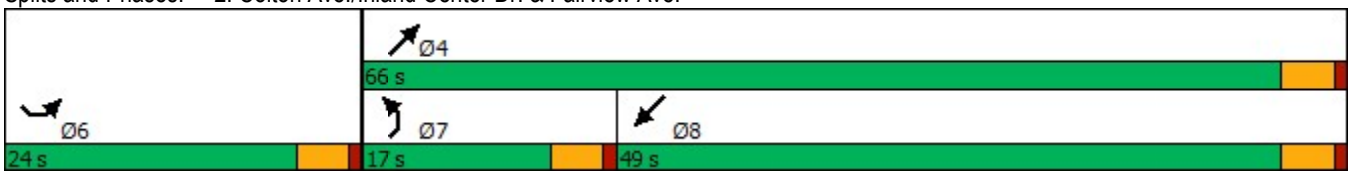
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	59	111	117	800	484	84
Future Volume (vph)	59	111	117	800	484	84
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	82	154	163	1111	672	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	0	163	1111	789	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	59	117	800	484
Future Volume (vph)	59	117	800	484
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	24.0	17.0	66.0	49.0
Total Split (%)	26.7%	18.9%	73.3%	54.4%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	19.7	11.7	57.2	41.0
Actuated g/C Ratio	0.23	0.14	0.67	0.48
v/c Ratio	0.56	0.74	0.93	0.93
Control Delay	24.0	58.7	27.3	39.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	24.0	58.7	27.3	39.8
LOS	C	E	C	D
Approach Delay	24.0		31.3	39.8
Approach LOS	C		C	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 85.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 33.5	Intersection LOS: C
Intersection Capacity Utilization 63.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	236	163	1111	789
v/c Ratio	0.56	0.74	0.93	0.93
Control Delay	24.0	58.7	27.3	39.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	24.0	58.7	27.3	39.8
Queue Length 50th (ft)	69	90	454	384
Queue Length 95th (ft)	99	122	395	374
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	422	237	1299	928
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.56	0.69	0.86	0.85

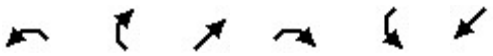
Intersection Summary

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	59	111	117	800	484	84
Future Volume (veh/h)	59	111	117	800	484	84
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	82	154	162	1111	672	117
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	120	226	194	1191	729	127
Arrive On Green	0.23	0.23	0.12	0.66	0.49	0.49
Sat Flow, veh/h	520	976	1619	1800	1494	260
Grp Volume(v), veh/h	237	0	162	1111	0	789
Grp Sat Flow(s),veh/h/ln	1502	0	1619	1800	0	1754
Q Serve(g_s), s	12.1	0.0	8.2	46.0	0.0	35.2
Cycle Q Clear(g_c), s	12.1	0.0	8.2	46.0	0.0	35.2
Prop In Lane	0.35	0.65	1.00			0.15
Lane Grp Cap(c), veh/h	348	0	194	1191	0	856
V/C Ratio(X)	0.68	0.00	0.83	0.93	0.00	0.92
Avail Cap(c_a), veh/h	348	0	240	1315	0	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	36.2	12.6	0.0	20.0
Incr Delay (d2), s/veh	10.3	0.0	18.3	11.5	0.0	13.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	4.7	26.0	0.0	20.1
LnGrp Delay(d),s/veh	39.8	0.0	54.6	24.1	0.0	33.7
LnGrp LOS	D		D	C		C
Approach Vol, veh/h	237			1273	789	
Approach Delay, s/veh	39.8			28.0	33.7	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				60.2		24.0	14.6	45.6
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				61.5		19.5	12.5	44.5
Max Q Clear Time (g_c+I1), s				48.0		14.1	10.2	37.2
Green Ext Time (p_c), s				7.7		0.3	0.1	3.3

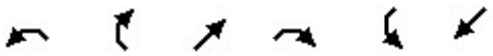
Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1900	0	1900	1900
Flt Permitted						
Satd. Flow (perm)	1900	0	1900	0	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	968	0	0	559
Future Volume (vph)	0	0	968	0	0	559
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	1052	0	0	608
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1052	0	0	608

Intersection Summary

Intersection	
Int Delay, s/veh	0

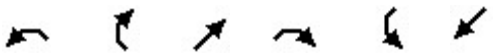
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	968	0	0	559
Future Vol, veh/h	0	0	968	0	0	559
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	1052	0	0	608

Major/Minor	Minor2		Major2	
Conflicting Flow All	608	608	0	0
Stage 1	608	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 413	499	-	-
Stage 1	~ 489	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	499	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s		0
HCM LOS	-	

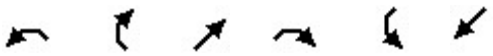
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	968	0	0	559
Future Volume (vph)	0	0	968	0	0	559
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	1052	0	0	608
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1052	0	0	608

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	968	0	0	559
Future Vol, veh/h	0	0	968	0	0	559
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	0	1052	0	0	608

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1052	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	278	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	278	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt						0.850						0.850
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1615	0	1615	0	1530	1615	1800	0	1615	1800	1530
Flt Permitted		0.950		0.950			0.109			0.075		
Satd. Flow (perm)	0	1615	0	1615	0	1530	185	1800	0	128	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						88						572
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

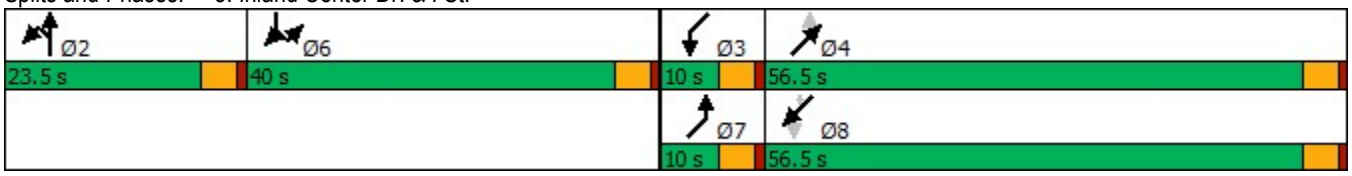
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1	0	0	512	0	53	81	886	1	4	506	570
Future Volume (vph)	1	0	0	512	0	53	81	886	1	4	506	570
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1	0	0	648	0	67	103	1122	1	5	641	722
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	648	0	67	103	1123	0	5	641	722

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Configurations								
Traffic Volume (vph)	0	512	53	81	886	4	506	570
Future Volume (vph)	0	512	53	81	886	4	506	570
Turn Type	NA	Prot	Prot	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	2	6	6	7	4	3	8	
Permitted Phases				4		8		8
Detector Phase	2	6	6	7	4	3	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	23.5	40.0	40.0	10.0	56.5	10.0	56.5	56.5
Total Split (%)	18.1%	30.8%	30.8%	7.7%	43.5%	7.7%	43.5%	43.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.0	35.5	35.5	59.0	58.0	55.4	49.9	49.9
Actuated g/C Ratio	0.15	0.28	0.28	0.46	0.45	0.43	0.39	0.39
v/c Ratio	0.00	1.45	0.14	0.71	1.38	0.04	0.91	0.76
Control Delay	48.0	247.7	4.4	47.3	208.2	18.8	55.8	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	247.7	4.4	47.3	208.2	18.8	55.8	12.7
LOS	D	F	A	D	F	B	E	B
Approach Delay	48.0				194.7		32.9	
Approach LOS	D				F		C	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 128	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.45	
Intersection Signal Delay: 134.3	Intersection LOS: F
Intersection Capacity Utilization 94.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Group Flow (vph)	1	648	67	103	1123	5	641	722
v/c Ratio	0.00	1.45	0.14	0.71	1.38	0.04	0.91	0.76
Control Delay	48.0	247.7	4.4	47.3	208.2	18.8	55.8	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	247.7	4.4	47.3	208.2	18.8	55.8	12.7
Queue Length 50th (ft)	1	~748	0	47	~1215	2	498	98
Queue Length 95th (ft)	6	#815	13	#80	#1324	8	545	133
Internal Link Dist (ft)	133				59		387	
Turn Bay Length (ft)				110		50		
Base Capacity (vph)	240	448	488	146	815	119	732	961
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	1.45	0.14	0.71	1.38	0.04	0.88	0.75

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	512	0	53	81	886	1	4	506	570
Future Volume (veh/h)	1	0	0	512	0	53	81	886	1	4	506	570
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	0	0	648	0	67	103	1122	1	5	641	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	362	0	0	0	0	0	403	1099	1	95	1016	863
Arrive On Green	0.22	0.00	0.00	0.00	0.00	0.00	0.05	0.61	0.61	0.01	0.56	0.00
Sat Flow, veh/h	1619	0	0		0		1619	1798	2	1619	1800	1530
Grp Volume(v), veh/h	1	0	0		0.0		103	0	1123	5	641	0
Grp Sat Flow(s),veh/h/ln	1619	0	0				1619	0	1800	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.0				2.1	0.0	52.0	0.1	20.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				2.1	0.0	52.0	0.1	20.5	0.0
Prop In Lane	1.00		0.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	362	0	0				403	0	1100	95	1016	863
V/C Ratio(X)	0.00	0.00	0.00				0.26	0.00	1.02	0.05	0.63	0.00
Avail Cap(c_a), veh/h	362	0	0				421	0	1100	189	1100	935
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.7	0.0	0.0				9.4	0.0	16.5	21.4	12.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.3	0.0	32.5	0.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				1.0	0.0	35.3	0.1	10.4	0.0
LnGrp Delay(d),s/veh	25.7	0.0	0.0				9.7	0.0	49.0	21.6	13.6	0.0
LnGrp LOS	C						A		F	C	B	
Approach Vol, veh/h		1						1226			646	
Approach Delay, s/veh		25.7						45.7			13.6	
Approach LOS		C						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	5.1	56.5			9.1	52.5
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	52.0			5.5	52.0
Max Q Clear Time (g_c+I1), s		2.0	2.1	54.0			4.1	22.5
Green Ext Time (p_c), s		0.0	0.0	0.0			0.0	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.893			0.999			0.992	
Flt Protected		0.961			0.994		0.950			0.950		
Satd. Flow (prot)	0	1782	0	0	1687	0	1805	1898	0	1805	3581	0
Flt Permitted		0.961			0.994		0.950			0.950		
Satd. Flow (perm)	0	1782	0	0	1687	0	1805	1898	0	1805	3581	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	85	0	18	5	3	30	23	1359	8	16	1081	65
Future Volume (vph)	85	0	18	5	3	30	23	1359	8	16	1081	65
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	106	0	23	6	4	38	29	1699	10	20	1351	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	48	0	29	1709	0	20	1432	0

Intersection Summary

Intersection	
Int Delay, s/veh	1230.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	85	0	18	5	3	30	23	1359	8	16	1081	65
Future Vol, veh/h	85	0	18	5	3	30	23	1359	8	16	1081	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	106	0	23	6	4	38	29	1699	10	20	1351	81

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3215	3199	716	2478	3234	1704	1432	0	0	1709	0	0
Stage 1	1432	1432	-	1762	1762	-	-	-	-	-	-	-
Stage 2	1783	1767	-	716	1472	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 5	10	377	18	10	115	481	-	-	377	-	-
Stage 1	144	202	-	109	139	-	-	-	-	-	-	-
Stage 2	~ 106	138	-	392	193	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 2	9	377	15	9	115	481	-	-	377	-	-
Mov Cap-2 Maneuver	~ 2	9	-	15	9	-	-	-	-	-	-	-
Stage 1	135	191	-	102	131	-	-	-	-	-	-	-
Stage 2	~ 65	130	-	349	183	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay	$ 32047.9	$ 345.4	0.2	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	481	-	-	41	2	377	-	-
HCM Lane V/C Ratio	0.06	-	-	1.159	64.375	0.053	-	-
HCM Control Delay (s)	13	-	-	$ 345.4	$ 32047.9	15.1	-	-
HCM Lane LOS	B	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-	4.6	18.5	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.923				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1470	2850	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1470	2850	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									128			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

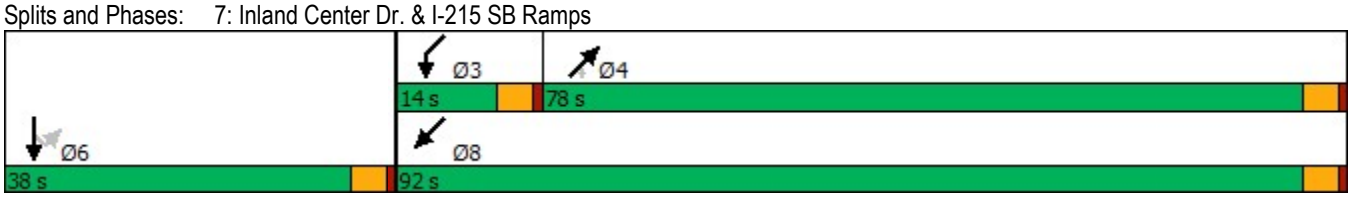
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	241	311	356	0	499	1036	202	871	0
Future Volume (vph)	0	0	0	241	311	356	0	499	1036	202	871	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	290	375	429	0	601	1248	243	1049	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	261	833	0	0	601	1248	243	1049	0

Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	241	311	499	1036	202	871
Future Volume (vph)	241	311	499	1036	202	871
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	38.0	38.0	78.0	78.0	14.0	92.0
Total Split (%)	29.2%	29.2%	60.0%	60.0%	10.8%	70.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	33.5	33.5	73.5	73.5	9.5	87.5
Actuated g/C Ratio	0.26	0.26	0.57	0.57	0.07	0.67
v/c Ratio	0.69	1.22dr	0.22	1.36	1.13	0.46
Control Delay	54.4	120.6	14.2	192.4	153.9	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	8.4
Total Delay	54.4	120.6	14.2	192.4	153.9	19.2
LOS	D	F	B	F	F	B
Approach Delay		104.8	134.5			44.5
Approach LOS		F	F			D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.36	
Intersection Signal Delay: 99.4	Intersection LOS: F
Intersection Capacity Utilization 140.2%	ICU Level of Service H
Analysis Period (min) 15	
dr Defacto Right Lane. Recode with 1 though lane as a right lane.	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	261	833	601	1248	243	1049
v/c Ratio	0.69	1.22dr	0.22	1.36	1.13	0.46
Control Delay	54.4	120.6	14.2	192.4	153.9	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	8.4
Total Delay	54.4	120.6	14.2	192.4	153.9	19.2
Queue Length 50th (ft)	218	~448	87	~1338	~122	202
Queue Length 95th (ft)	297	#511	100	#1412	#186	217
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	378	734	2778	920	215	2301
Starvation Cap Reductn	0	0	0	8	0	1212
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	1.13	0.22	1.37	1.13	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	241	311	356	0	499	1036	202	871	0
Future Volume (veh/h)	0	0	0	241	311	356	0	499	1036	202	871	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				290	375	429	0	601	1248	243	1049	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				417	438	372	0	2778	865	216	2302	0
Arrive On Green				0.26	0.26	0.26	0.00	0.57	0.57	0.07	0.67	0.00
Sat Flow, veh/h				1619	1700	1445	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				290	375	429	0	601	1248	243	1049	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1445	0	1638	1530	1478	1710	0
Q Serve(g_s), s				21.1	27.3	33.5	0.0	7.9	73.5	9.5	18.8	0.0
Cycle Q Clear(g_c), s				21.1	27.3	33.5	0.0	7.9	73.5	9.5	18.8	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				417	438	372	0	2778	865	216	2302	0
V/C Ratio(X)				0.70	0.86	1.15	0.00	0.22	1.44	1.12	0.46	0.00
Avail Cap(c_a), veh/h				417	438	372	0	2778	865	216	2302	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				43.6	46.0	48.3	0.0	14.0	28.2	60.3	10.0	0.0
Incr Delay (d2), s/veh				9.2	18.9	94.9	0.0	0.0	205.8	98.8	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.5	15.1	23.2	0.0	3.6	80.2	6.8	8.8	0.0
LnGrp Delay(d),s/veh				52.8	64.9	143.1	0.0	14.0	234.0	159.1	10.2	0.0
LnGrp LOS				D	E	F		B	F	F	B	
Approach Vol, veh/h					1094			1849			1292	
Approach Delay, s/veh					92.4			162.5			38.2	
Approach LOS					F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			14.0	78.0		38.0		92.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			9.5	73.5		33.5		87.5
Max Q Clear Time (g_c+I1), s			11.5	75.5		35.5		20.8
Green Ext Time (p_c), s			0.0	0.0		0.0		10.3

Intersection Summary	
HCM 2010 Ctrl Delay	106.5
HCM 2010 LOS	F

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.961	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1643	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1643	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22	134									50
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	700	349	540	0	0	0	276	489	0	0	374	38
Future Volume (vph)	700	349	540	0	0	0	276	489	0	0	374	38
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	875	436	675	0	0	0	345	611	0	0	468	48
Shared Lane Traffic (%)			23%									
Lane Group Flow (vph)	875	591	520	0	0	0	345	611	0	0	468	48

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	700	349	540	276	489	374	38
Future Volume (vph)	700	349	540	276	489	374	38
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	75.5	75.5	75.5	32.0	54.5	22.5	22.5
Total Split (%)	58.1%	58.1%	58.1%	24.6%	41.9%	17.3%	17.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	71.0	71.0	71.0	27.5	47.2	15.2	15.2
Actuated g/C Ratio	0.56	0.56	0.56	0.22	0.37	0.12	0.12
v/c Ratio	0.97	0.64	0.60	0.99	0.48	0.63	0.21
Control Delay	51.8	22.7	16.9	95.6	32.1	57.4	15.0
Queue Delay	0.0	0.0	0.0	37.0	4.1	0.0	0.0
Total Delay	51.8	22.7	16.9	132.6	36.1	57.4	15.0
LOS	D	C	B	F	D	E	B
Approach Delay		34.0			71.0	53.5	
Approach LOS		C			E	D	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 127.2	
Natural Cycle: 130	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 47.1	Intersection LOS: D
Intersection Capacity Utilization 140.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	875	591	520	345	611	468	48
v/c Ratio	0.97	0.64	0.60	0.99	0.48	0.63	0.21
Control Delay	51.8	22.7	16.9	95.6	32.1	57.4	15.0
Queue Delay	0.0	0.0	0.0	37.0	4.1	0.0	0.0
Total Delay	51.8	22.7	16.9	132.6	36.1	57.4	15.0
Queue Length 50th (ft)	674	329	213	287	201	108	0
Queue Length 95th (ft)	#812	391	272	#410	221	122	27
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	901	927	870	349	1344	876	259
Starvation Cap Reductn	0	0	0	71	634	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.64	0.60	1.24	0.86	0.53	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	700	349	540	0	0	0	276	489	0	0	374	38
Future Volume (veh/h)	700	349	540	0	0	0	276	489	0	0	374	38
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	875	615	556				345	611	0	0	468	48
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	920	1023	869				356	1231	0	0	643	159
Arrive On Green	0.57	0.57	0.57				0.22	0.36	0.00	0.00	0.10	0.10
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	875	615	556				345	611	0	0	468	48
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	63.5	28.0	30.8				26.4	17.4	0.0	0.0	9.2	3.6
Cycle Q Clear(g_c), s	63.5	28.0	30.8				26.4	17.4	0.0	0.0	9.2	3.6
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	920	1023	869				356	1231	0	0	643	159
V/C Ratio(X)	0.95	0.60	0.64				0.97	0.50	0.00	0.00	0.73	0.30
Avail Cap(c_a), veh/h	920	1023	869				356	1368	0	0	892	220
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	17.7	18.3				48.3	31.2	0.0	0.0	54.3	51.8
Incr Delay (d2), s/veh	20.0	2.6	3.6				39.2	0.3	0.0	0.0	1.9	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	33.3	14.6	13.8				15.7	8.3	0.0	0.0	4.0	1.6
LnGrp Delay(d),s/veh	45.4	20.3	21.9				87.5	31.5	0.0	0.0	56.2	52.9
LnGrp LOS	D	C	C				F	C			E	D
Approach Vol, veh/h		2046						956			516	
Approach Delay, s/veh		31.5						51.7			55.9	
Approach LOS		C						D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		75.5		49.5			32.0	17.5
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		71.0		50.0			27.5	18.0
Max Q Clear Time (g_c+I1), s		65.5		19.4			28.4	11.2
Green Ext Time (p_c), s		4.1		4.6			0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Notes

Scenario Report

Scenario:	OY+C NP_AM
Command:	OY+C NP_AM
Volume:	OY+C NP_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	0	Average Delay (sec/veh):	26.8
Optimal Cycle:	63	Level Of Service:	C

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	13	546	260	474	495	48	29	126	3	214	162	200
Growth 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
Initial Bse:	13	546	260	474	495	48	29	126	3	214	162	200
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:	13	546	260	474	495	48	29	126	3	214	162	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	546	260	474	495	48	29	126	3	214	162	200
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:	13	546	260	474	495	48	29	126	3	214	162	200
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.90	0.90	0.95	0.94	0.94	0.22	1.00	1.00	0.55	0.92	0.92
Lanes:	1.00	1.35	0.65	1.00	1.82	0.18	1.00	0.98	0.02	1.00	0.45	0.55
Final Sat.:	1805	2328	1109	1805	3248	315	410	1850	44	1037	780	963
Capacity Analysis Module:												
Vol/Sat:	0.01	0.23	0.23	0.26	0.15	0.15	0.07	0.07	0.07	0.21	0.21	0.21
Crit Moves:		****		****							****	
Green/Cycle:	0.03	0.33	0.33	0.37	0.67	0.67	0.29	0.29	0.29	0.29	0.29	0.29
Volume/Cap:	0.23	0.70	0.70	0.70	0.23	0.23	0.24	0.23	0.23	0.70	0.70	0.70
Uniform Del:	47.2	29.1	29.1	26.7	6.3	6.3	26.8	26.7	26.7	31.3	31.4	31.4
IncremntDel:	2.0	2.0	2.0	3.4	0.0	0.0	1.0	0.2	0.2	7.0	4.4	4.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	49.2	31.1	31.1	30.1	6.3	6.3	27.8	26.9	26.9	38.4	35.8	35.8
User DelAdj:	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:	49.2	31.1	31.1	30.1	6.3	6.3	27.8	26.9	26.9	38.4	35.8	35.8
LOS by Move:	D	C	C	C	A	A	C	C	C	D	D	D
HCM2kAvgQ:	1	12	12	13	3	3	1	3	3	7	11	11

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.530
Loss Time (sec): 0 Average Delay (sec/veh): 21.6
Optimal Cycle: 112 Level Of Service: C

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	59	0	111	117	800	0	0	484	84
Growth 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
Initial Bse:	0	0	0	59	0	111	117	800	0	0	484	84
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	59	0	111	117	800	0	0	484	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	59	0	111	117	800	0	0	484	84
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	59	0	111	117	800	0	0	484	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	1.00	0.82	0.95	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	0.35	0.00	0.65	1.00	1.00	0.00	0.00	0.85	0.15
Final Sat.:	0	0	0	544	0	1023	1805	1900	0	0	1587	275
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.11	0.06	0.42	0.00	0.00	0.31	0.31
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.13	0.00	0.13	0.50	0.87	0.00	0.00	0.37	0.37
Volume/Cap:	0.00	0.00	0.00	0.84	0.00	0.84	0.13	0.48	0.00	0.00	0.83	0.83
Uniform Del:	0.0	0.0	0.0	42.5	0.0	42.5	13.1	1.4	0.0	0.0	28.9	28.9
IncremntDel:	0.0	0.0	0.0	25.3	0.0	25.3	0.1	0.2	0.0	0.0	8.7	8.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	67.8	0.0	67.8	13.2	1.7	0.0	0.0	37.7	37.7
User DelAdj:	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	67.8	0.0	67.8	13.2	1.7	0.0	0.0	37.7	37.7
LOS by Move:	A	A	A	E	A	E	B	A	A	A	D	D
HCM2kAvgQ:	0	0	0	8	0	8	2	6	0	0	18	18

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.509
Loss Time (sec): 0 Average Delay (sec/veh): 0.2
Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	1 0	1	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	968	0	0	559	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	968	0	0	559	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	0	0	0	0	0	0	968	0	0	559	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	968	0	0	559	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	0	0	0	0	0	0	968	0	0	559	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	1900	0	0	0	0	0	1900	0	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.29	0.00
Crit Moves:								****				
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.29	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	0	0	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.509
Loss Time (sec): 0 Average Delay (sec/veh): 0.2
Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				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	0	0 1	0	0	0	0 0	0	0	1	0 0	0	0	1	0 0
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	968	0		0	559	0	
Growth 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	
Initial Bse:	0	0	0		0	0	0		0	968	0		0	559	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	0	0		0	0	0		0	968	0		0	559	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	0	0		0	0	0		0	968	0		0	559	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	0	0		0	0	0		0	968	0		0	559	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
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	0.00	1.00		0.00	0.00	0.00		0.00	1.00	0.00		0.00	1.00	0.00	
Final Sat.:	0	0	1900		0	0	0		0	1900	0		0	1900	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.51	0.00		0.00	0.29	0.00	
Crit Moves:										****						
Green/Cycle:	0.00	0.00	0.00		0.00	0.00	0.00		0.00	1.00	0.00		0.00	1.00	0.00	
Volume/Cap:	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.51	0.00		0.00	0.29	0.00	
Uniform Del:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
IncremntDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.2	0.0		0.0	0.1	0.0	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Delay Adj:	0.00	0.00	0.00		0.00	0.00	0.00		0.00	1.00	0.00		0.00	1.00	0.00	
Delay/Veh:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.2	0.0		0.0	0.1	0.0	
User DelAdj:	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		0.0	0.0	0.0		0.0	0.2	0.0		0.0	0.1	0.0	
LOS by Move:	A	A	A		A	A	A		A	A	A		A	A	A	
HCM2kAvgQ:	0	0	0		0	0	0		0	1	0		0	0	0	

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.753
Loss Time (sec): 0 Average Delay (sec/veh): 19.1
Optimal Cycle: 92 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Prot+Permit				Prot+Permit			
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	0 0	1	0	0	0 1	1	0	0	1 0	1	0	1	0 1
Volume Module:																
Base Vol:	1	0	0		512	0	53		81	886	1		4	506	570	
Growth 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	
Initial Bse:	1	0	0		512	0	53		81	886	1		4	506	570	
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:	1	0	0		512	0	53		81	886	1		4	506	570	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	1	0	0		512	0	53		81	886	1		4	506	570	
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:	1	0	0		512	0	53		81	886	1		4	506	570	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	0.85		0.95	1.00	1.00		0.95	1.00	0.85	
Lanes:	1.00	0.00	0.00		1.00	0.00	1.00		1.00	0.99	0.01		1.00	1.00	1.00	
Final Sat.:	1805	0	0		1805	0	1615		1805	1898	2		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.28	0.00	0.03		0.04	0.47	0.47		0.00	0.27	0.35	
Crit Moves:	****				****					****			****			
Green/Cycle:	0.00	0.00	0.00		0.38	0.00	0.38		0.62	0.62	0.62		0.56	0.55	0.55	
Volume/Cap:	0.75	0.00	0.00		0.75	0.00	0.09		0.17	0.75	0.75		0.02	0.48	0.64	
Uniform Del:	50.0	0.0	0.0		27.1	0.0	20.1		9.1	13.6	13.6		14.5	13.7	15.5	
IncremntDel:	478.8	0.0	0.0		4.8	0.0	0.1		0.2	2.8	2.8		0.1	0.4	1.6	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Delay Adj:	1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	528.8	0.0	0.0		31.9	0.0	20.2		9.3	16.4	16.4		14.6	14.0	17.0	
User DelAdj:	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:	528.8	0.0	0.0		31.9	0.0	20.2		9.3	16.4	16.4		14.6	14.0	17.0	
LOS by Move:	F	A	A		C	A	C		A	B	B		B	B	B	
HCM2kAvgQ:	0	0	0		15	0	1		1	20	20		0	9	13	

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.795
Loss Time (sec):	0	Average Delay (sec/veh):	5.8
Optimal Cycle:	70	Level Of Service:	A

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	1! 0	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	5	3	30	85	0	18	23	1359	8	16	1081	65
Growth 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
Initial Bse:	5	3	30	85	0	18	23	1359	8	16	1081	65
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:	5	3	30	85	0	18	23	1359	8	16	1081	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	3	30	85	0	18	23	1359	8	16	1081	65
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:	5	3	30	85	0	18	23	1359	8	16	1081	65
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.88	0.88	0.72	1.00	0.72	0.25	1.00	1.00	0.12	0.94	0.94
Lanes:	0.13	0.08	0.79	0.83	0.00	0.17	1.00	0.99	0.01	1.00	1.89	0.11
Final Sat.:	220	132	1321	1132	0	240	474	1887	11	220	3375	203
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.08	0.00	0.08	0.05	0.72	0.72	0.07	0.32	0.32
Crit Moves:				****				****				
Green/Cycle:	0.09	0.09	0.09	0.09	0.00	0.09	0.91	0.91	0.91	0.91	0.91	0.91
Volume/Cap:	0.24	0.24	0.24	0.80	0.00	0.80	0.05	0.80	0.80	0.08	0.35	0.35
Uniform Del:	42.0	42.0	42.0	44.3	0.0	44.3	0.5	1.6	1.6	0.5	0.7	0.7
IncremntDel:	0.8	0.8	0.8	27.9	0.0	27.9	0.1	2.7	2.7	0.2	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	42.8	42.8	42.8	72.2	0.0	72.2	0.5	4.3	4.3	0.7	0.7	0.7
User DelAdj:	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:	42.8	42.8	42.8	72.2	0.0	72.2	0.5	4.3	4.3	0.7	0.7	0.7
LOS by Move:	D	D	D	E	A	E	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	5	0	5	0	16	16	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.460
Loss Time (sec):	0	Average Delay (sec/veh):	388.5
Optimal Cycle:	42	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	1	2	0 2
Volume Module:												
Base Vol:	0	0	0	241	311	356	0	499	1036	202	871	0
Growth 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
Initial Bse:	0	0	0	241	311	356	0	499	1036	202	871	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	0	0	241	311	356	0	499	1036	202	871	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	241	311	356	0	499	1036	202	871	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	0	0	241	311	356	0	499	1036	202	871	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1631	1631	1631	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.19	0.22	0.00	0.10	0.64	0.06	0.24	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.39	0.39	0.39	0.00	0.17	0.17	0.43	0.61	0.00
Volume/Cap:	0.00	0.00	0.00	0.38	0.49	0.56	0.00	0.56	3.71	0.13	0.40	0.00
Uniform Del:	0.0	0.0	0.0	21.6	22.8	23.6	0.0	37.8	41.3	17.0	10.2	0.0
IncremntDel:	0.0	0.0	0.0	0.1	0.2	0.4	0.0	0.8	1226	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	21.7	23.0	24.0	0.0	38.6	1268	17.0	10.3	0.0
User DelAdj:	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	21.7	23.0	24.0	0.0	38.6	1268	17.0	10.3	0.0
LOS by Move:	A	A	A	C	C	C	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	6	8	9	0	6	125	2	7	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	0	Average Delay (sec/veh):	20.3
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	700	349	540	0	0	0	276	489	0	0	374	38
Growth 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
Initial Bse:	700	349	540	0	0	0	276	489	0	0	374	38
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:	700	349	540	0	0	0	276	489	0	0	374	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	700	349	540	0	0	0	276	489	0	0	374	38
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:	700	349	540	0	0	0	276	489	0	0	374	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.79	1.21	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1356	2098	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.43	0.26	0.26	0.00	0.00	0.00	0.15	0.14	0.00	0.00	0.05	0.02
Crit Moves:	****						****				****	
Green/Cycle:	0.68	0.68	0.68	0.00	0.00	0.00	0.24	0.32	0.00	0.00	0.08	0.08
Volume/Cap:	0.64	0.38	0.38	0.00	0.00	0.00	0.64	0.42	0.00	0.00	0.64	0.28
Uniform Del:	9.2	7.0	7.0	0.0	0.0	0.0	34.2	26.5	0.0	0.0	44.3	42.9
IncremntDel:	1.3	0.1	0.1	0.0	0.0	0.0	3.2	0.2	0.0	0.0	2.4	1.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	10.5	7.1	7.1	0.0	0.0	0.0	37.4	26.7	0.0	0.0	46.7	44.0
User DelAdj:	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:	10.5	7.1	7.1	0.0	0.0	0.0	37.4	26.7	0.0	0.0	46.7	44.0
LOS by Move:	B	A	A	A	A	A	D	C	A	A	D	D
HCM2kAvgQ:	13	6	6	0	0	0	9	6	0	0	4	1

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

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Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.970			0.982			0.993			0.898	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3317	0	1615	3358	0	1615	1787	0	1615	1616	0
Flt Permitted	0.950			0.950			0.151			0.522		
Satd. Flow (perm)	1615	3317	0	1615	3358	0	257	1787	0	887	1616	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			24			3			158	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	22	780	197	257	519	71	92	222	10	309	236	502
Future Volume (vph)	22	780	197	257	519	71	92	222	10	309	236	502
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	23	830	210	273	552	76	98	236	11	329	251	534
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	1040	0	273	628	0	98	247	0	329	785	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	22	780	257	519	92	222	309	236
Future Volume (vph)	22	780	257	519	92	222	309	236
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	28.0	16.0	34.0	31.0	31.0	31.0	31.0
Total Split (%)	13.3%	37.3%	21.3%	45.3%	41.3%	41.3%	41.3%	41.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.5	23.5	11.5	35.5	26.5	26.5	26.5	26.5
Actuated g/C Ratio	0.07	0.31	0.15	0.47	0.35	0.35	0.35	0.35
v/c Ratio	0.19	0.97	1.11	0.39	1.09	0.39	1.05	1.17
Control Delay	36.8	47.9	122.1	14.2	152.6	20.2	92.9	112.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	47.9	122.1	14.2	152.6	20.2	92.9	112.2
LOS	D	D	F	B	F	C	F	F
Approach Delay		47.6		46.9		57.8		106.5
Approach LOS		D		D		E		F

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 67.6	Intersection LOS: E
Intersection Capacity Utilization 111.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	23	1040	273	628	98	247	329	785
v/c Ratio	0.19	0.97	1.11	0.39	1.09	0.39	1.05	1.17
Control Delay	36.8	47.9	122.1	14.2	152.6	20.2	92.9	112.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	47.9	122.1	14.2	152.6	20.2	92.9	112.2
Queue Length 50th (ft)	10	240	~147	79	~52	83	~170	~392
Queue Length 95th (ft)	32	#374	#287	152	#143	143	#321	#604
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	118	1069	247	1601	90	633	313	673
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.97	1.11	0.39	1.09	0.39	1.05	1.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	22	780	197	257	519	71	92	222	10	309	236	502
Future Volume (veh/h)	22	780	197	257	519	71	92	222	10	309	236	502
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	23	830	210	273	552	76	98	236	11	329	251	534
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	41	848	214	248	1334	183	96	603	28	353	182	386
Arrive On Green	0.03	0.31	0.31	0.15	0.44	0.44	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1619	2705	684	1619	3022	415	626	1706	80	1030	514	1093
Grp Volume(v), veh/h	23	525	515	273	312	316	98	0	247	329	0	785
Grp Sat Flow(s),veh/h/ln	1619	1710	1679	1619	1710	1727	626	0	1786	1030	0	1607
Q Serve(g_s), s	1.1	22.8	22.8	11.5	9.3	9.4	0.0	0.0	7.8	18.7	0.0	26.5
Cycle Q Clear(g_c), s	1.1	22.8	22.8	11.5	9.3	9.4	26.5	0.0	7.8	26.5	0.0	26.5
Prop In Lane	1.00		0.41	1.00		0.24	1.00		0.04	1.00		0.68
Lane Grp Cap(c), veh/h	41	536	526	248	755	762	96	0	631	353	0	568
V/C Ratio(X)	0.56	0.98	0.98	1.10	0.41	0.42	1.02	0.00	0.39	0.93	0.00	1.38
Avail Cap(c_a), veh/h	119	536	526	248	755	762	96	0	631	353	0	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.1	25.5	25.5	31.8	14.3	14.3	37.5	0.0	18.2	30.2	0.0	24.3
Incr Delay (d2), s/veh	11.4	34.1	34.5	86.4	1.7	1.7	97.6	0.0	0.4	31.0	0.0	182.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	15.7	15.5	11.1	4.8	4.8	4.6	0.0	3.9	9.8	0.0	40.5
LnGrp Delay(d),s/veh	47.5	59.6	60.0	118.1	16.0	16.0	135.3	0.0	18.6	61.2	0.0	207.1
LnGrp LOS	D	E	E	F	B	B	F		B	E		F
Approach Vol, veh/h		1063			901			345			1114	
Approach Delay, s/veh		59.5			46.9			51.8			164.0	
Approach LOS		E			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	28.0		31.0	6.4	37.6		31.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	11.5	23.5		26.5	5.5	29.5		26.5
Max Q Clear Time (g_c+I1), s	13.5	24.8		28.5	3.1	11.4		28.5
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	89.4
HCM 2010 LOS	F

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.931				0.991	
Flt Protected	0.976		0.950			
Satd. Flow (prot)	1545	0	1615	1800	1784	0
Flt Permitted	0.976		0.950			
Satd. Flow (perm)	1545	0	1615	1800	1784	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	42				7	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

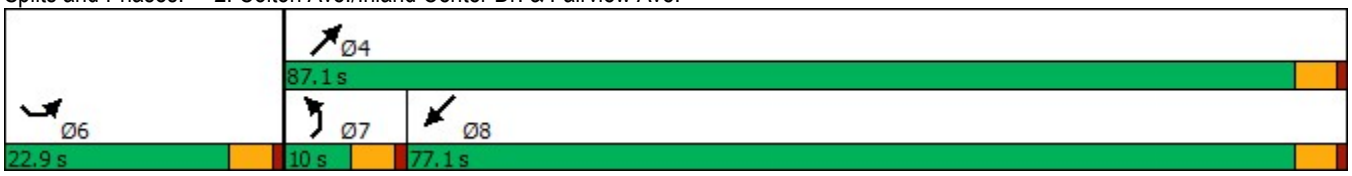
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	46	49	49	641	985	73
Future Volume (vph)	46	49	49	641	985	73
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	51	54	54	712	1094	81
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	0	54	712	1175	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	46	49	641	985
Future Volume (vph)	46	49	641	985
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	22.9	10.0	87.1	77.1
Total Split (%)	20.8%	9.1%	79.2%	70.1%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	18.4	5.5	80.3	72.5
Actuated g/C Ratio	0.17	0.05	0.74	0.67
v/c Ratio	0.35	0.66	0.53	0.98
Control Delay	28.9	87.4	7.4	40.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	28.9	87.4	7.4	40.0
LOS	C	F	A	D
Approach Delay	28.9		13.1	40.0
Approach LOS	C		B	D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 107.8	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 29.3	Intersection LOS: C
Intersection Capacity Utilization 73.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	105	54	712	1175
v/c Ratio	0.35	0.66	0.53	0.98
Control Delay	28.9	87.4	7.4	40.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	28.9	87.4	7.4	40.0
Queue Length 50th (ft)	39	38	175	747
Queue Length 95th (ft)	92	#104	249	#1119
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	299	82	1382	1206
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.35	0.66	0.52	0.97

Intersection Summary

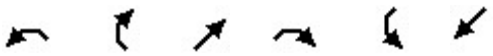
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	46	49	49	641	985	73
Future Volume (veh/h)	46	49	49	641	985	73
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	51	54	54	712	1094	81
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	124	131	67	1348	1103	82
Arrive On Green	0.17	0.17	0.04	0.75	0.67	0.67
Sat Flow, veh/h	734	777	1619	1800	1656	123
Grp Volume(v), veh/h	106	0	54	712	0	1175
Grp Sat Flow(s),veh/h/ln	1526	0	1619	1800	0	1778
Q Serve(g_s), s	6.8	0.0	3.6	17.9	0.0	70.9
Cycle Q Clear(g_c), s	6.8	0.0	3.6	17.9	0.0	70.9
Prop In Lane	0.48	0.51	1.00			0.07
Lane Grp Cap(c), veh/h	258	0	67	1348	0	1184
V/C Ratio(X)	0.41	0.00	0.81	0.53	0.00	0.99
Avail Cap(c_a), veh/h	258	0	82	1364	0	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.5	0.0	51.8	5.7	0.0	17.9
Incr Delay (d2), s/veh	4.8	0.0	36.7	0.4	0.0	24.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	2.3	8.8	0.0	42.2
LnGrp Delay(d),s/veh	45.3	0.0	88.6	6.1	0.0	42.1
LnGrp LOS	D		F	A		D
Approach Vol, veh/h	106			766	1175	
Approach Delay, s/veh	45.3			11.9	42.1	
Approach LOS	D			B	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				86.1		22.9	9.0	77.1
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				82.6		18.4	5.5	72.6
Max Q Clear Time (g_c+I1), s				19.9		8.8	5.6	72.9
Green Ext Time (p_c), s				6.2		0.2	0.0	0.0

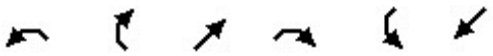
Intersection Summary	
HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1900	0	1900	1900
Flt Permitted						
Satd. Flow (perm)	1900	0	1900	0	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	716	0	0	1149
Future Volume (vph)	0	0	716	0	0	1149
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	778	0	0	1249
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	778	0	0	1249

Intersection Summary

Intersection	
Int Delay, s/veh	0

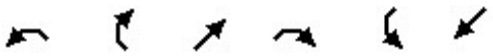
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	716	0	0	1149
Future Vol, veh/h	0	0	716	0	0	1149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	778	0	0	1249

Major/Minor	Minor2		Major2	
Conflicting Flow All	1249	1249	0	0
Stage 1	1249	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 175	213	-	-
Stage 1	~ 247	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	213	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s		0
HCM LOS	-	

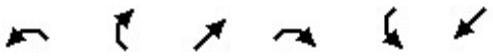
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	716	0	0	1149
Future Volume (vph)	0	0	716	0	0	1149
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	778	0	0	1249
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	778	0	0	1249

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	716	0	0	1149
Future Vol, veh/h	0	0	716	0	0	1149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	0	778	0	0	1249

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	778	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	400	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	400	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.865				0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1470	0	1615	0	1530	1615	1800	0	1700	1800	1530
Flt Permitted				0.950			0.063					
Satd. Flow (perm)	0	1470	0	1615	0	1530	107	1800	0	1700	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		175				88						328
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

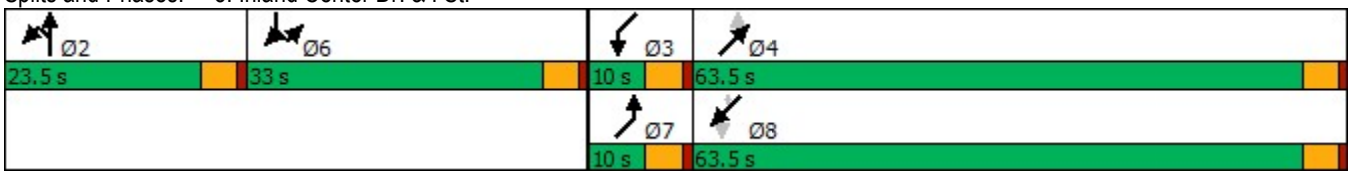
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	1	412	0	91	84	632	0	0	1058	622
Future Volume (vph)	0	0	1	412	0	91	84	632	0	0	1058	622
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	1	458	0	101	93	702	0	0	1176	691
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	458	0	101	93	702	0	0	1176	691

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR	Ø3
Lane Configurations								
Traffic Volume (vph)	0	412	91	84	632	1058	622	
Future Volume (vph)	0	412	91	84	632	1058	622	
Turn Type	NA	Prot	Prot	pm+pt	NA	NA	Perm	
Protected Phases	2	6	6	7	4	8		3
Permitted Phases				4			8	
Detector Phase	2	6	6	7	4	8	8	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5	9.5
Total Split (s)	23.5	33.0	33.0	10.0	63.5	63.5	63.5	10.0
Total Split (%)	18.1%	25.4%	25.4%	7.7%	48.8%	48.8%	48.8%	8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.0	28.5	28.5	69.0	69.0	59.0	59.0	
Actuated g/C Ratio	0.15	0.22	0.22	0.53	0.53	0.45	0.45	
v/c Ratio	0.00	1.29	0.25	0.78	0.74	1.44	0.79	
Control Delay	0.0	192.5	12.5	59.2	29.2	235.3	22.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.0	192.5	12.5	59.2	29.2	235.3	22.9	
LOS	A	F	B	E	C	F	C	
Approach Delay					32.7	156.7		
Approach LOS					C	F		

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.44	
Intersection Signal Delay: 126.6	Intersection LOS: F
Intersection Capacity Utilization 107.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1	458	101	93	702	1176	691
v/c Ratio	0.00	1.29	0.25	0.78	0.74	1.44	0.79
Control Delay	0.0	192.5	12.5	59.2	29.2	235.3	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.0	192.5	12.5	59.2	29.2	235.3	22.9
Queue Length 50th (ft)	0	~492	9	38	440	~1344	274
Queue Length 95th (ft)	0	#704	57	#125	599	#1606	461
Internal Link Dist (ft)	133				59	387	
Turn Bay Length (ft)				110			
Base Capacity (vph)	364	354	404	120	955	816	873
Starvation Cap Reductn	0	0	0	0	0	3	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	1.29	0.25	0.78	0.74	1.45	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	1	412	0	91	84	632	0	0	1058	622
Future Volume (veh/h)	0	0	1	412	0	91	84	632	0	0	1058	622
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	0	0	1	458	0	101	93	702	0	0	1176	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	0	286	0	0	0	152	1275	0	430	1105	940
Arrive On Green	0.00	0.00	0.20	0.00	0.00	0.00	0.05	0.71	0.00	0.00	0.61	0.00
Sat Flow, veh/h	0	0	1445		0		1619	1800	0	1619	1800	1530
Grp Volume(v), veh/h	0	0	1		0.0		93	702	0	0	1176	0
Grp Sat Flow(s),veh/h/ln	0	0	1445				1619	1800	0	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.1				1.9	17.9	0.0	0.0	59.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1				1.9	17.9	0.0	0.0	59.0	0.0
Prop In Lane	0.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	286				152	1275	0	430	1105	940
V/C Ratio(X)	0.00	0.00	0.00				0.61	0.55	0.00	0.00	1.06	0.00
Avail Cap(c_a), veh/h	0	0	286				168	1275	0	521	1105	940
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	30.9				24.5	6.7	0.0	0.0	18.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				5.4	0.5	0.0	0.0	45.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				1.8	9.0	0.0	0.0	42.9	0.0
LnGrp Delay(d),s/veh	0.0	0.0	31.0				29.9	7.2	0.0	0.0	64.3	0.0
LnGrp LOS			C				C	A			F	
Approach Vol, veh/h		1						795			1176	
Approach Delay, s/veh		31.0						9.9			64.3	
Approach LOS		C						A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	0.0	72.6			9.1	63.5
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	59.0			5.5	59.0
Max Q Clear Time (g_c+I1), s		2.1	0.0	19.9			3.9	61.0
Green Ext Time (p_c), s		0.0	0.0	5.8			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	42.4
HCM 2010 LOS	D

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.905			0.997			0.991	
Flt Protected		0.966			0.991		0.950			0.950		
Satd. Flow (prot)	0	1769	0	0	1704	0	1805	1894	0	1805	3578	0
Flt Permitted		0.966			0.991		0.950			0.950		
Satd. Flow (perm)	0	1769	0	0	1704	0	1805	1894	0	1805	3578	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	86	4	33	8	5	31	16	1047	20	29	1610	109
Future Volume (vph)	86	4	33	8	5	31	16	1047	20	29	1610	109
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	92	4	35	9	5	33	17	1126	22	31	1731	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	0	0	47	0	17	1148	0	31	1848	0

Intersection Summary

Intersection	
Int Delay, s/veh	669.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	86	4	33	8	5	31	16	1047	20	29	1610	109
Future Vol, veh/h	86	4	33	8	5	31	16	1047	20	29	1610	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	92	4	35	9	5	33	17	1126	22	31	1731	117

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3042	3034	924	2101	3081	1137	1848	0	0	1148	0	0
Stage 1	1852	1852	-	1171	1171	-	-	-	-	-	-	-
Stage 2	1190	1182	-	930	1910	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 7	13	275	34	12	248	333	-	-	616	-	-
Stage 1	~ 78	125	-	237	269	-	-	-	-	-	-	-
Stage 2	231	266	-	291	117	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 3	12	275	20	11	248	333	-	-	616	-	-
Mov Cap-2 Maneuver	~ 3	12	-	20	11	-	-	-	-	-	-	-
Stage 1	~ 74	119	-	225	255	-	-	-	-	-	-	-
Stage 2	186	252	-	232	111	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, $	16209	291.5	0.2	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	333	-	-	45	4	616	-	-
HCM Lane V/C Ratio	0.052	-	-	1.051	33.065	0.051	-	-
HCM Control Delay (s)	16.4	-	-	291.$	16209	11.2	-	-
HCM Lane LOS	C	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	4.4	18.7	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.922				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1470	2847	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1470	2847	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									158			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	271	371	435	0	610	584	469	1400	0
Future Volume (vph)	0	0	0	271	371	435	0	610	584	469	1400	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	301	412	483	0	678	649	521	1556	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	271	925	0	0	678	649	521	1556	0

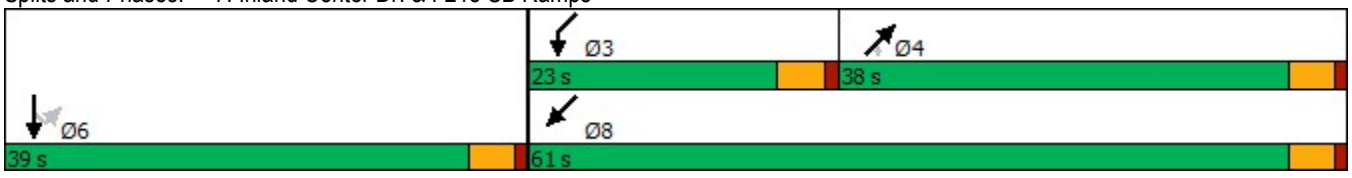
Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	271	371	610	584	469	1400
Future Volume (vph)	271	371	610	584	469	1400
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	39.0	39.0	38.0	38.0	23.0	61.0
Total Split (%)	39.0%	39.0%	38.0%	38.0%	23.0%	61.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	34.5	34.5	33.5	33.5	18.5	56.5
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.18	0.56
v/c Ratio	0.53	1.02dr	0.41	1.05	0.96	0.81
Control Delay	31.0	50.4	26.6	76.8	70.5	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	48.1
Total Delay	31.0	50.4	26.6	76.8	70.5	69.7
LOS	C	D	C	E	E	E
Approach Delay		46.0	51.1			69.9
Approach LOS		D	D			E

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 58.3	Intersection LOS: E
Intersection Capacity Utilization 152.9%	ICU Level of Service H
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	271	925	678	649	521	1556
v/c Ratio	0.53	1.02dr	0.41	1.05	0.96	0.81
Control Delay	31.0	50.4	26.6	76.8	70.5	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	48.1
Total Delay	31.0	50.4	26.6	76.8	70.5	69.7
Queue Length 50th (ft)	151	311	121	~382	171	391
Queue Length 95th (ft)	241	#448	156	#601	#273	492
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	507	982	1646	617	545	1932
Starvation Cap Reductn	0	0	0	0	0	662
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.94	0.41	1.05	0.96	1.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	271	371	435	0	610	584	469	1400	0
Future Volume (veh/h)	0	0	0	271	371	435	0	610	584	469	1400	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				301	412	483	0	678	649	521	1556	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				559	586	499	0	1646	513	547	1932	0
Arrive On Green				0.34	0.34	0.34	0.00	0.34	0.34	0.19	0.56	0.00
Sat Flow, veh/h				1619	1700	1445	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				301	412	483	0	678	649	521	1556	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1445	0	1638	1530	1478	1710	0
Q Serve(g_s), s				15.0	21.0	32.9	0.0	10.6	33.5	17.4	36.3	0.0
Cycle Q Clear(g_c), s				15.0	21.0	32.9	0.0	10.6	33.5	17.4	36.3	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				559	587	499	0	1646	513	547	1932	0
V/C Ratio(X)				0.54	0.70	0.97	0.00	0.41	1.27	0.95	0.81	0.00
Avail Cap(c_a), veh/h				559	587	499	0	1646	513	547	1932	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				26.4	28.3	32.2	0.0	25.7	33.3	40.3	17.4	0.0
Incr Delay (d2), s/veh				3.7	6.9	33.3	0.0	0.2	134.7	27.0	2.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.3	11.0	17.6	0.0	4.8	33.3	9.1	17.6	0.0
LnGrp Delay(d),s/veh				30.0	35.2	65.5	0.0	25.8	167.9	67.3	20.0	0.0
LnGrp LOS				C	D	E		C	F	E	B	
Approach Vol, veh/h					1196			1327			2077	
Approach Delay, s/veh					46.1			95.3			31.8	
Approach LOS					D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			23.0	38.0		39.0		61.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			18.5	33.5		34.5		56.5
Max Q Clear Time (g_c+I1), s			19.4	35.5		34.9		38.3
Green Ext Time (p_c), s			0.0	0.0		0.0		11.4

Intersection Summary	
HCM 2010 Ctrl Delay	53.9
HCM 2010 LOS	D

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.960	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1642	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1642	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26	113									178
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1022	283	446	0	0	0	322	555	0	0	837	370
Future Volume (vph)	1022	283	446	0	0	0	322	555	0	0	837	370
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1175	325	513	0	0	0	370	638	0	0	962	425
Shared Lane Traffic (%)			23%									
Lane Group Flow (vph)	1175	443	395	0	0	0	370	638	0	0	962	425

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	1022	283	446	322	555	837	370
Future Volume (vph)	1022	283	446	322	555	837	370
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	64.5	64.5	64.5	23.0	45.5	22.5	22.5
Total Split (%)	58.6%	58.6%	58.6%	20.9%	41.4%	20.5%	20.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	60.0	60.0	60.0	18.5	41.0	18.0	18.0
Actuated g/C Ratio	0.55	0.55	0.55	0.17	0.37	0.16	0.16
v/c Ratio	1.34	0.49	0.47	1.37	0.50	0.95	1.07
Control Delay	183.9	16.7	12.6	222.7	28.3	64.4	90.0
Queue Delay	0.0	0.0	0.0	0.0	4.4	0.0	0.0
Total Delay	183.9	16.7	12.6	222.7	32.7	64.4	90.0
LOS	F	B	B	F	C	E	F
Approach Delay		113.5			102.4	72.2	
Approach LOS		F			F	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.37	
Intersection Signal Delay: 98.0	Intersection LOS: F
Intersection Capacity Utilization 152.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1175	443	395	370	638	962	425
v/c Ratio	1.34	0.49	0.47	1.37	0.50	0.95	1.07
Control Delay	183.9	16.7	12.6	222.7	28.3	64.4	90.0
Queue Delay	0.0	0.0	0.0	0.0	4.4	0.0	0.0
Total Delay	183.9	16.7	12.6	222.7	32.7	64.4	90.0
Queue Length 50th (ft)	~1082	182	117	~345	180	197	~219
Queue Length 95th (ft)	#1270	257	186	#505	225	#250	#390
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	880	907	844	271	1274	1013	399
Starvation Cap Reductn	0	0	0	0	546	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.34	0.49	0.47	1.37	0.88	0.95	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1022	283	446	0	0	0	322	555	0	0	837	370
Future Volume (veh/h)	1022	283	446	0	0	0	322	555	0	0	837	370
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	1175	466	419				370	638	0	0	962	425
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	883	982	835				272	1275	0	0	1013	250
Arrive On Green	0.55	0.55	0.55				0.17	0.37	0.00	0.00	0.16	0.16
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	1175	466	419				370	638	0	0	962	425
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	60.0	17.5	18.9				18.5	15.8	0.0	0.0	16.9	18.0
Cycle Q Clear(g_c), s	60.0	17.5	18.9				18.5	15.8	0.0	0.0	16.9	18.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	883	982	835				272	1275	0	0	1013	250
V/C Ratio(X)	1.33	0.47	0.50				1.36	0.50	0.00	0.00	0.95	1.70
Avail Cap(c_a), veh/h	883	982	835				272	1275	0	0	1013	250
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	15.3	15.6				45.7	26.6	0.0	0.0	45.5	46.0
Incr Delay (d2), s/veh	156.5	1.6	2.2				183.5	0.3	0.0	0.0	17.4	330.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	64.9	9.1	8.4				22.1	7.5	0.0	0.0	8.4	30.6
LnGrp Delay(d),s/veh	181.5	17.0	17.8				229.2	26.9	0.0	0.0	63.0	376.5
LnGrp LOS	F	B	B				F	C			E	F
Approach Vol, veh/h		2060						1008			1387	
Approach Delay, s/veh		111.0						101.2			159.0	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		64.5		45.5			23.0	22.5
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		60.0		41.0			18.5	18.0
Max Q Clear Time (g_c+I1), s		62.0		17.8			20.5	20.0
Green Ext Time (p_c), s		0.0		4.5			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	123.7
HCM 2010 LOS	F

Notes

Scenario Report

Scenario:	OY+C NP_PM
Command:	OY+C NP_PM
Volume:	OY+C NP_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	0	Average Delay (sec/veh):	31.1
Optimal Cycle:	127	Level Of Service:	C

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	22	780	197	257	519	71	92	222	10	309	236	502
Growth 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
Initial Bse:	22	780	197	257	519	71	92	222	10	309	236	502
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:	22	780	197	257	519	71	92	222	10	309	236	502
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	780	197	257	519	71	92	222	10	309	236	502
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:	22	780	197	257	519	71	92	222	10	309	236	502
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	0.93	0.93	0.12	0.99	0.99	0.52	0.90	0.90
Lanes:	1.00	1.60	0.40	1.00	1.76	0.24	1.00	0.96	0.04	1.00	0.32	0.68
Final Sat.:	1805	2796	706	1805	3118	427	232	1807	81	986	546	1161
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.14	0.17	0.17	0.40	0.12	0.12	0.31	0.43	0.43
Crit Moves:		****		****							****	
Green/Cycle:	0.03	0.33	0.33	0.17	0.46	0.46	0.51	0.51	0.51	0.51	0.51	0.51
Volume/Cap:	0.36	0.85	0.85	0.85	0.36	0.36	0.78	0.24	0.24	0.62	0.85	0.85
Uniform Del:	47.3	31.4	31.4	40.5	17.5	17.5	20.2	13.9	13.9	17.7	21.5	21.5
IncremntDel:	3.6	6.4	6.4	20.4	0.1	0.1	28.3	0.1	0.1	2.4	8.3	8.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	50.9	37.9	37.9	60.9	17.6	17.6	48.4	14.0	14.0	20.1	29.7	29.7
User DelAdj:	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:	50.9	37.9	37.9	60.9	17.6	17.6	48.4	14.0	14.0	20.1	29.7	29.7
LOS by Move:	D	D	D	E	B	B	D	B	B	C	C	C
HCM2kAvgQ:	1	18	18	10	6	6	4	4	4	8	22	22

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.651
Loss Time (sec): 0 Average Delay (sec/veh): 6.6
Optimal Cycle: 53 Level Of Service: A

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	46	0	49	49	641	0	0	985	73
Growth 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
Initial Bse:	0	0	0	46	0	49	49	641	0	0	985	73
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	46	0	49	49	641	0	0	985	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	46	0	49	49	641	0	0	985	73
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	46	0	49	49	641	0	0	985	73
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.81	1.00	0.81	0.95	1.00	1.00	1.00	0.99	0.99
Lanes:	0.00	0.00	0.00	0.48	0.00	0.52	1.00	1.00	0.00	0.00	0.93	0.07
Final Sat.:	0	0	0	746	0	795	1805	1900	0	0	1753	130
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.03	0.34	0.00	0.00	0.56	0.56
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.09	0.00	0.09	0.04	0.91	0.00	0.00	0.86	0.86
Volume/Cap:	0.00	0.00	0.00	0.65	0.00	0.65	0.65	0.37	0.00	0.00	0.65	0.65
Uniform Del:	0.0	0.0	0.0	43.7	0.0	43.7	47.2	0.7	0.0	0.0	2.1	2.1
IncremntDel:	0.0	0.0	0.0	10.0	0.0	10.0	18.4	0.1	0.0	0.0	0.9	0.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	53.7	0.0	53.7	65.6	0.8	0.0	0.0	3.1	3.1
User DelAdj:	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	53.7	0.0	53.7	65.6	0.8	0.0	0.0	3.1	3.1
LOS by Move:	A	A	A	D	A	D	E	A	A	A	A	A
HCM2kAvgQ:	0	0	0	4	0	4	3	3	0	0	11	11

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.605
Loss Time (sec): 0 Average Delay (sec/veh): 0.4
Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	1 0	1	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	716	0	0	1149	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	716	0	0	1149	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	0	0	0	0	0	0	716	0	0	1149	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	716	0	0	1149	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	0	0	0	0	0	0	716	0	0	1149	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	1900	0	0	0	0	0	1900	0	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.60	0.00
Crit Moves:											****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.60	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	0	0	2	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.605
Loss Time (sec):	0	Average Delay (sec/veh):	0.4
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	716	0	0	1149	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	716	0	0	1149	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	0	0	0	0	0	0	716	0	0	1149	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	716	0	0	1149	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	0	0	0	0	0	0	716	0	0	1149	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	0	0	1900	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.60	0.00
Crit Moves:											****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.60	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	0	0	2	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.832
Loss Time (sec):	0	Average Delay (sec/veh):	17.7
Optimal Cycle:	136	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	0	1	0	1
Volume Module:												
Base Vol:	0	0	1	412	0	91	84	632	0	0	1058	622
Growth 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
Initial Bse:	0	0	1	412	0	91	84	632	0	0	1058	622
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	1	412	0	91	84	632	0	0	1058	622
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	1	412	0	91	84	632	0	0	1058	622
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	1	412	0	91	84	632	0	0	1058	622
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	0	0	1644	1805	0	1615	1805	1900	0	1900	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.00	0.06	0.05	0.33	0.00	0.00	0.56	0.39
Crit Moves:				****	****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.27	0.00	0.27	0.73	0.73	0.00	0.00	0.67	0.67
Volume/Cap:	0.00	0.00	0.00	0.83	0.00	0.21	0.40	0.46	0.00	0.00	0.83	0.58
Uniform Del:	0.0	0.0	50.0	34.1	0.0	27.9	17.1	5.7	0.0	0.0	12.4	8.9
IncremntDel:	0.0	0.0	604.0	11.5	0.0	0.2	1.3	0.2	0.0	0.0	4.8	0.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	654.0	45.6	0.0	28.1	18.4	5.9	0.0	0.0	17.2	9.7
User DelAdj:	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	654.0	45.6	0.0	28.1	18.4	5.9	0.0	0.0	17.2	9.7
LOS by Move:	A	A	F	D	A	C	B	A	A	A	B	A
HCM2kAvgQ:	0	0	0	14	0	2	2	8	0	0	26	11

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.647
Loss Time (sec): 0 Average Delay (sec/veh): 4.7
Optimal Cycle: 41 Level Of Service: A

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	1! 0	1	0	0 1	0	1	0
Volume Module:												
Base Vol:	8	5	31	86	4	33	16	1047	20	29	1610	109
Growth 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
Initial Bse:	8	5	31	86	4	33	16	1047	20	29	1610	109
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:	8	5	31	86	4	33	16	1047	20	29	1610	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	5	31	86	4	33	16	1047	20	29	1610	109
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:	8	5	31	86	4	33	16	1047	20	29	1610	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.77	0.77	0.77	0.13	1.00	1.00	0.20	0.94	0.94
Lanes:	0.18	0.11	0.71	0.70	0.03	0.27	1.00	0.98	0.02	1.00	1.87	0.13
Final Sat.:	302	189	1169	1022	48	392	249	1859	36	384	3351	227
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.08	0.08	0.08	0.06	0.56	0.56	0.08	0.48	0.48
Crit Moves:					****			****				
Green/Cycle:	0.13	0.13	0.13	0.13	0.13	0.13	0.87	0.87	0.87	0.87	0.87	0.87
Volume/Cap:	0.20	0.20	0.20	0.65	0.65	0.65	0.07	0.65	0.65	0.09	0.55	0.55
Uniform Del:	38.9	38.9	38.9	41.3	41.3	41.3	0.9	1.9	1.9	0.9	1.6	1.6
IncremntDel:	0.5	0.5	0.5	7.6	7.6	7.6	0.1	0.9	0.9	0.1	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	39.3	39.3	39.3	48.9	48.9	48.9	1.0	2.8	2.8	1.0	1.8	1.8
User DelAdj:	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:	39.3	39.3	39.3	48.9	48.9	48.9	1.0	2.8	2.8	1.0	1.8	1.8
LOS by Move:	D	D	D	D	D	D	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	5	5	5	0	11	11	0	8	8

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.655
Loss Time (sec): 0 Average Delay (sec/veh): 114.4
Optimal Cycle: 82 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	1	2	0 2
Volume Module:												
Base Vol:	0	0	0	271	371	435	0	610	584	469	1400	0
Growth 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
Initial Bse:	0	0	0	271	371	435	0	610	584	469	1400	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	0	0	271	371	435	0	610	584	469	1400	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	271	371	435	0	610	584	469	1400	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	0	0	271	371	435	0	610	584	469	1400	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1630	1630	1630	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.23	0.27	0.00	0.12	0.36	0.13	0.39	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.35	0.35	0.35	0.00	0.15	0.15	0.50	0.65	0.00
Volume/Cap:	0.00	0.00	0.00	0.48	0.66	0.77	0.00	0.77	2.37	0.27	0.59	0.00
Uniform Del:	0.0	0.0	0.0	25.7	27.7	29.2	0.0	40.7	42.4	14.3	9.7	0.0
IncremntDel:	0.0	0.0	0.0	0.2	1.0	2.7	0.0	4.7	630.8	0.1	0.4	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	25.9	28.7	31.9	0.0	45.5	673.2	14.4	10.2	0.0
User DelAdj:	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	25.9	28.7	31.9	0.0	45.5	673.2	14.4	10.2	0.0
LOS by Move:	A	A	A	C	C	C	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	7	11	14	0	9	60	4	13	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.040
Loss Time (sec):	0	Average Delay (sec/veh):	46.6
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	1022	283	446	0	0	0	322	555	0	0	837	370
Growth 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
Initial Bse:	1022	283	446	0	0	0	322	555	0	0	837	370
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:	1022	283	446	0	0	0	322	555	0	0	837	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1022	283	446	0	0	0	322	555	0	0	837	370
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:	1022	283	446	0	0	0	322	555	0	0	837	370
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.78	1.22	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1339	2111	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.63	0.21	0.21	0.00	0.00	0.00	0.18	0.15	0.00	0.00	0.12	0.23
Crit Moves:	****						****					****
Green/Cycle:	0.61	0.61	0.61	0.00	0.00	0.00	0.17	0.39	0.00	0.00	0.22	0.22
Volume/Cap:	1.04	0.35	0.35	0.00	0.00	0.00	1.04	0.39	0.00	0.00	0.55	1.04
Uniform Del:	19.6	9.7	9.7	0.0	0.0	0.0	41.4	21.9	0.0	0.0	34.6	39.0
IncremntDel:	39.7	0.1	0.1	0.0	0.0	0.0	62.0	0.2	0.0	0.0	0.4	58.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	59.3	9.8	9.8	0.0	0.0	0.0	103.4	22.0	0.0	0.0	35.0	97.6
User DelAdj:	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:	59.3	9.8	9.8	0.0	0.0	0.0	103.4	22.0	0.0	0.0	35.0	97.6
LOS by Move:	E	A	A	A	A	A	F	C	A	A	D	F
HCM2kAvgQ:	42	6	6	0	0	0	16	6	0	0	7	18

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

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Appendix J

Opening Year (2020) With Related Projects With Project Conditions
Intersection Analysis Worksheets

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.951			0.987			0.996			0.917	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3252	0	1615	3376	0	1615	1793	0	1615	1651	0
Flt Permitted	0.950			0.950			0.159			0.560		
Satd. Flow (perm)	1615	3252	0	1615	3376	0	270	1793	0	952	1651	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		80			17			1			59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

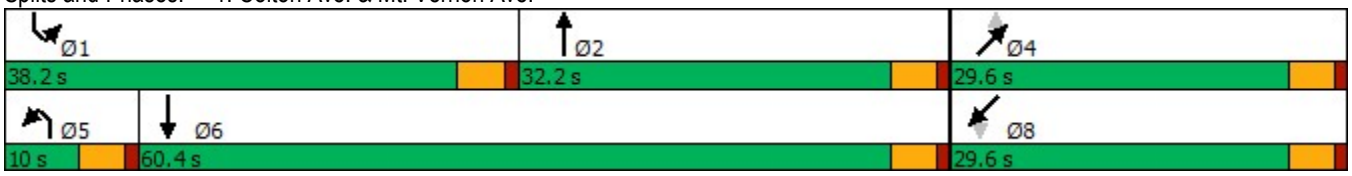
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	13	546	262	476	495	48	29	136	3	214	163	201
Future Volume (vph)	13	546	262	476	495	48	29	136	3	214	163	201
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	16	658	316	573	596	58	35	164	4	258	196	242
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	974	0	573	654	0	35	168	0	258	438	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	13	546	476	495	29	136	214	163
Future Volume (vph)	13	546	476	495	29	136	214	163
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	32.2	38.2	60.4	29.6	29.6	29.6	29.6
Total Split (%)	10.0%	32.2%	38.2%	60.4%	29.6%	29.6%	29.6%	29.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.5	27.7	33.7	61.9	25.1	25.1	25.1	25.1
Actuated g/C Ratio	0.06	0.28	0.34	0.62	0.25	0.25	0.25	0.25
v/c Ratio	0.18	1.02	1.05	0.31	0.52	0.37	1.08	0.96
Control Delay	50.1	67.2	87.1	9.9	62.9	33.7	120.1	65.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	67.2	87.1	9.9	62.9	33.7	120.1	65.8
LOS	D	E	F	A	E	C	F	E
Approach Delay		66.9		46.0		38.7		85.9
Approach LOS		E		D		D		F

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 61.1	Intersection LOS: E
Intersection Capacity Utilization 95.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.



Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	16	974	573	654	35	168	258	438
v/c Ratio	0.18	1.02	1.05	0.31	0.52	0.37	1.08	0.96
Control Delay	50.1	67.2	87.1	9.9	62.9	33.7	120.1	65.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	67.2	87.1	9.9	62.9	33.7	120.1	65.8
Queue Length 50th (ft)	10	~315	~401	80	19	88	~185	244
Queue Length 95th (ft)	29	#391	#532	131	#58	136	#302	#379
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	88	958	544	2096	67	450	238	458
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	1.02	1.05	0.31	0.52	0.37	1.08	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	13	546	262	476	495	48	29	136	3	214	163	201
Future Volume (veh/h)	13	546	262	476	495	48	29	136	3	214	163	201
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	16	658	316	573	596	58	35	164	4	258	196	242
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	29	621	298	546	1878	182	72	439	11	264	184	227
Arrive On Green	0.02	0.28	0.28	0.34	0.60	0.60	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1619	2243	1077	1619	3150	306	864	1750	43	1106	734	906
Grp Volume(v), veh/h	16	502	472	573	323	331	35	0	168	258	0	438
Grp Sat Flow(s),veh/h/ln	1619	1710	1610	1619	1710	1746	864	0	1792	1106	0	1640
Q Serve(g_s), s	1.0	27.7	27.7	33.7	9.4	9.4	0.0	0.0	7.7	17.4	0.0	25.1
Cycle Q Clear(g_c), s	1.0	27.7	27.7	33.7	9.4	9.4	25.1	0.0	7.7	25.1	0.0	25.1
Prop In Lane	1.00		0.67	1.00		0.18	1.00		0.02	1.00		0.55
Lane Grp Cap(c), veh/h	29	474	446	546	1019	1041	72	0	450	264	0	412
V/C Ratio(X)	0.55	1.06	1.06	1.05	0.32	0.32	0.49	0.00	0.37	0.98	0.00	1.06
Avail Cap(c_a), veh/h	89	474	446	546	1019	1041	72	0	450	264	0	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	36.2	36.2	33.2	10.1	10.1	50.0	0.0	31.0	43.5	0.0	37.5
Incr Delay (d2), s/veh	15.3	57.9	59.1	52.4	0.8	0.8	5.0	0.0	0.5	48.9	0.0	62.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	20.6	19.6	22.9	4.6	4.7	1.1	0.0	3.9	10.7	0.0	18.5
LnGrp Delay(d),s/veh	64.0	94.0	95.3	85.5	10.9	10.9	55.0	0.0	31.5	92.4	0.0	99.8
LnGrp LOS	E	F	F	F	B	B	E		C	F		F
Approach Vol, veh/h		990			1227			203			696	
Approach Delay, s/veh		94.2			45.7			35.5			97.1	
Approach LOS		F			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.2	32.2		29.6	6.3	64.1		29.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	33.7	27.7		25.1	5.5	55.9		25.1
Max Q Clear Time (g_c+I1), s	35.7	29.7		27.1	3.0	11.4		27.1
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	71.9
HCM 2010 LOS	E

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.912				0.980	
Flt Protected	0.983		0.950			
Satd. Flow (prot)	1524	0	1615	1800	1764	0
Flt Permitted	0.983		0.950			
Satd. Flow (perm)	1524	0	1615	1800	1764	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	95				14	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

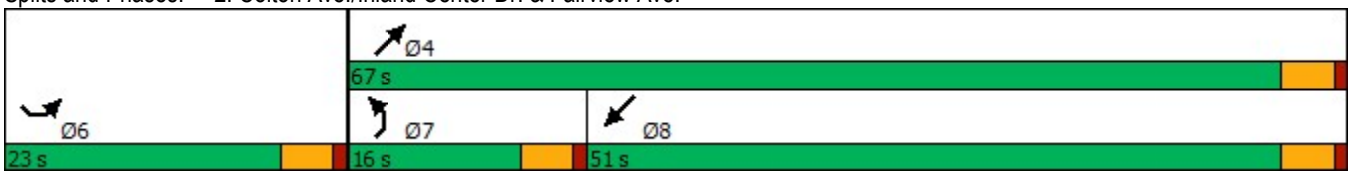
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	59	111	117	815	486	84
Future Volume (vph)	59	111	117	815	486	84
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	82	154	163	1132	675	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	0	163	1132	792	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	59	117	815	486
Future Volume (vph)	59	117	815	486
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	23.0	16.0	67.0	51.0
Total Split (%)	25.6%	17.8%	74.4%	56.7%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	18.7	11.0	56.7	41.2
Actuated g/C Ratio	0.22	0.13	0.67	0.49
v/c Ratio	0.58	0.78	0.94	0.91
Control Delay	25.0	63.0	28.0	36.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	25.0	63.0	28.0	36.2
LOS	C	E	C	D
Approach Delay	25.0		32.4	36.2
Approach LOS	C		C	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 84.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 32.9	Intersection LOS: C
Intersection Capacity Utilization 64.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	236	163	1132	792
v/c Ratio	0.58	0.78	0.94	0.91
Control Delay	25.0	63.0	28.0	36.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	25.0	63.0	28.0	36.2
Queue Length 50th (ft)	71	91	456	367
Queue Length 95th (ft)	101	#131	392	358
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	410	222	1345	986
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.58	0.73	0.84	0.80

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	59	111	117	815	486	84
Future Volume (veh/h)	59	111	117	815	486	84
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	82	154	162	1132	675	117
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	114	214	193	1212	748	130
Arrive On Green	0.22	0.22	0.12	0.67	0.50	0.50
Sat Flow, veh/h	520	976	1619	1800	1495	259
Grp Volume(v), veh/h	237	0	162	1132	0	792
Grp Sat Flow(s),veh/h/ln	1502	0	1619	1800	0	1754
Q Serve(g_s), s	12.3	0.0	8.2	46.6	0.0	34.6
Cycle Q Clear(g_c), s	12.3	0.0	8.2	46.6	0.0	34.6
Prop In Lane	0.35	0.65	1.00			0.15
Lane Grp Cap(c), veh/h	330	0	193	1212	0	878
V/C Ratio(X)	0.72	0.00	0.84	0.93	0.00	0.90
Avail Cap(c_a), veh/h	330	0	221	1337	0	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.4	0.0	36.3	12.1	0.0	19.2
Incr Delay (d2), s/veh	12.6	0.0	21.5	11.5	0.0	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	4.8	26.5	0.0	19.1
LnGrp Delay(d),s/veh	43.0	0.0	57.7	23.6	0.0	30.0
LnGrp LOS	D		E	C		C
Approach Vol, veh/h	237			1294	792	
Approach Delay, s/veh	43.0			27.9	30.0	
Approach LOS	D			C	C	

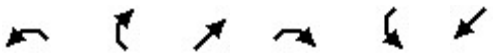
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				61.2		23.0	14.6	46.6
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				62.5		18.5	11.5	46.5
Max Q Clear Time (g_c+I1), s				48.6		14.3	10.2	36.6
Green Ext Time (p_c), s				8.1		0.3	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

Notes

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.910		0.999			
Flt Protected	0.984				0.950	
Satd. Flow (prot)	1701	0	1898	0	1805	1900
Flt Permitted	0.984				0.950	
Satd. Flow (perm)	1701	0	1898	0	1805	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	2	4	976	8	69	559
Future Volume (vph)	2	4	976	8	69	559
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	2	4	1061	9	75	608
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	0	1070	0	75	608

Intersection Summary

Intersection	
Int Delay, s/veh	329.6

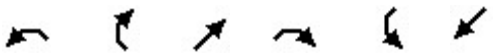
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	2	4	976	8	69	559
Future Vol, veh/h	2	4	976	8	69	559
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	4	1061	9	75	608

Major/Minor	Minor2		Major2	
Conflicting Flow All	758	608	0	0
Stage 1	758	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 339	499	-	-
Stage 1	~ 418	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	499	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s	$ 539.9	
HCM LOS	F	

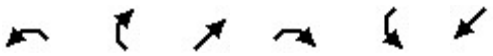
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	499	-	-
HCM Lane V/C Ratio	2.143	-	-
HCM Control Delay (s)	$ 539.9	-	-
HCM Lane LOS	F	-	-
HCM 95th %tile Q(veh)	76.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.865	0.999			
Flt Protected						
Satd. Flow (prot)	0	1644	1898	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1644	1898	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	4	973	8	0	628
Future Volume (vph)	0	4	973	8	0	628
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	4	1058	9	0	683
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	4	1067	0	0	683

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	4	973	8	0	628
Future Vol, veh/h	0	4	973	8	0	628
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	4	1058	9	0	683

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1063	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	274	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	274	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	18.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	274	-
HCM Lane V/C Ratio	-	-	0.016	-
HCM Control Delay (s)	-	-	18.4	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt						0.850						0.850
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1615	0	1615	0	1530	1615	1800	0	1615	1800	1530
Flt Permitted		0.950		0.950			0.067			0.072		
Satd. Flow (perm)	0	1615	0	1615	0	1530	114	1800	0	122	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						88						508
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

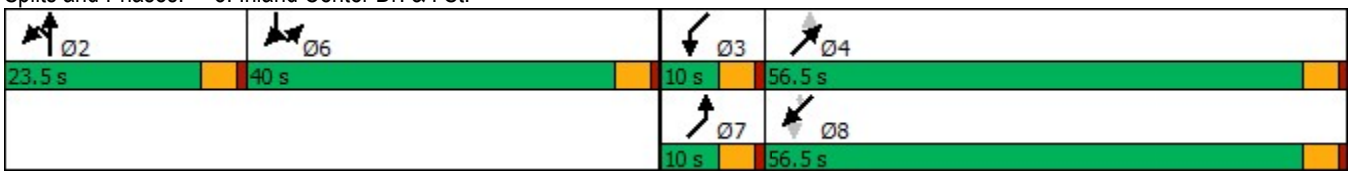
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1	0	0	512	0	57	81	895	1	4	570	570
Future Volume (vph)	1	0	0	512	0	57	81	895	1	4	570	570
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1	0	0	648	0	72	103	1133	1	5	722	722
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	648	0	72	103	1134	0	5	722	722

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Configurations								
Traffic Volume (vph)	0	512	57	81	895	4	570	570
Future Volume (vph)	0	512	57	81	895	4	570	570
Turn Type	NA	Prot	Prot	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	2	6	6	7	4	3	8	
Permitted Phases				4		8		8
Detector Phase	2	6	6	7	4	3	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	23.5	40.0	40.0	10.0	56.5	10.0	56.5	56.5
Total Split (%)	18.1%	30.8%	30.8%	7.7%	43.5%	7.7%	43.5%	43.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.0	35.5	35.5	61.1	60.0	57.5	52.0	52.0
Actuated g/C Ratio	0.15	0.27	0.27	0.47	0.46	0.44	0.40	0.40
v/c Ratio	0.00	1.47	0.15	0.89	1.37	0.04	1.00	0.79
Control Delay	48.0	258.2	5.4	82.9	202.7	18.8	73.4	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	258.2	5.4	82.9	202.7	18.8	73.4	16.6
LOS	D	F	A	F	F	B	E	B
Approach Delay	48.0				192.7		44.9	
Approach LOS	D				F		D	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.47	
Intersection Signal Delay: 138.3	Intersection LOS: F
Intersection Capacity Utilization 94.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Group Flow (vph)	1	648	72	103	1134	5	722	722
v/c Ratio	0.00	1.47	0.15	0.89	1.37	0.04	1.00	0.79
Control Delay	48.0	258.2	5.4	82.9	202.7	18.8	73.4	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	258.2	5.4	82.9	202.7	18.8	73.4	16.6
Queue Length 50th (ft)	1	~748	0	47	~1234	2	~606	163
Queue Length 95th (ft)	6	#815	17	#125	#1343	8	#690	202
Internal Link Dist (ft)	133				59		387	
Turn Bay Length (ft)				110		50		
Base Capacity (vph)	236	441	481	116	830	117	720	916
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	1.47	0.15	0.89	1.37	0.04	1.00	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	512	0	57	81	895	1	4	570	570
Future Volume (veh/h)	1	0	0	512	0	57	81	895	1	4	570	570
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	1	0	0	648	0	72	103	1133	1	5	722	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	362	0	0	0	0	0	352	1099	1	95	1016	863
Arrive On Green	0.22	0.00	0.00	0.00	0.00	0.00	0.05	0.61	0.61	0.01	0.56	0.00
Sat Flow, veh/h	1619	0	0		0		1619	1798	2	1619	1800	1530
Grp Volume(v), veh/h	1	0	0		0.0		103	0	1134	5	722	0
Grp Sat Flow(s),veh/h/ln	1619	0	0				1619	0	1800	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.0				2.1	0.0	52.0	0.1	24.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0				2.1	0.0	52.0	0.1	24.8	0.0
Prop In Lane	1.00		0.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	362	0	0				352	0	1100	95	1016	863
V/C Ratio(X)	0.00	0.00	0.00				0.29	0.00	1.03	0.05	0.71	0.00
Avail Cap(c_a), veh/h	362	0	0				370	0	1100	189	1100	935
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.7	0.0	0.0				10.9	0.0	16.5	21.4	13.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.5	0.0	35.3	0.2	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				1.0	0.0	36.2	0.1	12.8	0.0
LnGrp Delay(d),s/veh	25.7	0.0	0.0				11.3	0.0	51.8	21.6	15.5	0.0
LnGrp LOS	C						B		F	C	B	
Approach Vol, veh/h		1						1237			727	
Approach Delay, s/veh		25.7						48.4			15.5	
Approach LOS		C						D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	5.1	56.5			9.1	52.5
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	52.0			5.5	52.0
Max Q Clear Time (g_c+I1), s		2.0	2.1	54.0			4.1	26.8
Green Ext Time (p_c), s		0.0	0.0	0.0			0.0	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	36.2
HCM 2010 LOS	D

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.893			0.999			0.992	
Flt Protected		0.961			0.994		0.950			0.950		
Satd. Flow (prot)	0	1782	0	0	1687	0	1805	1898	0	1805	3581	0
Flt Permitted		0.961			0.994		0.950			0.950		
Satd. Flow (perm)	0	1782	0	0	1687	0	1805	1898	0	1805	3581	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	85	0	18	5	3	30	23	1367	8	16	1145	65
Future Volume (vph)	85	0	18	5	3	30	23	1367	8	16	1145	65
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	106	0	23	6	4	38	29	1709	10	20	1431	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	48	0	29	1719	0	20	1512	0

Intersection Summary

Intersection	
Int Delay, s/veh	2409.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	85	0	18	5	3	30	23	1367	8	16	1145	65
Future Vol, veh/h	85	0	18	5	3	30	23	1367	8	16	1145	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	106	0	23	6	4	38	29	1709	10	20	1431	81

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3305	3289	756	2528	3324	1714	1512	0	0	1719	0	0
Stage 1	1512	1512	-	1772	1772	-	-	-	-	-	-	-
Stage 2	1793	1777	-	756	1552	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 4	9	355	16	8	113	448	-	-	373	-	-
Stage 1	128	184	-	107	137	-	-	-	-	-	-	-
Stage 2	~ 104	137	-	371	176	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 1	8	355	14	7	113	448	-	-	373	-	-
Mov Cap-2 Maneuver	~ 1	8	-	14	7	-	-	-	-	-	-	-
Stage 1	120	174	-	100	128	-	-	-	-	-	-	-
Stage 2	~ 63	128	-	329	166	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay	$ 4516.7	$ 430.9	0.2	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	448	-	-	36	1	373	-	-
HCM Lane V/C Ratio	0.064	-	-	1.319	128.75	0.054	-	-
HCM Control Delay (s)	13.6	-	-	$ 430.9	$ 4516.7	15.2	-	-
HCM Lane LOS	B	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-	5	18.6	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.920				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1470	2841	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1470	2841	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									146			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	241	311	382	0	503	1040	202	909	0
Future Volume (vph)	0	0	0	241	311	382	0	503	1040	202	909	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	290	375	460	0	606	1253	243	1095	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	261	864	0	0	606	1253	243	1095	0

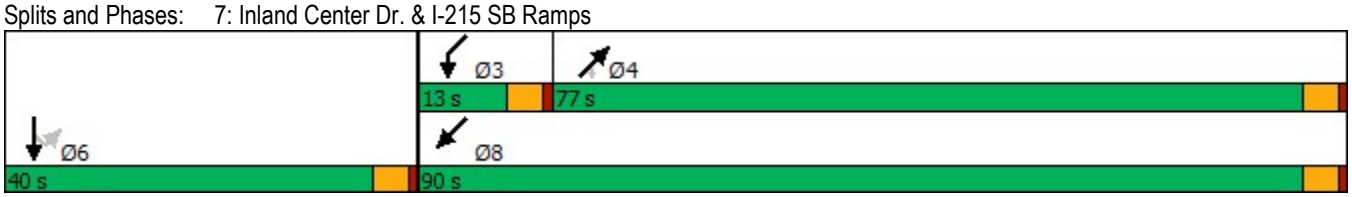
Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	241	311	503	1040	202	909
Future Volume (vph)	241	311	503	1040	202	909
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	40.0	40.0	77.0	77.0	13.0	90.0
Total Split (%)	30.8%	30.8%	59.2%	59.2%	10.0%	69.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	35.5	35.5	72.5	72.5	8.5	85.5
Actuated g/C Ratio	0.27	0.27	0.56	0.56	0.07	0.66
v/c Ratio	0.65	1.23dr	0.22	1.37	1.27	0.49
Control Delay	50.6	112.1	14.8	196.6	201.9	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	14.5
Total Delay	50.6	112.1	14.8	196.6	201.9	26.6
LOS	D	F	B	F	F	C
Approach Delay		97.9	137.4			58.4
Approach LOS		F	F			E

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.37	
Intersection Signal Delay: 102.6	Intersection LOS: F
Intersection Capacity Utilization 143.3%	ICU Level of Service H
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	261	864	606	1253	243	1095
v/c Ratio	0.65	1.23dr	0.22	1.37	1.27	0.49
Control Delay	50.6	112.1	14.8	196.6	201.9	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	14.5
Total Delay	50.6	112.1	14.8	196.6	201.9	26.6
Queue Length 50th (ft)	214	~458	90	~1341	~132	226
Queue Length 95th (ft)	291	#519	103	#1414	#196	242
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	401	775	2740	917	192	2249
Starvation Cap Reductn	0	0	0	6	0	1153
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	1.11	0.22	1.38	1.27	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	241	311	382	0	503	1040	202	909	0
Future Volume (veh/h)	0	0	0	241	311	382	0	503	1040	202	909	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				290	375	460	0	606	1253	243	1095	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				442	464	395	0	2740	853	193	2249	0
Arrive On Green				0.27	0.27	0.27	0.00	0.56	0.56	0.07	0.66	0.00
Sat Flow, veh/h				1619	1700	1445	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				290	375	460	0	606	1253	243	1095	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1445	0	1638	1530	1478	1710	0
Q Serve(g_s), s				20.6	26.7	35.5	0.0	8.1	72.5	8.5	21.0	0.0
Cycle Q Clear(g_c), s				20.6	26.7	35.5	0.0	8.1	72.5	8.5	21.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				442	464	395	0	2741	853	193	2249	0
V/C Ratio(X)				0.66	0.81	1.17	0.00	0.22	1.47	1.26	0.49	0.00
Avail Cap(c_a), veh/h				442	464	395	0	2741	853	193	2249	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				41.8	44.1	47.3	0.0	14.5	28.8	60.7	11.2	0.0
Incr Delay (d2), s/veh				7.4	14.0	98.8	0.0	0.0	217.2	150.7	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.1	14.3	25.0	0.0	3.7	81.8	7.5	9.8	0.0
LnGrp Delay(d),s/veh				49.2	58.1	146.1	0.0	14.5	246.0	211.4	11.4	0.0
LnGrp LOS				D	E	F		B	F	F	B	
Approach Vol, veh/h					1125			1859			1338	
Approach Delay, s/veh					91.8			170.5			47.7	
Approach LOS					F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	77.0		40.0		90.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			8.5	72.5		35.5		85.5
Max Q Clear Time (g_c+I1), s			10.5	74.5		37.5		23.0
Green Ext Time (p_c), s			0.0	0.0		0.0		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	112.0
HCM 2010 LOS	F

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.961	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1643	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1643	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22	133									50
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	733	349	540	0	0	0	279	490	0	0	379	38
Future Volume (vph)	733	349	540	0	0	0	279	490	0	0	379	38
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	916	436	675	0	0	0	349	613	0	0	474	48
Shared Lane Traffic (%)			23%									
Lane Group Flow (vph)	916	591	520	0	0	0	349	613	0	0	474	48

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	733	349	540	279	490	379	38
Future Volume (vph)	733	349	540	279	490	379	38
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	75.5	75.5	75.5	32.0	54.5	22.5	22.5
Total Split (%)	58.1%	58.1%	58.1%	24.6%	41.9%	17.3%	17.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	71.0	71.0	71.0	27.5	47.3	15.3	15.3
Actuated g/C Ratio	0.56	0.56	0.56	0.22	0.37	0.12	0.12
v/c Ratio	1.02	0.64	0.60	1.00	0.48	0.64	0.21
Control Delay	63.2	22.8	17.0	98.8	32.1	57.5	15.0
Queue Delay	0.0	0.0	0.0	33.7	4.2	0.0	0.0
Total Delay	63.2	22.8	17.0	132.5	36.3	57.5	15.0
LOS	E	C	B	F	D	E	B
Approach Delay		39.6			71.2	53.6	
Approach LOS		D			E	D	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 127.3	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 50.3	Intersection LOS: D
Intersection Capacity Utilization 143.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	916	591	520	349	613	474	48
v/c Ratio	1.02	0.64	0.60	1.00	0.48	0.64	0.21
Control Delay	63.2	22.8	17.0	98.8	32.1	57.5	15.0
Queue Delay	0.0	0.0	0.0	33.7	4.2	0.0	0.0
Total Delay	63.2	22.8	17.0	132.5	36.3	57.5	15.0
Queue Length 50th (ft)	~805	329	214	~294	202	109	0
Queue Length 95th (ft)	#877	391	272	#417	222	123	27
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	900	926	869	348	1343	875	259
Starvation Cap Reductn	0	0	0	70	635	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.64	0.60	1.26	0.87	0.54	0.19

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	733	349	540	0	0	0	279	490	0	0	379	38
Future Volume (veh/h)	733	349	540	0	0	0	279	490	0	0	379	38
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	916	615	556				349	612	0	0	474	48
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	919	1022	868				356	1233	0	0	649	160
Arrive On Green	0.57	0.57	0.57				0.22	0.36	0.00	0.00	0.10	0.10
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	916	615	556				349	612	0	0	474	48
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	70.5	28.1	30.9				26.8	17.4	0.0	0.0	9.3	3.6
Cycle Q Clear(g_c), s	70.5	28.1	30.9				26.8	17.4	0.0	0.0	9.3	3.6
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	919	1022	868				356	1233	0	0	649	160
V/C Ratio(X)	1.00	0.60	0.64				0.98	0.50	0.00	0.00	0.73	0.30
Avail Cap(c_a), veh/h	919	1022	868				356	1367	0	0	891	220
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	17.8	18.4				48.5	31.2	0.0	0.0	54.3	51.8
Incr Delay (d2), s/veh	29.0	2.6	3.6				42.4	0.3	0.0	0.0	2.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	38.7	14.6	13.8				16.2	8.3	0.0	0.0	4.1	1.6
LnGrp Delay(d),s/veh	55.9	20.4	22.0				90.9	31.5	0.0	0.0	56.3	52.8
LnGrp LOS	E	C	C				F	C			E	D
Approach Vol, veh/h		2087						961			522	
Approach Delay, s/veh		36.4						53.1			55.9	
Approach LOS		D						D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		75.5		49.6			32.0	17.6
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		71.0		50.0			27.5	18.0
Max Q Clear Time (g_c+I1), s		72.5		19.4			28.8	11.3
Green Ext Time (p_c), s		0.0		4.6			0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	43.7
HCM 2010 LOS	D

Notes

Scenario Report

Scenario:	OY+C+P_AM
Command:	OY+C+P_AM
Volume:	OY+C+P_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.708
Loss Time (sec):	0	Average Delay (sec/veh):	27.0
Optimal Cycle:	64	Level Of Service:	C

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	13	546	262	476	495	48	29	136	3	214	163	201
Growth 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
Initial Bse:	13	546	262	476	495	48	29	136	3	214	163	201
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:	13	546	262	476	495	48	29	136	3	214	163	201
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	546	262	476	495	48	29	136	3	214	163	201
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:	13	546	262	476	495	48	29	136	3	214	163	201
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.90	0.90	0.95	0.94	0.94	0.21	1.00	1.00	0.53	0.92	0.92
Lanes:	1.00	1.35	0.65	1.00	1.82	0.18	1.00	0.98	0.02	1.00	0.45	0.55
Final Sat.:	1805	2320	1113	1805	3248	315	407	1853	41	1007	780	962
Capacity Analysis Module:												
Vol/Sat:	0.01	0.24	0.24	0.26	0.15	0.15	0.07	0.07	0.07	0.21	0.21	0.21
Crit Moves:		****		****							****	
Green/Cycle:	0.03	0.33	0.33	0.37	0.67	0.67	0.30	0.30	0.30	0.30	0.30	0.30
Volume/Cap:	0.23	0.71	0.71	0.71	0.23	0.23	0.24	0.25	0.25	0.72	0.71	0.71
Uniform Del:	47.2	29.1	29.1	26.7	6.3	6.3	26.8	26.8	26.8	31.5	31.4	31.4
IncremntDel:	2.0	2.1	2.1	3.5	0.0	0.0	1.0	0.2	0.2	8.3	4.5	4.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	49.2	31.2	31.2	30.2	6.4	6.4	27.8	27.0	27.0	39.9	35.9	35.9
User DelAdj:	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:	49.2	31.2	31.2	30.2	6.4	6.4	27.8	27.0	27.0	39.9	35.9	35.9
LOS by Move:	D	C	C	C	A	A	C	C	C	D	D	D
HCM2kAvgQ:	1	13	13	13	3	3	1	3	3	7	11	11

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.537
Loss Time (sec):	0	Average Delay (sec/veh):	22.0
Optimal Cycle:	119	Level Of Service:	C

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	59	0	111	117	815	0	0	486	84
Growth 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
Initial Bse:	0	0	0	59	0	111	117	815	0	0	486	84
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	59	0	111	117	815	0	0	486	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	59	0	111	117	815	0	0	486	84
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	59	0	111	117	815	0	0	486	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	1.00	0.82	0.95	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	0.35	0.00	0.65	1.00	1.00	0.00	0.00	0.85	0.15
Final Sat.:	0	0	0	544	0	1023	1805	1900	0	0	1588	274
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.11	0.06	0.43	0.00	0.00	0.31	0.31
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.13	0.00	0.13	0.51	0.87	0.00	0.00	0.36	0.36
Volume/Cap:	0.00	0.00	0.00	0.85	0.00	0.85	0.13	0.49	0.00	0.00	0.84	0.84
Uniform Del:	0.0	0.0	0.0	42.6	0.0	42.6	12.9	1.4	0.0	0.0	29.2	29.2
IncremntDel:	0.0	0.0	0.0	26.9	0.0	26.9	0.1	0.2	0.0	0.0	9.4	9.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	69.5	0.0	69.5	13.0	1.7	0.0	0.0	38.7	38.7
User DelAdj:	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	69.5	0.0	69.5	13.0	1.7	0.0	0.0	38.7	38.7
LOS by Move:	A	A	A	E	A	E	B	A	A	A	D	D
HCM2kAvgQ:	0	0	0	8	0	8	2	6	0	0	19	19

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	0	Average Delay (sec/veh):	0.5
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	0 1	0	1	0 0
Volume Module:												
Base Vol:	2	0	4	0	0	0	0	976	8	69	559	0
Growth 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
Initial Bse:	2	0	4	0	0	0	0	976	8	69	559	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:	2	0	4	0	0	0	0	976	8	69	559	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	4	0	0	0	0	976	8	69	559	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:	2	0	4	0	0	0	0	976	8	69	559	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.47	1.00	1.00
Lanes:	0.33	0.00	0.67	0.00	0.00	0.00	0.00	0.99	0.01	1.00	1.00	0.00
Final Sat.:	567	0	1134	0	0	0	0	1883	15	893	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52	0.08	0.29	0.00
Crit Moves:	****							****				
Green/Cycle:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.99	0.99	0.99	0.99	0.00
Volume/Cap:	0.52	0.00	0.52	0.00	0.00	0.00	0.00	0.52	0.52	0.08	0.30	0.00
Uniform Del:	49.5	0.0	49.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	37.2	0.0	37.2	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	86.7	0.0	86.7	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.1	0.0
User DelAdj:	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:	86.7	0.0	86.7	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.1	0.0
LOS by Move:	F	A	F	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	1	0	1	0	0	0	0	1	1	0	1	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.519
Loss Time (sec): 0 Average Delay (sec/veh): 0.4
Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				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	0	0 1	0	0	0	0 0	0	0	0	1 0	0	0	1	0 0
Volume Module:																
Base Vol:	0	0	4		0	0	0		0	973	8		0	628	0	
Growth 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	
Initial Bse:	0	0	4		0	0	0		0	973	8		0	628	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	0	4		0	0	0		0	973	8		0	628	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	0	4		0	0	0		0	973	8		0	628	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	0	4		0	0	0		0	973	8		0	628	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	1.00	0.87		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	0.00	0.00	1.00		0.00	0.00	0.00		0.00	0.99	0.01		0.00	1.00	0.00	
Final Sat.:	0	0	1644		0	0	0		0	1883	15		0	1900	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.52	0.52		0.00	0.33	0.00	
Crit Moves:			****							****						
Green/Cycle:	0.00	0.00	0.00		0.00	0.00	0.00		0.00	1.00	1.00		0.00	1.00	0.00	
Volume/Cap:	0.00	0.00	0.52		0.00	0.00	0.00		0.00	0.52	0.52		0.00	0.33	0.00	
Uniform Del:	0.0	0.0	49.7		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
IncremntDel:	0.0	0.0	51.2		0.0	0.0	0.0		0.0	0.3	0.3		0.0	0.1	0.0	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Delay Adj:	0.00	0.00	1.00		0.00	0.00	0.00		0.00	1.00	1.00		0.00	1.00	0.00	
Delay/Veh:	0.0	0.0	100.8		0.0	0.0	0.0		0.0	0.3	0.3		0.0	0.1	0.0	
User DelAdj:	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	100.8		0.0	0.0	0.0		0.0	0.3	0.3		0.0	0.1	0.0	
LOS by Move:	A	A	F		A	A	A		A	A	A		A	A	A	
HCM2kAvgQ:	0	0	1		0	0	0		0	1	1		0	1	0	

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.758
Loss Time (sec): 0 Average Delay (sec/veh): 19.3
Optimal Cycle: 94 Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Prot+Permit				Prot+Permit			
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	0 0	1	0	0	0 1	1	0	0	1 0	1	0	1	0 1
Volume Module:																
Base Vol:	1	0	0		512	0	57		81	895	1		4	570	570	
Growth 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	
Initial Bse:	1	0	0		512	0	57		81	895	1		4	570	570	
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:	1	0	0		512	0	57		81	895	1		4	570	570	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	1	0	0		512	0	57		81	895	1		4	570	570	
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:	1	0	0		512	0	57		81	895	1		4	570	570	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	0.85		0.95	1.00	1.00		0.95	1.00	0.85	
Lanes:	1.00	0.00	0.00		1.00	0.00	1.00		1.00	0.99	0.01		1.00	1.00	1.00	
Final Sat.:	1805	0	0		1805	0	1615		1805	1898	2		1805	1900	1615	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.00	0.00		0.28	0.00	0.04		0.04	0.47	0.47		0.00	0.30	0.35	
Crit Moves:	****				****					****				****		
Green/Cycle:	0.00	0.00	0.00		0.37	0.00	0.37		0.63	0.62	0.62		0.56	0.55	0.55	
Volume/Cap:	0.76	0.00	0.00		0.76	0.00	0.09		0.19	0.76	0.76		0.02	0.54	0.64	
Uniform Del:	50.0	0.0	0.0		27.3	0.0	20.3		9.7	13.5	13.5		14.6	14.2	15.3	
IncremntDel:	486.0	0.0	0.0		5.0	0.0	0.1		0.2	2.9	2.9		0.1	0.6	1.5	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Delay Adj:	1.00	0.00	0.00		1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	535.9	0.0	0.0		32.3	0.0	20.4		9.9	16.4	16.4		14.6	14.7	16.9	
User DelAdj:	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:	535.9	0.0	0.0		32.3	0.0	20.4		9.9	16.4	16.4		14.6	14.7	16.9	
LOS by Move:	F	A	A		C	A	C		A	B	B		B	B	B	
HCM2kAvgQ:	0	0	0		15	0	1		1	21	21		0	11	13	

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	0	Average Delay (sec/veh):	5.8
Optimal Cycle:	72	Level Of Service:	A

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	1! 0	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	5	3	30	85	0	18	23	1367	8	16	1145	65
Growth 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
Initial Bse:	5	3	30	85	0	18	23	1367	8	16	1145	65
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:	5	3	30	85	0	18	23	1367	8	16	1145	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	3	30	85	0	18	23	1367	8	16	1145	65
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:	5	3	30	85	0	18	23	1367	8	16	1145	65
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.88	0.88	0.72	1.00	0.72	0.23	1.00	1.00	0.11	0.94	0.94
Lanes:	0.13	0.08	0.79	0.83	0.00	0.17	1.00	0.99	0.01	1.00	1.89	0.11
Final Sat.:	220	132	1321	1129	0	239	444	1887	11	215	3389	192
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.08	0.00	0.08	0.05	0.72	0.72	0.07	0.34	0.34
Crit Moves:				****				****				
Green/Cycle:	0.09	0.09	0.09	0.09	0.00	0.09	0.91	0.91	0.91	0.91	0.91	0.91
Volume/Cap:	0.24	0.24	0.24	0.80	0.00	0.80	0.06	0.80	0.80	0.08	0.37	0.37
Uniform Del:	42.0	42.0	42.0	44.4	0.0	44.4	0.5	1.6	1.6	0.5	0.7	0.7
IncremntDel:	0.8	0.8	0.8	28.7	0.0	28.7	0.1	2.8	2.8	0.2	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	42.8	42.8	42.8	73.1	0.0	73.1	0.5	4.4	4.4	0.7	0.7	0.7
User DelAdj:	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:	42.8	42.8	42.8	73.1	0.0	73.1	0.5	4.4	4.4	0.7	0.7	0.7
LOS by Move:	D	D	D	E	A	E	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	5	0	5	0	17	17	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.486
Loss Time (sec):	0	Average Delay (sec/veh):	404.8
Optimal Cycle:	45	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	1	2	0 2
Volume Module:												
Base Vol:	0	0	0	241	311	382	0	503	1040	202	909	0
Growth 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
Initial Bse:	0	0	0	241	311	382	0	503	1040	202	909	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	0	0	241	311	382	0	503	1040	202	909	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	241	311	382	0	503	1040	202	909	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	0	0	241	311	382	0	503	1040	202	909	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1629	1629	1629	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.19	0.23	0.00	0.10	0.64	0.06	0.25	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.40	0.40	0.40	0.00	0.17	0.17	0.43	0.60	0.00
Volume/Cap:	0.00	0.00	0.00	0.37	0.47	0.58	0.00	0.58	3.87	0.13	0.42	0.00
Uniform Del:	0.0	0.0	0.0	21.0	22.1	23.4	0.0	38.5	41.7	17.1	10.8	0.0
IncremntDel:	0.0	0.0	0.0	0.1	0.2	0.6	0.0	1.0	1303	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	21.1	22.3	23.9	0.0	39.5	1344	17.2	10.9	0.0
User DelAdj:	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	21.1	22.3	23.9	0.0	39.5	1344	17.2	10.9	0.0
LOS by Move:	A	A	A	C	C	C	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	6	8	10	0	6	127	2	8	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	0	Average Delay (sec/veh):	20.6
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	733	349	540	0	0	0	279	490	0	0	379	38
Growth 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
Initial Bse:	733	349	540	0	0	0	279	490	0	0	379	38
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:	733	349	540	0	0	0	279	490	0	0	379	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	733	349	540	0	0	0	279	490	0	0	379	38
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:	733	349	540	0	0	0	279	490	0	0	379	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.79	1.21	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1356	2098	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.45	0.26	0.26	0.00	0.00	0.00	0.15	0.14	0.00	0.00	0.05	0.02
Crit Moves:	****						****				****	
Green/Cycle:	0.68	0.68	0.68	0.00	0.00	0.00	0.23	0.32	0.00	0.00	0.08	0.08
Volume/Cap:	0.66	0.38	0.38	0.00	0.00	0.00	0.66	0.43	0.00	0.00	0.66	0.28
Uniform Del:	9.1	6.7	6.7	0.0	0.0	0.0	34.8	27.1	0.0	0.0	44.5	43.1
IncremntDel:	1.5	0.1	0.1	0.0	0.0	0.0	3.9	0.3	0.0	0.0	2.9	1.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	10.7	6.8	6.8	0.0	0.0	0.0	38.7	27.4	0.0	0.0	47.5	44.3
User DelAdj:	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:	10.7	6.8	6.8	0.0	0.0	0.0	38.7	27.4	0.0	0.0	47.5	44.3
LOS by Move:	B	A	A	A	A	A	D	C	A	A	D	D
HCM2kAvgQ:	14	6	6	0	0	0	9	6	0	0	4	1

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

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Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.970			0.982			0.993			0.899	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3317	0	1615	3358	0	1615	1787	0	1615	1618	0
Flt Permitted	0.950			0.950			0.145			0.528		
Satd. Flow (perm)	1615	3317	0	1615	3358	0	247	1787	0	898	1618	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		43			23			4			157	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	22	780	198	257	519	71	92	223	10	311	244	505
Future Volume (vph)	22	780	198	257	519	71	92	223	10	311	244	505
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	23	830	211	273	552	76	98	237	11	331	260	537
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	1041	0	273	628	0	98	248	0	331	797	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	22	780	257	519	92	223	311	244
Future Volume (vph)	22	780	257	519	92	223	311	244
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	27.0	16.0	33.0	32.0	32.0	32.0	32.0
Total Split (%)	13.3%	36.0%	21.3%	44.0%	42.7%	42.7%	42.7%	42.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.5	22.5	11.5	34.5	27.5	27.5	27.5	27.5
Actuated g/C Ratio	0.07	0.30	0.15	0.46	0.37	0.37	0.37	0.37
v/c Ratio	0.19	1.02	1.11	0.40	1.09	0.38	1.01	1.15
Control Delay	36.8	59.1	122.1	14.9	152.2	19.3	78.9	105.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	59.1	122.1	14.9	152.2	19.3	78.9	105.8
LOS	D	E	F	B	F	B	E	F
Approach Delay		58.7		47.4		56.9		97.9
Approach LOS		E		D		E		F

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 75	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 68.4	Intersection LOS: E
Intersection Capacity Utilization 112.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	23	1041	273	628	98	248	331	797
v/c Ratio	0.19	1.02	1.11	0.40	1.09	0.38	1.01	1.15
Control Delay	36.8	59.1	122.1	14.9	152.2	19.3	78.9	105.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	59.1	122.1	14.9	152.2	19.3	78.9	105.8
Queue Length 50th (ft)	10	~252	~147	82	~52	82	~152	~396
Queue Length 95th (ft)	32	#387	#287	156	#143	139	#315	#609
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	118	1025	247	1556	90	657	329	692
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	1.02	1.11	0.40	1.09	0.38	1.01	1.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	22	780	198	257	519	71	92	223	10	311	244	505
Future Volume (veh/h)	22	780	198	257	519	71	92	223	10	311	244	505
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	23	830	211	273	552	76	98	237	11	331	260	537
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	41	811	206	248	1293	178	96	626	29	368	192	397
Arrive On Green	0.03	0.30	0.30	0.15	0.43	0.43	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1619	2702	687	1619	3022	415	620	1707	79	1029	525	1084
Grp Volume(v), veh/h	23	525	516	273	312	316	98	0	248	331	0	797
Grp Sat Flow(s),veh/h/ln	1619	1710	1679	1619	1710	1727	620	0	1786	1029	0	1609
Q Serve(g_s), s	1.1	22.5	22.5	11.5	9.6	9.6	0.0	0.0	7.7	19.8	0.0	27.5
Cycle Q Clear(g_c), s	1.1	22.5	22.5	11.5	9.6	9.6	27.5	0.0	7.7	27.5	0.0	27.5
Prop In Lane	1.00		0.41	1.00		0.24	1.00		0.04	1.00		0.67
Lane Grp Cap(c), veh/h	41	513	504	248	732	739	96	0	655	368	0	590
V/C Ratio(X)	0.56	1.02	1.02	1.10	0.43	0.43	1.02	0.00	0.38	0.90	0.00	1.35
Avail Cap(c_a), veh/h	119	513	504	248	732	739	96	0	655	368	0	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.1	26.2	26.3	31.8	15.0	15.0	37.5	0.0	17.5	29.3	0.0	23.8
Incr Delay (d2), s/veh	11.4	45.9	46.4	86.4	1.8	1.8	97.6	0.0	0.4	24.0	0.0	169.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	17.1	16.8	11.1	4.9	4.9	4.6	0.0	3.8	9.3	0.0	39.8
LnGrp Delay(d),s/veh	47.5	72.2	72.6	118.1	16.8	16.8	135.3	0.0	17.8	53.3	0.0	192.8
LnGrp LOS	D	F	F	F	B	B	F		B	D		F
Approach Vol, veh/h		1064			901			346			1128	
Approach Delay, s/veh		71.9			47.5			51.1			151.8	
Approach LOS		E			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	27.0		32.0	6.4	36.6		32.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	11.5	22.5		27.5	5.5	28.5		27.5
Max Q Clear Time (g_c+I1), s	13.5	24.5		29.5	3.1	11.6		29.5
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.6		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		89.6
HCM 2010 LOS		F

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1800	1800	1800
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.931				0.991	
Flt Protected	0.976		0.950			
Satd. Flow (prot)	1545	0	1615	1800	1784	0
Flt Permitted	0.976		0.950			
Satd. Flow (perm)	1545	0	1615	1800	1784	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	42				7	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

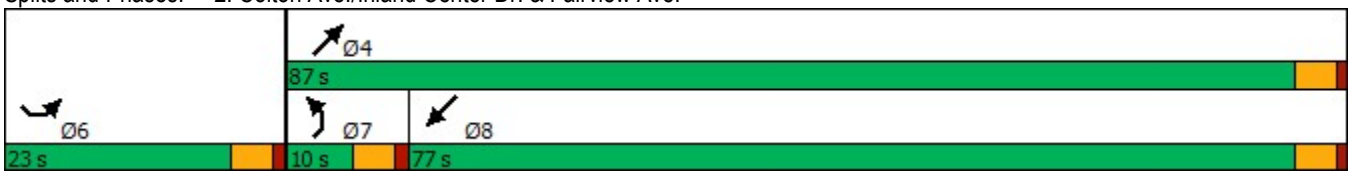
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	46	49	49	643	998	73
Future Volume (vph)	46	49	49	643	998	73
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	51	54	54	714	1109	81
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	0	54	714	1190	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	46	49	643	998
Future Volume (vph)	46	49	643	998
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	23.0	10.0	87.0	77.0
Total Split (%)	20.9%	9.1%	79.1%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	18.5	5.5	80.5	72.6
Actuated g/C Ratio	0.17	0.05	0.75	0.67
v/c Ratio	0.35	0.66	0.53	0.99
Control Delay	28.8	87.7	7.5	43.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	28.8	87.7	7.5	43.0
LOS	C	F	A	D
Approach Delay	28.8		13.1	43.0
Approach LOS	C		B	D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 108	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 31.2	Intersection LOS: C
Intersection Capacity Utilization 73.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	105	54	714	1190
v/c Ratio	0.35	0.66	0.53	0.99
Control Delay	28.8	87.7	7.5	43.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	28.8	87.7	7.5	43.0
Queue Length 50th (ft)	39	38	177	~805
Queue Length 95th (ft)	92	#104	251	#1145
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	299	82	1377	1201
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.35	0.66	0.52	0.99

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

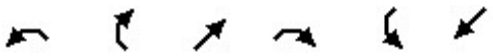
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	46	49	49	643	998	73
Future Volume (veh/h)	46	49	49	643	998	73
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1700	1800	1800	1800
Adj Flow Rate, veh/h	51	54	54	714	1109	81
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	125	132	67	1346	1102	81
Arrive On Green	0.17	0.17	0.04	0.75	0.67	0.67
Sat Flow, veh/h	734	777	1619	1800	1658	121
Grp Volume(v), veh/h	106	0	54	714	0	1190
Grp Sat Flow(s),veh/h/ln	1526	0	1619	1800	0	1779
Q Serve(g_s), s	6.8	0.0	3.6	18.1	0.0	72.5
Cycle Q Clear(g_c), s	6.8	0.0	3.6	18.1	0.0	72.5
Prop In Lane	0.48	0.51	1.00			0.07
Lane Grp Cap(c), veh/h	259	0	67	1346	0	1183
V/C Ratio(X)	0.41	0.00	0.81	0.53	0.00	1.01
Avail Cap(c_a), veh/h	259	0	82	1362	0	1183
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.4	0.0	51.8	5.7	0.0	18.3
Incr Delay (d2), s/veh	4.7	0.0	36.7	0.4	0.0	27.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	2.3	8.9	0.0	44.2
LnGrp Delay(d),s/veh	45.1	0.0	88.6	6.1	0.0	45.9
LnGrp LOS	D		F	A		F
Approach Vol, veh/h	106			768	1190	
Approach Delay, s/veh	45.1			11.9	45.9	
Approach LOS	D			B	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				86.0		23.0	9.0	77.0
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				82.5		18.5	5.5	72.5
Max Q Clear Time (g_c+I1), s				20.1		8.8	5.6	74.5
Green Ext Time (p_c), s				6.2		0.2	0.0	0.0

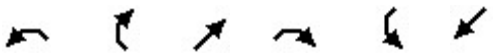
Intersection Summary	
HCM 2010 Ctrl Delay	33.2
HCM 2010 LOS	C

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.905					
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1694	0	1900	0	1805	1900
Flt Permitted	0.985				0.950	
Satd. Flow (perm)	1694	0	1900	0	1805	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	13	30	717	1	9	1149
Future Volume (vph)	13	30	717	1	9	1149
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	14	33	779	1	10	1249
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	0	780	0	10	1249

Intersection Summary

Intersection	
Int Delay, s/veh	475.9

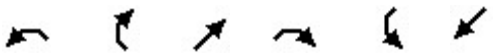
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	13	30	717	1	9	1149
Future Vol, veh/h	13	30	717	1	9	1149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	33	779	1	10	1249

Major/Minor	Minor2		Major2	
Conflicting Flow All	1269	1249	0	0
Stage 1	1269	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 170	213	-	-
Stage 1	~ 242	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	213	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s	$ 1243.5	
HCM LOS	F	

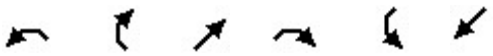
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	213	-	-
HCM Lane V/C Ratio	3.664	-	-
HCM Control Delay (s)	$ 1243.5	-	-
HCM Lane LOS	F	-	-
HCM 95th %tile Q(veh)	74.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1644	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1644	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	30	747	1	0	1158
Future Volume (vph)	0	30	747	1	0	1158
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	33	812	1	0	1259
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	33	813	0	0	1259

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	30	747	1	0	1158
Future Vol, veh/h	0	30	747	1	0	1158
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	0	0	0	0	0	0
Mvmt Flow	0	33	812	1	0	1259

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	813	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	382	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	382	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	15.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	382	-
HCM Lane V/C Ratio	-	-	0.085	-
HCM Control Delay (s)	-	-	15.3	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.865				0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1470	0	1615	0	1530	1615	1800	0	1700	1800	1530
Flt Permitted				0.950			0.063					
Satd. Flow (perm)	0	1470	0	1615	0	1530	107	1800	0	1700	1800	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		159				88						326
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

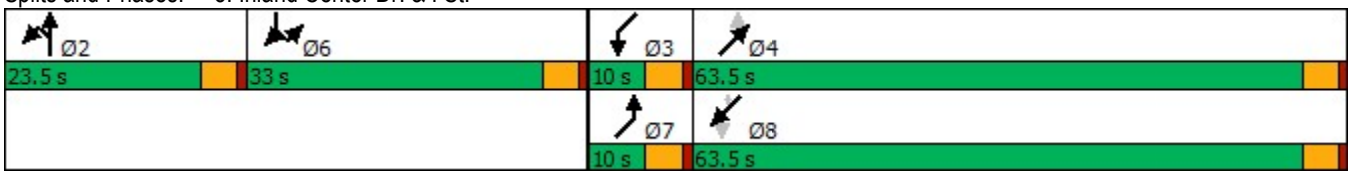
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	1	412	0	92	88	689	0	0	1066	622
Future Volume (vph)	0	0	1	412	0	92	88	689	0	0	1066	622
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	1	458	0	102	98	766	0	0	1184	691
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1	0	458	0	102	98	766	0	0	1184	691

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR	Ø3
Lane Configurations								
Traffic Volume (vph)	0	412	92	88	689	1066	622	
Future Volume (vph)	0	412	92	88	689	1066	622	
Turn Type	NA	Prot	Prot	pm+pt	NA	NA	Perm	
Protected Phases	2	6	6	7	4	8		3
Permitted Phases				4			8	
Detector Phase	2	6	6	7	4	8	8	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5	9.5
Total Split (s)	23.5	33.0	33.0	10.0	63.5	63.5	63.5	10.0
Total Split (%)	18.1%	25.4%	25.4%	7.7%	48.8%	48.8%	48.8%	8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.0	28.5	28.5	69.0	69.0	59.0	59.0	
Actuated g/C Ratio	0.15	0.22	0.22	0.53	0.53	0.45	0.45	
v/c Ratio	0.00	1.29	0.25	0.82	0.80	1.45	0.79	
Control Delay	0.0	192.5	12.7	66.0	32.9	239.5	23.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.0	192.5	12.7	66.0	32.9	239.5	23.0	
LOS	A	F	B	E	C	F	C	
Approach Delay					36.7	159.7		
Approach LOS					D	F		

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.45	
Intersection Signal Delay: 127.5	Intersection LOS: F
Intersection Capacity Utilization 107.7%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1	458	102	98	766	1184	691
v/c Ratio	0.00	1.29	0.25	0.82	0.80	1.45	0.79
Control Delay	0.0	192.5	12.7	66.0	32.9	239.5	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.0	192.5	12.7	66.0	32.9	239.5	23.0
Queue Length 50th (ft)	0	~492	9	40	509	~1358	276
Queue Length 95th (ft)	0	#704	58	#139	695	#1620	463
Internal Link Dist (ft)	133				59	387	
Turn Bay Length (ft)				110			
Base Capacity (vph)	350	354	404	120	955	816	872
Starvation Cap Reductn	0	0	0	0	0	3	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	1.29	0.25	0.82	0.80	1.46	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	1	412	0	92	88	689	0	0	1066	622
Future Volume (veh/h)	0	0	1	412	0	92	88	689	0	0	1066	622
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	0	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	0	0	1	458	0	102	98	766	0	0	1184	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	0	286	0	0	0	153	1276	0	391	1105	939
Arrive On Green	0.00	0.00	0.20	0.00	0.00	0.00	0.05	0.71	0.00	0.00	0.61	0.00
Sat Flow, veh/h	0	0	1445		0		1619	1800	0	1619	1800	1530
Grp Volume(v), veh/h	0	0	1		0.0		98	766	0	0	1184	0
Grp Sat Flow(s),veh/h/ln	0	0	1445				1619	1800	0	1619	1800	1530
Q Serve(g_s), s	0.0	0.0	0.1				2.0	20.7	0.0	0.0	59.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1				2.0	20.7	0.0	0.0	59.0	0.0
Prop In Lane	0.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	286				153	1276	0	391	1105	939
V/C Ratio(X)	0.00	0.00	0.00				0.64	0.60	0.00	0.00	1.07	0.00
Avail Cap(c_a), veh/h	0	0	286				168	1276	0	482	1105	939
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	31.0				24.5	7.1	0.0	0.0	18.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				7.0	0.8	0.0	0.0	48.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				2.0	10.5	0.0	0.0	43.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	31.0				31.5	7.9	0.0	0.0	67.1	0.0
LnGrp LOS			C				C	A			F	
Approach Vol, veh/h		1						864			1184	
Approach Delay, s/veh		31.0						10.6			67.1	
Approach LOS		C						B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	0.0	72.6			9.1	63.5
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	59.0			5.5	59.0
Max Q Clear Time (g_c+I1), s		2.1	0.0	22.7			4.0	61.0
Green Ext Time (p_c), s		0.0	0.0	6.6			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.905			0.997			0.991	
Flt Protected		0.966			0.991		0.950			0.950		
Satd. Flow (prot)	0	1769	0	0	1704	0	1805	1894	0	1805	3578	0
Flt Permitted		0.966			0.991		0.950			0.950		
Satd. Flow (perm)	0	1769	0	0	1704	0	1805	1894	0	1805	3578	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	86	4	33	8	5	31	16	1103	20	29	1618	109
Future Volume (vph)	86	4	33	8	5	31	16	1103	20	29	1618	109
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	92	4	35	9	5	33	17	1186	22	31	1740	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	0	0	47	0	17	1208	0	31	1857	0

Intersection Summary

Intersection	
Int Delay, s/veh	656.5

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	86	4	33	8	5	31	16	1103	20	29	1618	109
Future Vol, veh/h	86	4	33	8	5	31	16	1103	20	29	1618	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	92	4	35	9	5	33	17	1186	22	31	1740	117

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3111	3103	929	2165	3150	1197	1857	0	0	1208	0	0
Stage 1	1861	1861	-	1231	1231	-	-	-	-	-	-	-
Stage 2	1250	1242	-	934	1919	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 6	12	273	31	11	229	330	-	-	585	-	-
Stage 1	~ 77	124	-	219	252	-	-	-	-	-	-	-
Stage 2	214	249	-	290	116	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 3	11	273	17	10	229	330	-	-	585	-	-
Mov Cap-2 Maneuver	~ 3	11	-	17	10	-	-	-	-	-	-	-
Stage 1	~ 73	117	-	208	239	-	-	-	-	-	-	-
Stage 2	170	236	-	230	110	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, $	16209	$ 358.8	0.2	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	330	-	-	40	4	585	-	-
HCM Lane V/C Ratio	0.052	-	-	1.183	33.065	0.053	-	-
HCM Control Delay (s)	16.5	-	-	$ 358.8	$ 16209	11.5	-	-
HCM Lane LOS	C	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	4.7	18.7	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.921				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1470	2844	0	0	4914	1530	2949	3420	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1470	2844	0	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									148			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	271	371	439	0	638	613	469	1405	0
Future Volume (vph)	0	0	0	271	371	439	0	638	613	469	1405	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	301	412	488	0	709	681	521	1561	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	271	930	0	0	709	681	521	1561	0

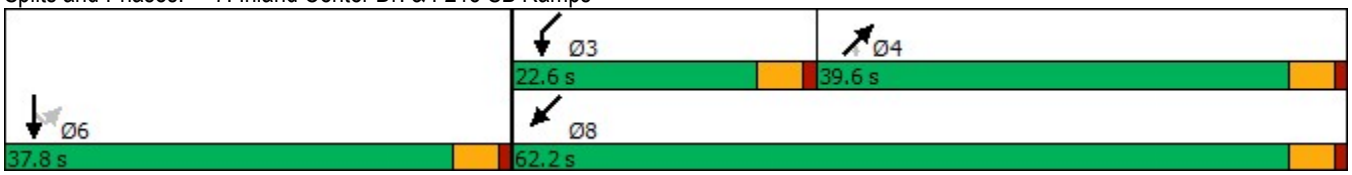
Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	271	371	638	613	469	1405
Future Volume (vph)	271	371	638	613	469	1405
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	37.8	37.8	39.6	39.6	22.6	62.2
Total Split (%)	37.8%	37.8%	39.6%	39.6%	22.6%	62.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	33.3	33.3	35.1	35.1	18.1	57.7
Actuated g/C Ratio	0.33	0.33	0.35	0.35	0.18	0.58
v/c Ratio	0.55	1.07dr	0.41	1.08	0.98	0.79
Control Delay	32.5	59.3	25.5	84.1	75.7	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	48.2
Total Delay	32.5	59.3	25.5	84.1	75.7	68.4
LOS	C	E	C	F	E	E
Approach Delay		53.2	54.2			70.2
Approach LOS		D	D			E

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 61.1	Intersection LOS: E
Intersection Capacity Utilization 155.1%	ICU Level of Service H
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	271	930	709	681	521	1561
v/c Ratio	0.55	1.07dr	0.41	1.08	0.98	0.79
Control Delay	32.5	59.3	25.5	84.1	75.7	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	48.2
Total Delay	32.5	59.3	25.5	84.1	75.7	68.4
Queue Length 50th (ft)	153	320	124	~421	171	381
Queue Length 95th (ft)	246	#464	159	#644	#277	478
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	489	947	1724	633	533	1973
Starvation Cap Reductn	0	0	0	0	0	681
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.98	0.41	1.08	0.98	1.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	271	371	439	0	638	613	469	1405	0
Future Volume (veh/h)	0	0	0	271	371	439	0	638	613	469	1405	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				301	412	488	0	709	681	521	1561	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				539	566	481	0	1725	537	535	1973	0
Arrive On Green				0.33	0.33	0.33	0.00	0.35	0.35	0.18	0.58	0.00
Sat Flow, veh/h				1619	1700	1445	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				301	412	488	0	709	681	521	1561	0
Grp Sat Flow(s),veh/h/ln				1619	1700	1445	0	1638	1530	1478	1710	0
Q Serve(g_s), s				15.2	21.3	33.3	0.0	10.9	35.1	17.5	35.5	0.0
Cycle Q Clear(g_c), s				15.2	21.3	33.3	0.0	10.9	35.1	17.5	35.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				539	566	481	0	1725	537	535	1973	0
V/C Ratio(X)				0.56	0.73	1.01	0.00	0.41	1.27	0.97	0.79	0.00
Avail Cap(c_a), veh/h				539	566	481	0	1725	537	535	1973	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				27.3	29.4	33.4	0.0	24.6	32.4	40.7	16.5	0.0
Incr Delay (d2), s/veh				4.1	8.0	44.6	0.0	0.2	134.8	32.1	2.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.4	11.2	19.2	0.0	4.9	34.9	9.6	17.3	0.0
LnGrp Delay(d),s/veh				31.5	37.3	78.0	0.0	24.8	167.3	72.9	18.7	0.0
LnGrp LOS				C	D	F		C	F	E	B	
Approach Vol, veh/h					1201			1390			2082	
Approach Delay, s/veh					52.4			94.6			32.3	
Approach LOS					D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			22.6	39.6		37.8		62.2
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			18.1	35.1		33.3		57.7
Max Q Clear Time (g_c+I1), s			19.5	37.1		35.3		37.5
Green Ext Time (p_c), s			0.0	0.0		0.0		12.2

Intersection Summary	
HCM 2010 Ctrl Delay	56.0
HCM 2010 LOS	E

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.960	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1615	1642	1454	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1615	1642	1454	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26	118									178
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

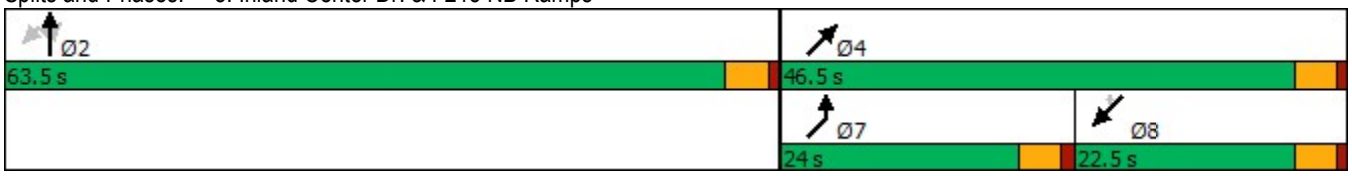
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1026	283	446	0	0	0	345	559	0	0	838	370
Future Volume (vph)	1026	283	446	0	0	0	345	559	0	0	838	370
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1179	325	513	0	0	0	397	643	0	0	963	425
Shared Lane Traffic (%)			23%									
Lane Group Flow (vph)	1179	443	395	0	0	0	397	643	0	0	963	425

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	1026	283	446	345	559	838	370
Future Volume (vph)	1026	283	446	345	559	838	370
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	63.5	63.5	63.5	24.0	46.5	22.5	22.5
Total Split (%)	57.7%	57.7%	57.7%	21.8%	42.3%	20.5%	20.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	59.0	59.0	59.0	19.5	42.0	18.0	18.0
Actuated g/C Ratio	0.54	0.54	0.54	0.18	0.38	0.16	0.16
v/c Ratio	1.36	0.50	0.47	1.39	0.49	0.95	1.07
Control Delay	195.6	17.4	12.8	230.5	27.5	64.6	90.0
Queue Delay	0.0	0.0	0.0	0.0	4.3	0.0	0.0
Total Delay	195.6	17.4	12.8	230.5	31.8	64.6	90.0
LOS	F	B	B	F	C	E	F
Approach Delay		120.7			107.7	72.3	
Approach LOS		F			F	E	

Intersection Summary		
Cycle Length: 110		
Actuated Cycle Length: 110		
Natural Cycle: 110		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 1.39		
Intersection Signal Delay: 102.5	Intersection LOS: F	
Intersection Capacity Utilization 155.1%	ICU Level of Service H	
Analysis Period (min) 15		

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1179	443	395	397	643	963	425
v/c Ratio	1.36	0.50	0.47	1.39	0.49	0.95	1.07
Control Delay	195.6	17.4	12.8	230.5	27.5	64.6	90.0
Queue Delay	0.0	0.0	0.0	0.0	4.3	0.0	0.0
Total Delay	195.6	17.4	12.8	230.5	31.8	64.6	90.0
Queue Length 50th (ft)	~1099	186	117	~374	179	197	~219
Queue Length 95th (ft)	#1287	264	187	#539	224	#250	#390
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	866	892	834	286	1305	1013	399
Starvation Cap Reductn	0	0	0	0	570	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.36	0.50	0.47	1.39	0.87	0.95	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1026	283	446	0	0	0	345	559	0	0	838	370
Future Volume (veh/h)	1026	283	446	0	0	0	345	559	0	0	838	370
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1800	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	1179	466	419				397	643	0	0	963	425
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	868	965	821				287	1306	0	0	1013	250
Arrive On Green	0.54	0.54	0.54				0.18	0.38	0.00	0.00	0.16	0.16
Sat Flow, veh/h	1619	1800	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	1179	466	419				397	643	0	0	963	425
Grp Sat Flow(s),veh/h/ln	1619	1800	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	59.0	17.8	19.2				19.5	15.7	0.0	0.0	16.9	18.0
Cycle Q Clear(g_c), s	59.0	17.8	19.2				19.5	15.7	0.0	0.0	16.9	18.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	868	965	821				287	1306	0	0	1013	250
V/C Ratio(X)	1.36	0.48	0.51				1.38	0.49	0.00	0.00	0.95	1.70
Avail Cap(c_a), veh/h	868	965	821				287	1306	0	0	1013	250
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	16.0	16.3				45.3	25.9	0.0	0.0	45.6	46.0
Incr Delay (d2), s/veh	168.5	1.7	2.3				192.7	0.3	0.0	0.0	17.6	330.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	66.7	9.3	8.5				24.1	7.5	0.0	0.0	8.5	30.6
LnGrp Delay(d),s/veh	194.0	17.7	18.5				238.0	26.2	0.0	0.0	63.1	376.5
LnGrp LOS	F	B	B				F	C			E	F
Approach Vol, veh/h		2064						1040			1388	
Approach Delay, s/veh		118.6						107.0			159.1	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		63.5		46.5			24.0	22.5
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		59.0		42.0			19.5	18.0
Max Q Clear Time (g_c+I1), s		61.0		17.7			21.5	20.0
Green Ext Time (p_c), s		0.0		4.6			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	128.4
HCM 2010 LOS	F

Notes

Scenario Report

Scenario:	OY+C+P_PM
Command:	OY+C+P_PM
Volume:	OY+C+P_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.860
Loss Time (sec):	0	Average Delay (sec/veh):	31.6
Optimal Cycle:	133	Level Of Service:	C

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	22	780	198	257	519	71	92	223	10	311	244	505
Growth 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
Initial Bse:	22	780	198	257	519	71	92	223	10	311	244	505
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:	22	780	198	257	519	71	92	223	10	311	244	505
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	780	198	257	519	71	92	223	10	311	244	505
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:	22	780	198	257	519	71	92	223	10	311	244	505
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	0.93	0.93	0.12	0.99	0.99	0.52	0.90	0.90
Lanes:	1.00	1.60	0.40	1.00	1.76	0.24	1.00	0.96	0.04	1.00	0.33	0.67
Final Sat.:	1805	2793	709	1805	3118	427	224	1808	81	988	556	1152
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.14	0.17	0.17	0.41	0.12	0.12	0.31	0.44	0.44
Crit Moves:		****		****							****	
Green/Cycle:	0.03	0.32	0.32	0.17	0.46	0.46	0.51	0.51	0.51	0.51	0.51	0.51
Volume/Cap:	0.36	0.86	0.86	0.86	0.36	0.36	0.80	0.24	0.24	0.62	0.86	0.86
Uniform Del:	47.3	31.6	31.6	40.6	17.7	17.7	20.4	13.7	13.7	17.5	21.4	21.4
IncremntDel:	3.7	6.8	6.8	21.5	0.1	0.1	32.6	0.1	0.1	2.3	8.7	8.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	51.0	38.5	38.5	62.1	17.8	17.8	53.0	13.8	13.8	19.9	30.1	30.1
User DelAdj:	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:	51.0	38.5	38.5	62.1	17.8	17.8	53.0	13.8	13.8	19.9	30.1	30.1
LOS by Move:	D	D	D	E	B	B	D	B	B	B	C	C
HCM2kAvgQ:	1	18	18	11	6	6	4	4	4	8	23	23

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658
Loss Time (sec):	0	Average Delay (sec/veh):	6.6
Optimal Cycle:	54	Level Of Service:	A

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	46	0	49	49	643	0	0	998	73
Growth 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
Initial Bse:	0	0	0	46	0	49	49	643	0	0	998	73
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	46	0	49	49	643	0	0	998	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	46	0	49	49	643	0	0	998	73
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	46	0	49	49	643	0	0	998	73
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.81	1.00	0.81	0.95	1.00	1.00	1.00	0.99	0.99
Lanes:	0.00	0.00	0.00	0.48	0.00	0.52	1.00	1.00	0.00	0.00	0.93	0.07
Final Sat.:	0	0	0	746	0	795	1805	1900	0	0	1755	128
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.03	0.34	0.00	0.00	0.57	0.57
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.09	0.00	0.09	0.04	0.91	0.00	0.00	0.87	0.87
Volume/Cap:	0.00	0.00	0.00	0.66	0.00	0.66	0.66	0.37	0.00	0.00	0.66	0.66
Uniform Del:	0.0	0.0	0.0	43.8	0.0	43.8	47.2	0.7	0.0	0.0	2.1	2.1
IncremntDel:	0.0	0.0	0.0	10.6	0.0	10.6	19.4	0.1	0.0	0.0	1.0	1.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	54.4	0.0	54.4	66.6	0.8	0.0	0.0	3.1	3.1
User DelAdj:	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	54.4	0.0	54.4	66.6	0.8	0.0	0.0	3.1	3.1
LOS by Move:	A	A	A	D	A	D	E	A	A	A	A	A
HCM2kAvgQ:	0	0	0	4	0	4	3	3	0	0	11	11

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.630
Loss Time (sec):	0	Average Delay (sec/veh):	2.1
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	0 1	0	1	0 1 0
Volume Module:												
Base Vol:	13	0	30	0	0	0	0	717	1	9	1149	0
Growth 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
Initial Bse:	13	0	30	0	0	0	0	717	1	9	1149	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:	13	0	30	0	0	0	0	717	1	9	1149	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	0	30	0	0	0	0	717	1	9	1149	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:	13	0	30	0	0	0	0	717	1	9	1149	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	1.00	1.00	0.81	1.00	1.00
Lanes:	0.30	0.00	0.70	0.00	0.00	0.00	0.00	0.99	0.01	1.00	1.00	0.00
Final Sat.:	513	0	1183	0	0	0	0	1897	3	1539	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.38	0.38	0.01	0.60	0.00
Crit Moves:			****								****	
Green/Cycle:	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.96	0.96	0.96	0.96	0.00
Volume/Cap:	0.63	0.00	0.63	0.00	0.00	0.00	0.00	0.39	0.39	0.01	0.63	0.00
Uniform Del:	47.3	0.0	47.3	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0
IncremntDel:	17.4	0.0	17.4	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.7	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	64.7	0.0	64.7	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.9	0.0
User DelAdj:	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:	64.7	0.0	64.7	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.9	0.0
LOS by Move:	E	A	E	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	2	0	2	0	0	0	0	2	2	0	5	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	0	Average Delay (sec/veh):	1.7
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	1	0	0	1	0	0
Volume Module:												
Base Vol:	0	0	30	0	0	0	0	747	1	0	1158	0
Growth 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
Initial Bse:	0	0	30	0	0	0	0	747	1	0	1158	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	0	30	0	0	0	0	747	1	0	1158	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	30	0	0	0	0	747	1	0	1158	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	0	30	0	0	0	0	747	1	0	1158	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.99	0.01	0.00	1.00	0.00
Final Sat.:	0	0	1644	0	0	0	0	1897	3	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.61	0.00
Crit Moves:			****								****	
Green/Cycle:	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.97	0.97	0.00	0.97	0.00
Volume/Cap:	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.41	0.41	0.00	0.63	0.00
Uniform Del:	0.0	0.0	48.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
IncremntDel:	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.7	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	71.6	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.8	0.0
User DelAdj:	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	71.6	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.8	0.0
LOS by Move:	A	A	E	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	2	0	0	0	0	2	2	0	4	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.839
Loss Time (sec):	0	Average Delay (sec/veh):	17.9
Optimal Cycle:	141	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	0	1	1	0	0	1	0	1
Volume Module:												
Base Vol:	0	0	1	412	0	92	88	689	0	0	1066	622
Growth 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
Initial Bse:	0	0	1	412	0	92	88	689	0	0	1066	622
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	1	412	0	92	88	689	0	0	1066	622
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	1	412	0	92	88	689	0	0	1066	622
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	1	412	0	92	88	689	0	0	1066	622
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	0	0	1644	1805	0	1615	1805	1900	0	1900	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.00	0.06	0.05	0.36	0.00	0.00	0.56	0.39
Crit Moves:				****	****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.27	0.00	0.27	0.73	0.73	0.00	0.00	0.67	0.67
Volume/Cap:	0.00	0.00	0.00	0.84	0.84	0.00	0.21	0.43	0.50	0.00	0.00	0.84	0.58
Uniform Del:	0.0	0.0	50.0	34.3	0.0	28.1	17.7	5.8	0.0	0.0	12.5	8.9
IncremntDel:	0.0	0.0	614.8	12.1	0.0	0.2	1.4	0.3	0.0	0.0	5.1	0.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	664.8	46.4	0.0	28.3	19.1	6.1	0.0	0.0	17.6	9.7
User DelAdj:	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	664.8	46.4	0.0	28.3	19.1	6.1	0.0	0.0	17.6	9.7
LOS by Move:	A	A	F	D	A	C	B	A	A	A	B	A
HCM2kAvgQ:	0	0	0	15	0	2	2	9	0	0	27	11

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.678
Loss Time (sec): 0 Average Delay (sec/veh): 4.8
Optimal Cycle: 45 Level Of Service: A

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	1! 0	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	8	5	31	86	4	33	16	1103	20	29	1618	109
Growth 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
Initial Bse:	8	5	31	86	4	33	16	1103	20	29	1618	109
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:	8	5	31	86	4	33	16	1103	20	29	1618	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	5	31	86	4	33	16	1103	20	29	1618	109
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:	8	5	31	86	4	33	16	1103	20	29	1618	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.76	0.76	0.76	0.13	1.00	1.00	0.19	0.94	0.94
Lanes:	0.18	0.11	0.71	0.70	0.03	0.27	1.00	0.98	0.02	1.00	1.87	0.13
Final Sat.:	302	189	1169	1014	47	389	247	1861	34	352	3352	226
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.08	0.08	0.08	0.06	0.59	0.59	0.08	0.48	0.48
Crit Moves:					****			****				
Green/Cycle:	0.13	0.13	0.13	0.13	0.13	0.13	0.87	0.87	0.87	0.87	0.87	0.87
Volume/Cap:	0.21	0.21	0.21	0.68	0.68	0.68	0.07	0.68	0.68	0.09	0.55	0.55
Uniform Del:	39.3	39.3	39.3	41.8	41.8	41.8	0.8	1.9	1.9	0.9	1.5	1.5
IncremntDel:	0.5	0.5	0.5	9.8	9.8	9.8	0.1	1.1	1.1	0.1	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	39.8	39.8	39.8	51.7	51.7	51.7	1.0	3.1	3.1	1.0	1.7	1.7
User DelAdj:	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:	39.8	39.8	39.8	51.7	51.7	51.7	1.0	3.1	3.1	1.0	1.7	1.7
LOS by Move:	D	D	D	D	D	D	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	5	5	5	0	12	12	0	7	7

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.658
Loss Time (sec): 0 Average Delay (sec/veh): 119.9
Optimal Cycle: 85 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	2	0	2 0
Volume Module:												
Base Vol:	0	0	0	271	371	439	0	638	613	469	1405	0
Growth 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
Initial Bse:	0	0	0	271	371	439	0	638	613	469	1405	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	0	0	271	371	439	0	638	613	469	1405	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	271	371	439	0	638	613	469	1405	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	0	0	271	371	439	0	638	613	469	1405	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1630	1630	1630	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.23	0.27	0.00	0.12	0.38	0.13	0.39	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.34	0.34	0.34	0.00	0.16	0.16	0.50	0.66	0.00
Volume/Cap:	0.00	0.00	0.00	0.48	0.66	0.78	0.00	0.78	2.41	0.27	0.59	0.00
Uniform Del:	0.0	0.0	0.0	25.8	27.8	29.4	0.0	40.5	42.1	14.5	9.7	0.0
IncremntDel:	0.0	0.0	0.0	0.2	1.0	3.0	0.0	4.9	647.0	0.1	0.4	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	25.9	28.8	32.4	0.0	45.4	689.2	14.6	10.1	0.0
User DelAdj:	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	25.9	28.8	32.4	0.0	45.4	689.2	14.6	10.1	0.0
LOS by Move:	A	A	A	A	C	C	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	7	11	15	0	9	64	4	13	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.058
Loss Time (sec):	0	Average Delay (sec/veh):	49.5
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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 1	0 0	0	0 0	1 0	2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	1026	283	446	0	0	0	349	559	0	0	838	370
Growth 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
Initial Bse:	1026	283	446	0	0	0	349	559	0	0	838	370
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:	1026	283	446	0	0	0	349	559	0	0	838	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1026	283	446	0	0	0	349	559	0	0	838	370
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:	1026	283	446	0	0	0	349	559	0	0	838	370
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.91	0.91	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.78	1.22	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1339	2111	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.64	0.21	0.21	0.00	0.00	0.00	0.19	0.15	0.00	0.00	0.12	0.23
Crit Moves:	****						****					****
Green/Cycle:	0.60	0.60	0.60	0.00	0.00	0.00	0.18	0.40	0.00	0.00	0.22	0.22
Volume/Cap:	1.06	0.35	0.35	0.00	0.00	0.00	1.06	0.39	0.00	0.00	0.56	1.06
Uniform Del:	20.0	10.1	10.1	0.0	0.0	0.0	40.9	21.3	0.0	0.0	34.9	39.2
IncremntDel:	45.4	0.1	0.1	0.0	0.0	0.0	65.6	0.2	0.0	0.0	0.5	64.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	65.4	10.2	10.2	0.0	0.0	0.0	106.4	21.5	0.0	0.0	35.4	103.3
User DelAdj:	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:	65.4	10.2	10.2	0.0	0.0	0.0	106.4	21.5	0.0	0.0	35.4	103.3
LOS by Move:	E	B	B	A	A	A	F	C	A	A	D	F
HCM2kAvgQ:	44	6	6	0	0	0	18	6	0	0	7	18

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

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Appendix K

Mitigated Opening Year (2020) With Related Projects With Project Conditions
Intersection Analysis Worksheets

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.893			0.999			0.992	
Flt Protected		0.961			0.994		0.950			0.950		
Satd. Flow (prot)	0	1594	0	0	1509	0	1615	1798	0	1615	3393	0
Flt Permitted		0.769			0.971		0.146			0.039		
Satd. Flow (perm)	0	1276	0	0	1474	0	248	1798	0	66	3393	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			38			1			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

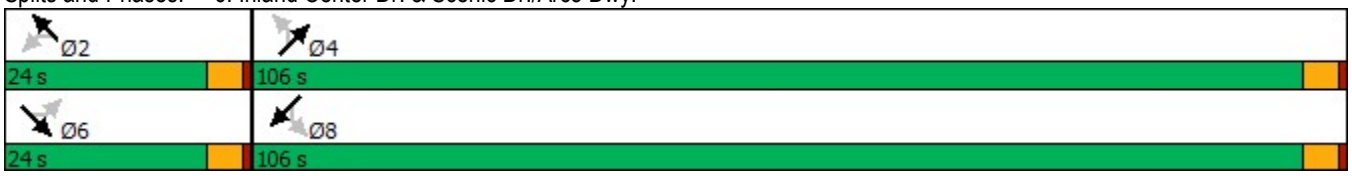
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	85	0	18	5	3	30	23	1367	8	16	1145	65
Future Volume (vph)	85	0	18	5	3	30	23	1367	8	16	1145	65
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	106	0	23	6	4	38	29	1709	10	20	1431	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	129	0	0	48	0	29	1719	0	20	1512	0

Intersection Summary

Lane Group	SEL	SET	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	85	0	5	3	23	1367	16	1145
Future Volume (vph)	85	0	5	3	23	1367	16	1145
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	24.0	24.0	106.0	106.0	106.0	106.0
Total Split (%)	18.5%	18.5%	18.5%	18.5%	81.5%	81.5%	81.5%	81.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	None	None	None	None
Act Effct Green (s)		15.7		15.7	101.6	101.6	101.6	101.6
Actuated g/C Ratio		0.12		0.12	0.80	0.80	0.80	0.80
v/c Ratio		0.76		0.22	0.15	1.19	0.38	0.55
Control Delay		74.9		21.9	5.2	109.1	28.3	5.6
Queue Delay		0.0		0.0	0.0	0.1	0.0	4.2
Total Delay		74.9		21.9	5.2	109.2	28.3	9.8
LOS		E		C	A	F	C	A
Approach Delay		74.9		21.9		107.4		10.0
Approach LOS		E		C		F		B

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 126.3	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay: 61.9	Intersection LOS: E
Intersection Capacity Utilization 97.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 6: Inland Center Dr. & Scenic Dr./Arco Dwy.



Lane Group	SET	NWT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	129	48	29	1719	20	1512
v/c Ratio	0.76	0.22	0.15	1.19	0.38	0.55
Control Delay	74.9	21.9	5.2	109.1	28.3	5.6
Queue Delay	0.0	0.0	0.0	0.1	0.0	4.2
Total Delay	74.9	21.9	5.2	109.2	28.3	9.8
Queue Length 50th (ft)	93	7	5	~1734	4	198
Queue Length 95th (ft)	142	36	13	#1688	26	213
Internal Link Dist (ft)	19	155		387		266
Turn Bay Length (ft)			50		60	
Base Capacity (vph)	208	259	199	1446	52	2731
Starvation Cap Reductn	0	0	0	29	0	1122
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.19	0.15	1.21	0.38	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	85	0	18	5	3	30	23	1367	8	16	1145	65
Future Volume (veh/h)	85	0	18	5	3	30	23	1367	8	16	1145	65
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	1700	1700	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	106	0	22	6	4	38	29	1709	10	20	1431	81
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	177	0	26	42	26	132	271	1463	9	58	2694	152
Arrive On Green	0.11	0.00	0.11	0.11	0.11	0.11	0.82	0.82	0.82	0.82	0.82	0.82
Sat Flow, veh/h	1134	0	235	84	236	1213	314	1788	10	257	3291	186
Grp Volume(v), veh/h	128	0	0	48	0	0	29	0	1719	20	741	771
Grp Sat Flow(s),veh/h/ln	1370	0	0	1532	0	0	314	0	1798	257	1710	1767
Q Serve(g_s), s	7.5	0.0	0.0	0.0	0.0	0.0	4.1	0.0	101.5	0.0	17.2	17.4
Cycle Q Clear(g_c), s	11.2	0.0	0.0	3.7	0.0	0.0	21.4	0.0	101.5	101.5	17.2	17.4
Prop In Lane	0.83		0.17	0.12		0.79	1.00		0.01	1.00		0.11
Lane Grp Cap(c), veh/h	202	0	0	199	0	0	271	0	1472	58	1400	1447
V/C Ratio(X)	0.63	0.00	0.00	0.24	0.00	0.00	0.11	0.00	1.17	0.34	0.53	0.53
Avail Cap(c_a), veh/h	264	0	0	269	0	0	271	0	1472	58	1400	1447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	0.0	0.0	50.9	0.0	0.0	7.1	0.0	11.2	62.0	3.6	3.6
Incr Delay (d2), s/veh	3.3	0.0	0.0	0.6	0.0	0.0	0.2	0.0	83.2	3.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	0.0	1.6	0.0	0.0	0.4	0.0	82.7	0.7	8.0	8.5
LnGrp Delay(d),s/veh	57.2	0.0	0.0	51.5	0.0	0.0	7.2	0.0	94.5	65.5	4.0	4.0
LnGrp LOS	E			D			A		F	E	A	A
Approach Vol, veh/h		128			48			1748			1532	
Approach Delay, s/veh		57.2			51.5			93.0			4.8	
Approach LOS		E			D			F			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		18.0		106.0		18.0		106.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		19.5		101.5		19.5		101.5
Max Q Clear Time (g_c+I1), s		5.7		103.5		13.2		103.5
Green Ext Time (p_c), s		0.1		0.0		0.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.0
HCM 2010 LOS	D

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	0		1	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.91	0.91	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.978	0.850			0.850			
Flt Protected					0.982					0.950		
Satd. Flow (prot)	0	0	0	0	2971	1392	0	4914	1530	2949	3420	0
Flt Permitted					0.982					0.950		
Satd. Flow (perm)	0	0	0	0	2971	1392	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									104			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

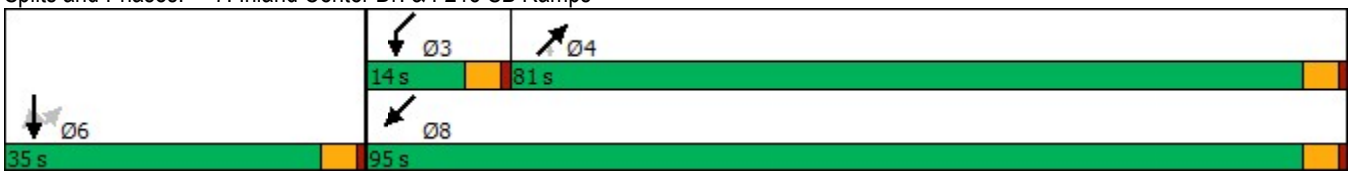
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	241	311	382	0	503	1040	202	909	0
Future Volume (vph)	0	0	0	241	311	382	0	503	1040	202	909	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	290	375	460	0	606	1253	243	1095	0
Shared Lane Traffic (%)						25%						
Lane Group Flow (vph)	0	0	0	0	780	345	0	606	1253	243	1095	0

Intersection Summary

Lane Group	SBT	SBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	311	382	503	1040	202	909
Future Volume (vph)	311	382	503	1040	202	909
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	6		4		3	8
Permitted Phases		6		4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	35.0	35.0	81.0	81.0	14.0	95.0
Total Split (%)	26.9%	26.9%	62.3%	62.3%	10.8%	73.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	30.5	30.5	76.5	76.5	9.5	90.5
Actuated g/C Ratio	0.23	0.23	0.59	0.59	0.07	0.70
v/c Ratio	1.12	1.06	0.21	1.33	1.13	0.46
Control Delay	117.1	113.6	12.8	179.9	153.9	9.6
Queue Delay	0.0	0.0	0.5	0.5	0.0	7.7
Total Delay	117.1	113.6	13.3	180.4	153.9	17.2
LOS	F	F	B	F	F	B
Approach Delay	116.0		125.9			42.1
Approach LOS	F		F			D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.33	
Intersection Signal Delay: 97.4	Intersection LOS: F
Intersection Capacity Utilization 134.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBT	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	780	345	606	1253	243	1095
v/c Ratio	1.12	1.06	0.21	1.33	1.13	0.46
Control Delay	117.1	113.6	12.8	179.9	153.9	9.6
Queue Delay	0.0	0.0	0.5	0.5	0.0	7.7
Total Delay	117.1	113.6	13.3	180.4	153.9	17.2
Queue Length 50th (ft)	~414	~349	83	~1338	~122	197
Queue Length 95th (ft)	#480	#493	95	#1411	#186	211
Internal Link Dist (ft)	485		266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	697	326	2891	943	215	2380
Starvation Cap Reductn	0	0	1783	80	0	1239
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.12	1.06	0.55	1.45	1.13	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	241	311	382	0	503	1040	202	909	0
Future Volume (veh/h)	0	0	0	241	311	382	0	503	1040	202	909	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				290	529	358	0	606	1253	243	1095	0
Adj No. of Lanes				0	2	1	0	3	1	2	2	0
Peak Hour Factor				0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				265	520	359	0	2892	900	216	2381	0
Arrive On Green				0.23	0.23	0.23	0.00	0.59	0.59	0.07	0.70	0.00
Sat Flow, veh/h				1129	2215	1530	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				422	397	358	0	606	1253	243	1095	0
Grp Sat Flow(s),veh/h/ln				1644	1700	1530	0	1638	1530	1478	1710	0
Q Serve(g_s), s				30.5	30.3	30.4	0.0	7.5	76.5	9.5	18.6	0.0
Cycle Q Clear(g_c), s				30.5	30.3	30.4	0.0	7.5	76.5	9.5	18.6	0.0
Prop In Lane				0.69		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				386	399	359	0	2892	900	216	2381	0
V/C Ratio(X)				1.09	0.99	1.00	0.00	0.21	1.39	1.12	0.46	0.00
Avail Cap(c_a), veh/h				386	399	359	0	2892	900	216	2381	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				49.8	49.7	49.7	0.0	12.6	26.8	60.3	8.8	0.0
Incr Delay (d2), s/veh				73.8	43.8	46.8	0.0	0.0	183.1	98.8	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				21.7	19.1	17.5	0.0	3.4	77.8	6.8	8.7	0.0
LnGrp Delay(d),s/veh				123.6	93.5	96.5	0.0	12.6	209.8	159.1	9.0	0.0
LnGrp LOS				F	F	F		B	F	F	A	
Approach Vol, veh/h					1177			1859			1338	
Approach Delay, s/veh					105.2			145.5			36.2	
Approach LOS					F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			14.0	81.0		35.0		95.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			9.5	76.5		30.5		90.5
Max Q Clear Time (g_c+I1), s			11.5	78.5		32.5		20.6
Green Ext Time (p_c), s			0.0	0.0		0.0		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	101.3
HCM 2010 LOS	F

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected	0.950	0.982					0.950					
Satd. Flow (prot)	1534	1586	1530	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950	0.982					0.950					
Satd. Flow (perm)	1534	1586	1530	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			195									73
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

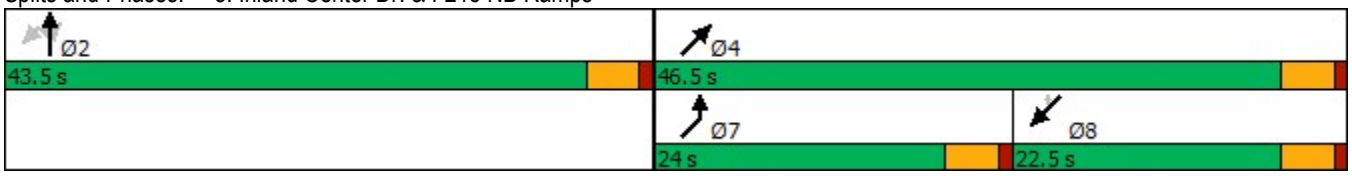
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	733	349	540	0	0	0	279	490	0	0	379	38
Future Volume (vph)	733	349	540	0	0	0	279	490	0	0	379	38
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	916	436	675	0	0	0	349	613	0	0	474	48
Shared Lane Traffic (%)	27%											
Lane Group Flow (vph)	669	683	675	0	0	0	349	613	0	0	474	48

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	733	349	540	279	490	379	38
Future Volume (vph)	733	349	540	279	490	379	38
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	43.5	43.5	43.5	24.0	46.5	22.5	22.5
Total Split (%)	48.3%	48.3%	48.3%	26.7%	51.7%	25.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	39.1	39.1	39.1	19.5	36.4	12.4	12.4
Actuated g/C Ratio	0.46	0.46	0.46	0.23	0.43	0.15	0.15
v/c Ratio	0.94	0.93	0.83	0.94	0.42	0.52	0.17
Control Delay	46.9	44.3	25.3	67.7	17.6	35.3	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	46.9	44.3	25.3	67.7	18.0	35.3	5.1
LOS	D	D	C	E	B	D	A
Approach Delay		38.8			36.0	32.5	
Approach LOS		D			D	C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 84.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 37.1	Intersection LOS: D
Intersection Capacity Utilization 134.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	669	683	675	349	613	474	48
v/c Ratio	0.94	0.93	0.83	0.94	0.42	0.52	0.17
Control Delay	46.9	44.3	25.3	67.7	17.6	35.3	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	46.9	44.3	25.3	67.7	18.0	35.3	5.1
Queue Length 50th (ft)	343	347	222	183	114	68	0
Queue Length 95th (ft)	#509	#511	319	#301	134	82	11
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	709	732	812	373	1701	1320	383
Starvation Cap Reductn	0	0	0	0	600	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.93	0.83	0.94	0.56	0.36	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	733	349	540	0	0	0	279	490	0	0	379	38
Future Volume (veh/h)	733	349	540	0	0	0	279	490	0	0	379	38
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	676	772	675				349	612	0	0	474	48
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	769	807	727				380	1421	0	0	779	192
Arrive On Green	0.47	0.47	0.47				0.23	0.42	0.00	0.00	0.13	0.13
Sat Flow, veh/h	1619	1700	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	676	772	675				349	612	0	0	474	48
Grp Sat Flow(s),veh/h/ln	1619	1700	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	30.9	35.9	34.0				17.3	10.5	0.0	0.0	6.0	2.3
Cycle Q Clear(g_c), s	30.9	35.9	34.0				17.3	10.5	0.0	0.0	6.0	2.3
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	769	807	727				380	1421	0	0	779	192
V/C Ratio(X)	0.88	0.96	0.93				0.92	0.43	0.00	0.00	0.61	0.25
Avail Cap(c_a), veh/h	769	807	727				384	1749	0	0	1357	335
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	20.7	20.3				30.6	17.1	0.0	0.0	34.0	32.4
Incr Delay (d2), s/veh	13.6	22.6	19.9				26.4	0.2	0.0	0.0	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.6	21.8	18.3				10.4	5.0	0.0	0.0	2.6	1.0
LnGrp Delay(d),s/veh	33.1	43.4	40.2				57.0	17.3	0.0	0.0	34.8	33.1
LnGrp LOS	C	D	D				E	B			C	C
Approach Vol, veh/h		2123						961			522	
Approach Delay, s/veh		39.1						31.7			34.6	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		43.5		38.6			23.8	14.8
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		39.0		42.0			19.5	18.0
Max Q Clear Time (g_c+I1), s		37.9		12.5			19.3	8.0
Green Ext Time (p_c), s		1.0		4.6			0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	36.5
HCM 2010 LOS	D

Notes

Scenario Report

Scenario:	OY+C+P_AM
Command:	OY+C+P_AM
Volume:	OY+C+P_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	0	Average Delay (sec/veh):	5.8
Optimal Cycle:	72	Level Of Service:	A

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	1	0	0	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	5	3	30		85	0	18		23	1367	8		16	1145	65	
Growth 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	
Initial Bse:	5	3	30		85	0	18		23	1367	8		16	1145	65	
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:	5	3	30		85	0	18		23	1367	8		16	1145	65	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	5	3	30		85	0	18		23	1367	8		16	1145	65	
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:	5	3	30		85	0	18		23	1367	8		16	1145	65	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.88	0.88	0.88		0.72	1.00	0.72		0.23	1.00	1.00		0.11	0.94	0.94	
Lanes:	0.13	0.08	0.79		0.83	0.00	0.17		1.00	0.99	0.01		1.00	1.89	0.11	
Final Sat.:	220	132	1321		1129	0	239		444	1887	11		215	3389	192	
Capacity Analysis Module:																
Vol/Sat:	0.02	0.02	0.02		0.08	0.00	0.08		0.05	0.72	0.72		0.07	0.34	0.34	
Crit Moves:					****					****						
Green/Cycle:	0.09	0.09	0.09		0.09	0.00	0.09		0.91	0.91	0.91		0.91	0.91	0.91	
Volume/Cap:	0.24	0.24	0.24		0.80	0.00	0.80		0.06	0.80	0.80		0.08	0.37	0.37	
Uniform Del:	42.0	42.0	42.0		44.4	0.0	44.4		0.5	1.6	1.6		0.5	0.7	0.7	
IncremntDel:	0.8	0.8	0.8		28.7	0.0	28.7		0.1	2.8	2.8		0.2	0.1	0.1	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Delay Adj:	1.00	1.00	1.00		1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	42.8	42.8	42.8		73.1	0.0	73.1		0.5	4.4	4.4		0.7	0.7	0.7	
User DelAdj:	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:	42.8	42.8	42.8		73.1	0.0	73.1		0.5	4.4	4.4		0.7	0.7	0.7	
LOS by Move:	D	D	D		E	A	E		A	A	A		A	A	A	
HCM2kAvgQ:	1	1	1		5	0	5		0	17	17		0	3	3	

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.443
Loss Time (sec):	0	Average Delay (sec/veh):	366.7
Optimal Cycle:	40	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0	0	1	0	1	1	0	0	3	0	1	2	0	2	0	0
Volume Module:																		
Base Vol:	0	0	0	241	311	382	0	503	1040	202	909	0
Growth 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
Initial Bse:	0	0	0	241	311	382	0	503	1040	202	909	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	0	0	241	311	382	0	503	1040	202	909	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	241	311	382	0	503	1040	202	909	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	0	0	241	311	382	0	503	1040	202	909	0
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	0.77	1.00	1.23	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1261	1627	1998	0	5187	1615	3502	3610	0
Capacity Analysis Module:																		
Vol/Sat:	0.00	0.00	0.00	0.19	0.19	0.19	0.00	0.10	0.64	0.06	0.25	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.35	0.35	0.35	0.00	0.18	0.18	0.47	0.65	0.00
Volume/Cap:	0.00	0.00	0.00	0.54	0.54	0.54	0.00	0.54	3.59	0.12	0.39	0.00
Uniform Del:	0.0	0.0	0.0	25.8	25.8	25.8	0.0	37.3	41.0	15.1	8.4	0.0
IncremntDel:	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.6	1172	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	26.1	26.1	26.1	0.0	37.9	1213	15.1	8.5	0.0
User DelAdj:	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	26.1	26.1	26.1	0.0	37.9	1213	15.1	8.5	0.0
LOS by Move:	A	A	A	C	C	C	A	D	F	B	A	A
HCM2kAvgQ:	0	0	0	8	8	8	0	6	124	2	7	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.544
Loss Time (sec):	0	Average Delay (sec/veh):	19.9
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	4	0	1
Volume Module:																		
Base Vol:	733	349	540	0	0	0	279	490	0	0	379	38
Growth 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
Initial Bse:	733	349	540	0	0	0	279	490	0	0	379	38
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:	733	349	540	0	0	0	279	490	0	0	379	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	733	349	540	0	0	0	279	490	0	0	379	38
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:	733	349	540	0	0	0	279	490	0	0	379	38
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.85	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.35	0.65	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	2399	1142	1615	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:																		
Vol/Sat:	0.31	0.31	0.33	0.00	0.00	0.00	0.15	0.14	0.00	0.00	0.05	0.02
Crit Moves:			****					****				****						
Green/Cycle:	0.61	0.61	0.61	0.00	0.00	0.00	0.28	0.39	0.00	0.00	0.10	0.10
Volume/Cap:	0.50	0.50	0.54	0.00	0.00	0.00	0.54	0.35	0.00	0.00	0.54	0.23
Uniform Del:	10.7	10.7	11.1	0.0	0.0	0.0	30.3	21.9	0.0	0.0	42.8	41.4
IncremntDel:	0.2	0.2	0.6	0.0	0.0	0.0	1.2	0.2	0.0	0.0	0.9	0.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	10.9	10.9	11.8	0.0	0.0	0.0	31.5	22.0	0.0	0.0	43.7	42.1
User DelAdj:	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:	10.9	10.9	11.8	0.0	0.0	0.0	31.5	22.0	0.0	0.0	43.7	42.1
LOS by Move:	B	B	B	A	A	A	C	C	A	A	D	D
HCM2kAvgQ:	9	9	10	0	0	0	8	6	0	0	4	1

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

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.905			0.997			0.991	
Flt Protected		0.966			0.991		0.950			0.950		
Satd. Flow (prot)	0	1583	0	0	1525	0	1615	1795	0	1615	3389	0
Flt Permitted		0.761			0.942		0.077			0.083		
Satd. Flow (perm)	0	1247	0	0	1449	0	131	1795	0	141	3389	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			33			2			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

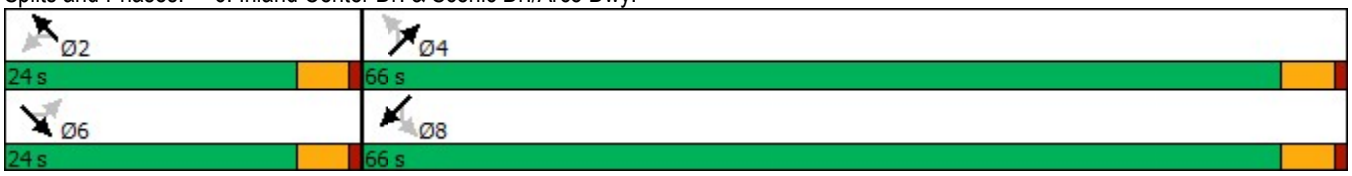
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	86	4	33	8	5	31	16	1103	20	29	1618	109
Future Volume (vph)	86	4	33	8	5	31	16	1103	20	29	1618	109
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	92	4	35	9	5	33	17	1186	22	31	1740	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	0	0	47	0	17	1208	0	31	1857	0

Intersection Summary

Lane Group	SEL	SET	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	86	4	8	5	16	1103	29	1618
Future Volume (vph)	86	4	8	5	16	1103	29	1618
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	24.0	24.0	66.0	66.0	66.0	66.0
Total Split (%)	26.7%	26.7%	26.7%	26.7%	73.3%	73.3%	73.3%	73.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	None	None	None	None
Act Effct Green (s)		12.6		12.6	59.4	59.4	59.4	59.4
Actuated g/C Ratio		0.16		0.16	0.73	0.73	0.73	0.73
v/c Ratio		0.63		0.19	0.18	0.92	0.30	0.75
Control Delay		41.3		16.2	9.7	23.7	14.3	9.6
Queue Delay		0.0		0.0	0.0	14.6	0.0	4.7
Total Delay		41.3		16.2	9.7	38.2	14.3	14.3
LOS		D		B	A	D	B	B
Approach Delay		41.3		16.2		37.8		14.3
Approach LOS		D		B		D		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 81.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 24.2	Intersection LOS: C
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Inland Center Dr. & Scenic Dr./Arco Dwy.



Lane Group	SET	NWT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	131	47	17	1208	31	1857
v/c Ratio	0.63	0.19	0.18	0.92	0.30	0.75
Control Delay	41.3	16.2	9.7	23.7	14.3	9.6
Queue Delay	0.0	0.0	0.0	14.6	0.0	4.7
Total Delay	41.3	16.2	9.7	38.2	14.3	14.3
Queue Length 50th (ft)	55	6	2	405	4	234
Queue Length 95th (ft)	112	34	14	#960	29	436
Internal Link Dist (ft)	19	155		387		266
Turn Bay Length (ft)			50		60	
Base Capacity (vph)	318	377	100	1377	108	2604
Starvation Cap Reductn	0	0	0	183	0	671
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.12	0.17	1.01	0.29	0.96

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	86	4	33	8	5	31	16	1103	20	29	1618	109
Future Volume (veh/h)	86	4	33	8	5	31	16	1103	20	29	1618	109
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1700	1700	1700	1700	1700	1700	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	92	4	35	9	5	33	17	1186	22	31	1740	117
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	192	13	45	74	38	131	202	1336	25	205	2468	164
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	906	106	369	141	314	1071	225	1762	33	421	3255	217
Grp Volume(v), veh/h	131	0	0	47	0	0	17	0	1208	31	906	951
Grp Sat Flow(s),veh/h/ln	1381	0	0	1525	0	0	225	0	1794	421	1710	1762
Q Serve(g_s), s	4.7	0.0	0.0	0.0	0.0	0.0	3.2	0.0	37.5	4.4	20.6	21.4
Cycle Q Clear(g_c), s	6.8	0.0	0.0	2.1	0.0	0.0	24.6	0.0	37.5	42.0	20.6	21.4
Prop In Lane	0.70		0.27	0.19		0.70	1.00		0.02	1.00		0.12
Lane Grp Cap(c), veh/h	250	0	0	244	0	0	202	0	1360	205	1296	1336
V/C Ratio(X)	0.52	0.00	0.00	0.19	0.00	0.00	0.08	0.00	0.89	0.15	0.70	0.71
Avail Cap(c_a), veh/h	428	0	0	438	0	0	215	0	1465	229	1396	1438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	0.0	0.0	29.9	0.0	0.0	11.2	0.0	6.7	22.3	4.7	4.8
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.4	0.0	0.0	0.2	0.0	6.7	0.3	1.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	0.9	0.0	0.0	0.2	0.0	20.3	0.5	9.8	10.6
LnGrp Delay(d),s/veh	33.5	0.0	0.0	30.3	0.0	0.0	11.4	0.0	13.5	22.6	6.1	6.3
LnGrp LOS	C			C			B		B	C	A	A
Approach Vol, veh/h		131			47			1225			1888	
Approach Delay, s/veh		33.5			30.3			13.4			6.5	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.7		61.6		13.7		61.6
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		19.5		61.5		19.5		61.5
Max Q Clear Time (g_c+I1), s		4.1		39.5		8.8		44.0
Green Ext Time (p_c), s		0.1		12.6		0.4		13.1

Intersection Summary	
HCM 2010 Ctrl Delay	10.5
HCM 2010 LOS	B

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1700	1700	1800	1700	1800	1800	1600	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	0		1	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.91	0.91	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.979	0.850			0.850			
Flt Protected					0.982					0.950		
Satd. Flow (prot)	0	0	0	0	2975	1392	0	4914	1530	2949	3420	0
Flt Permitted					0.982					0.950		
Satd. Flow (perm)	0	0	0	0	2975	1392	0	4914	1530	2949	3420	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									125			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	271	371	439	0	638	613	469	1405	0
Future Volume (vph)	0	0	0	271	371	439	0	638	613	469	1405	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	301	412	488	0	709	681	521	1561	0
Shared Lane Traffic (%)						24%						
Lane Group Flow (vph)	0	0	0	0	830	371	0	709	681	521	1561	0

Intersection Summary

Lane Group	SBT	SBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	371	439	638	613	469	1405
Future Volume (vph)	371	439	638	613	469	1405
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	6		4		3	8
Permitted Phases		6		4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	35.0	35.0	42.0	42.0	23.0	65.0
Total Split (%)	35.0%	35.0%	42.0%	42.0%	23.0%	65.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	30.5	30.5	37.5	37.5	18.5	60.5
Actuated g/C Ratio	0.30	0.30	0.38	0.38	0.18	0.60
v/c Ratio	0.92	0.88	0.38	1.05	0.96	0.75
Control Delay	49.6	55.9	23.6	74.5	70.5	17.4
Queue Delay	0.0	0.0	0.0	21.4	0.0	48.3
Total Delay	49.6	55.9	23.6	96.0	70.5	65.6
LOS	D	E	C	F	E	E
Approach Delay	51.6		59.1			66.8
Approach LOS	D		E			E

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 60.6	Intersection LOS: E
Intersection Capacity Utilization 133.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps

Lane Group	SBT	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	830	371	709	681	521	1561
v/c Ratio	0.92	0.88	0.38	1.05	0.96	0.75
Control Delay	49.6	55.9	23.6	74.5	70.5	17.4
Queue Delay	0.0	0.0	0.0	21.4	0.0	48.3
Total Delay	49.6	55.9	23.6	96.0	70.5	65.6
Queue Length 50th (ft)	279	245	119	~420	171	351
Queue Length 95th (ft)	#402	#429	153	#644	#273	442
Internal Link Dist (ft)	485		266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	907	424	1842	651	545	2069
Starvation Cap Reductn	0	0	0	109	0	731
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.88	0.38	1.26	0.96	1.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	271	371	439	0	638	613	469	1405	0
Future Volume (veh/h)	0	0	0	271	371	439	0	638	613	469	1405	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1700	1700	1800	0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h				301	581	376	0	709	681	521	1561	0
Adj No. of Lanes				0	2	1	0	3	1	2	2	0
Peak Hour Factor				0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				332	689	467	0	1843	574	547	2069	0
Arrive On Green				0.31	0.31	0.31	0.00	0.38	0.38	0.19	0.61	0.00
Sat Flow, veh/h				1088	2258	1530	0	5076	1530	2956	3510	0
Grp Volume(v), veh/h				455	427	376	0	709	681	521	1561	0
Grp Sat Flow(s),veh/h/ln				1646	1700	1530	0	1638	1530	1478	1710	0
Q Serve(g_s), s				26.6	23.3	22.6	0.0	10.5	37.5	17.4	33.2	0.0
Cycle Q Clear(g_c), s				26.6	23.3	22.6	0.0	10.5	37.5	17.4	33.2	0.0
Prop In Lane				0.66		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				502	519	467	0	1843	574	547	2069	0
V/C Ratio(X)				0.91	0.82	0.81	0.00	0.38	1.19	0.95	0.75	0.00
Avail Cap(c_a), veh/h				502	519	467	0	1843	574	547	2069	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				33.4	32.2	32.0	0.0	22.8	31.2	40.3	14.4	0.0
Incr Delay (d2), s/veh				22.7	13.8	13.8	0.0	0.1	100.7	27.0	1.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.2	12.9	11.3	0.0	4.7	31.8	9.1	15.9	0.0
LnGrp Delay(d),s/veh				56.1	46.0	45.8	0.0	23.0	132.0	67.3	16.0	0.0
LnGrp LOS				E	D	D		C	F	E	B	
Approach Vol, veh/h					1258			1390			2082	
Approach Delay, s/veh					49.6			76.4			28.8	
Approach LOS					D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			23.0	42.0		35.0		65.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			18.5	37.5		30.5		60.5
Max Q Clear Time (g_c+I1), s			19.4	39.5		28.6		35.2
Green Ext Time (p_c), s			0.0	0.0		1.3		14.1

Intersection Summary	
HCM 2010 Ctrl Delay	48.3
HCM 2010 LOS	D

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected	0.950	0.972					0.950					
Satd. Flow (prot)	1534	1570	1530	0	0	0	1615	3420	0	0	6192	1530
Flt Permitted	0.950	0.972					0.950					
Satd. Flow (perm)	1534	1570	1530	0	0	0	1615	3420	0	0	6192	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			171									200
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

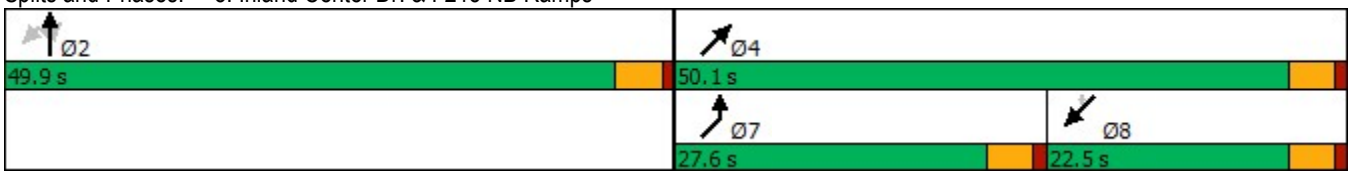
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1026	283	446	0	0	0	345	559	0	0	838	370
Future Volume (vph)	1026	283	446	0	0	0	345	559	0	0	838	370
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1179	325	513	0	0	0	397	643	0	0	963	425
Shared Lane Traffic (%)	37%											
Lane Group Flow (vph)	743	761	513	0	0	0	397	643	0	0	963	425

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	1026	283	446	345	559	838	370
Future Volume (vph)	1026	283	446	345	559	838	370
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	49.9	49.9	49.9	27.6	50.1	22.5	22.5
Total Split (%)	49.9%	49.9%	49.9%	27.6%	50.1%	22.5%	22.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	45.4	45.4	45.4	23.1	45.6	18.0	18.0
Actuated g/C Ratio	0.45	0.45	0.45	0.23	0.46	0.18	0.18
v/c Ratio	1.07	1.07	0.65	1.06	0.41	0.86	0.97
Control Delay	81.9	82.0	18.2	103.1	19.2	49.2	58.7
Queue Delay	0.0	0.0	0.0	14.0	1.9	0.0	0.0
Total Delay	81.9	82.0	18.2	117.1	21.1	49.2	58.7
LOS	F	F	B	F	C	D	E
Approach Delay		65.7			57.8	52.1	
Approach LOS		E			E	D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 59.6	Intersection LOS: E
Intersection Capacity Utilization 133.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	743	761	513	397	643	963	425
v/c Ratio	1.07	1.07	0.65	1.06	0.41	0.86	0.97
Control Delay	81.9	82.0	18.2	103.1	19.2	49.2	58.7
Queue Delay	0.0	0.0	0.0	14.0	1.9	0.0	0.0
Total Delay	81.9	82.0	18.2	117.1	21.1	49.2	58.7
Queue Length 50th (ft)	~554	~568	163	~281	140	175	153
Queue Length 95th (ft)	#746	#762	261	#441	177	206	#324
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	696	712	787	373	1559	1114	439
Starvation Cap Reductn	0	0	0	35	724	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.07	1.07	0.65	1.17	0.77	0.86	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1026	283	446	0	0	0	345	559	0	0	838	370
Future Volume (veh/h)	1026	283	446	0	0	0	345	559	0	0	838	370
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1700	1700	1800				1700	1800	0	0	1800	1800
Adj Flow Rate, veh/h	752	923	513				397	643	0	0	963	425
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.87	0.87	0.87				0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	735	772	695				374	1560	0	0	1115	275
Arrive On Green	0.45	0.45	0.45				0.23	0.46	0.00	0.00	0.18	0.18
Sat Flow, veh/h	1619	1700	1530				1619	3510	0	0	6444	1530
Grp Volume(v), veh/h	752	923	513				397	643	0	0	963	425
Grp Sat Flow(s),veh/h/ln	1619	1700	1530				1619	1710	0	0	1548	1530
Q Serve(g_s), s	45.4	45.4	27.5				23.1	12.6	0.0	0.0	15.1	18.0
Cycle Q Clear(g_c), s	45.4	45.4	27.5				23.1	12.6	0.0	0.0	15.1	18.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	735	772	695				374	1560	0	0	1115	275
V/C Ratio(X)	1.02	1.20	0.74				1.06	0.41	0.00	0.00	0.86	1.54
Avail Cap(c_a), veh/h	735	772	695				374	1560	0	0	1115	275
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	27.3	22.4				38.5	18.2	0.0	0.0	39.8	41.0
Incr Delay (d2), s/veh	39.2	100.6	6.9				63.7	0.2	0.0	0.0	7.2	261.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.2	42.8	12.9				16.9	5.9	0.0	0.0	7.0	27.6
LnGrp Delay(d),s/veh	66.5	127.9	29.3				102.2	18.4	0.0	0.0	47.0	302.8
LnGrp LOS	F	F	C				F	B			D	F
Approach Vol, veh/h		2188						1040			1388	
Approach Delay, s/veh		83.7						50.4			125.3	
Approach LOS		F						D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		49.9		50.1			27.6	22.5
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		45.4		45.6			23.1	18.0
Max Q Clear Time (g_c+I1), s		47.4		14.6			25.1	20.0
Green Ext Time (p_c), s		0.0		4.9			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	88.7
HCM 2010 LOS	F

Notes

Scenario Report

Scenario:	OY+C+P_PM
Command:	OY+C+P_PM
Volume:	OY+C+P_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	0	Average Delay (sec/veh):	4.8
Optimal Cycle:	45	Level Of Service:	A

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	1! 0	0	1	0 0	1	0	1 1 0
Volume Module:												
Base Vol:	8	5	31	86	4	33	16	1103	20	29	1618	109
Growth 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
Initial Bse:	8	5	31	86	4	33	16	1103	20	29	1618	109
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:	8	5	31	86	4	33	16	1103	20	29	1618	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	5	31	86	4	33	16	1103	20	29	1618	109
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:	8	5	31	86	4	33	16	1103	20	29	1618	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.76	0.76	0.76	0.13	1.00	1.00	0.19	0.94	0.94
Lanes:	0.18	0.11	0.71	0.70	0.03	0.27	1.00	0.98	0.02	1.00	1.87	0.13
Final Sat.:	302	189	1169	1014	47	389	247	1861	34	352	3352	226
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.08	0.08	0.08	0.06	0.59	0.59	0.08	0.48	0.48
Crit Moves:					****			****				
Green/Cycle:	0.13	0.13	0.13	0.13	0.13	0.13	0.87	0.87	0.87	0.87	0.87	0.87
Volume/Cap:	0.21	0.21	0.21	0.68	0.68	0.68	0.07	0.68	0.68	0.09	0.55	0.55
Uniform Del:	39.3	39.3	39.3	41.8	41.8	41.8	0.8	1.9	1.9	0.9	1.5	1.5
IncremntDel:	0.5	0.5	0.5	9.8	9.8	9.8	0.1	1.1	1.1	0.1	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	39.8	39.8	39.8	51.7	51.7	51.7	1.0	3.1	3.1	1.0	1.7	1.7
User DelAdj:	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:	39.8	39.8	39.8	51.7	51.7	51.7	1.0	3.1	3.1	1.0	1.7	1.7
LOS by Move:	D	D	D	D	D	D	A	A	A	A	A	A
HCM2kAvgQ:	1	1	1	5	5	5	0	12	12	0	7	7

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.610
Loss Time (sec):	0	Average Delay (sec/veh):	109.6
Optimal Cycle:	70	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0	0	1	0	1	1	0	0	3	0	1	2	0	2	0	0
Volume Module:																		
Base Vol:	0	0	0	271	371	439	0	638	613	469	1405	0
Growth 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
Initial Bse:	0	0	0	271	371	439	0	638	613	469	1405	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	0	0	271	371	439	0	638	613	469	1405	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	271	371	439	0	638	613	469	1405	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	0	0	271	371	439	0	638	613	469	1405	0
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	0.75	1.03	1.22	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1226	1679	1986	0	5187	1615	3502	3610	0
Capacity Analysis Module:																		
Vol/Sat:	0.00	0.00	0.00	0.22	0.22	0.22	0.00	0.12	0.38	0.13	0.39	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.30	0.30	0.30	0.00	0.17	0.17	0.53	0.70	0.00
Volume/Cap:	0.00	0.00	0.00	0.73	0.73	0.73	0.00	0.73	2.26	0.25	0.56	0.00
Uniform Del:	0.0	0.0	0.0	31.3	31.3	31.3	0.0	39.5	41.6	12.7	7.4	0.0
IncremntDel:	0.0	0.0	0.0	1.9	1.9	1.9	0.0	3.2	579.6	0.1	0.3	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	33.3	33.3	33.3	0.0	42.7	621.2	12.8	7.7	0.0
User DelAdj:	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	33.3	33.3	33.3	0.0	42.7	621.2	12.8	7.7	0.0
LOS by Move:	A	A	A	C	C	C	A	D	F	B	A	A
HCM2kAvgQ:	0	0	0	12	12	12	0	8	62	4	11	0

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	0	Average Delay (sec/veh):	27.3
Optimal Cycle:	93	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	4	0	1
Volume Module:																		
Base Vol:	1026	283	446	0	0	0	349	559	0	0	838	370
Growth 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
Initial Bse:	1026	283	446	0	0	0	349	559	0	0	838	370
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:	1026	283	446	0	0	0	349	559	0	0	838	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1026	283	446	0	0	0	349	559	0	0	838	370
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:	1026	283	446	0	0	0	349	559	0	0	838	370
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	0.85	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.57	0.43	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	2716	749	1615	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:																		
Vol/Sat:	0.38	0.38	0.28	0.00	0.00	0.00	0.19	0.15	0.00	0.00	0.12	0.23
Crit Moves:		****						****				****
Green/Cycle:	0.47	0.47	0.47	0.00	0.00	0.00	0.24	0.53	0.00	0.00	0.29	0.29
Volume/Cap:	0.80	0.80	0.59	0.00	0.00	0.00	0.80	0.29	0.00	0.00	0.42	0.80
Uniform Del:	22.4	22.4	19.3	0.0	0.0	0.0	35.7	13.2	0.0	0.0	29.0	33.0
IncremntDel:	2.9	2.9	1.2	0.0	0.0	0.0	10.1	0.1	0.0	0.0	0.1	9.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	25.3	25.3	20.4	0.0	0.0	0.0	45.8	13.3	0.0	0.0	29.1	42.6
User DelAdj:	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:	25.3	25.3	20.4	0.0	0.0	0.0	45.8	13.3	0.0	0.0	29.1	42.6
LOS by Move:	C	C	C	A	A	A	D	B	A	A	C	D
HCM2kAvgQ:	19	19	10	0	0	0	12	5	0	0	6	13

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

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Appendix L

Long-Range (2040) Without Project Conditions Intersection Analysis Worksheets

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.957			0.987			0.995			0.917	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	3455	0	1710	3563	0	1710	1890	0	1710	1742	0
Flt Permitted	0.950			0.950			0.170			0.570		
Satd. Flow (perm)	1710	3455	0	1710	3563	0	306	1890	0	1026	1742	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		62			17			2			58	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

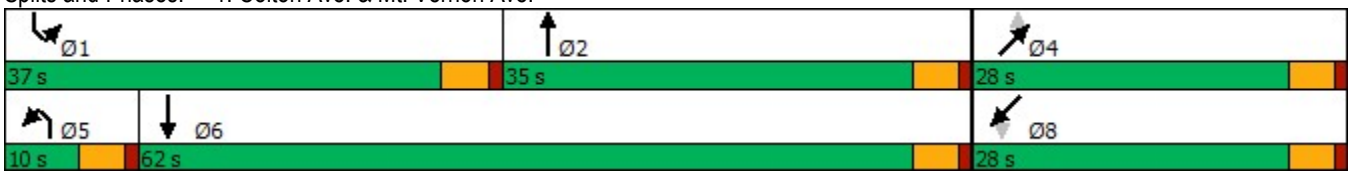
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	18	747	299	546	678	66	40	145	5	247	187	230
Future Volume (vph)	18	747	299	546	678	66	40	145	5	247	187	230
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	19	786	315	575	714	69	42	153	5	260	197	242
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	1101	0	575	783	0	42	158	0	260	439	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	18	747	546	678	40	145	247	187
Future Volume (vph)	18	747	546	678	40	145	247	187
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	35.0	37.0	62.0	28.0	28.0	28.0	28.0
Total Split (%)	10.0%	35.0%	37.0%	62.0%	28.0%	28.0%	28.0%	28.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.5	30.5	32.5	63.5	23.5	23.5	23.5	23.5
Actuated g/C Ratio	0.06	0.30	0.32	0.64	0.24	0.24	0.24	0.24
v/c Ratio	0.20	1.00	1.04	0.35	0.59	0.36	1.08	0.97
Control Delay	50.4	61.9	82.4	9.5	69.7	34.2	118.9	69.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	61.9	82.4	9.5	69.7	34.2	118.9	69.5
LOS	D	E	F	A	E	C	F	E
Approach Delay		61.7		40.3		41.7		87.9
Approach LOS		E		D		D		F

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 57.3	Intersection LOS: E
Intersection Capacity Utilization 105.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.



Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	19	1101	575	783	42	158	260	439
v/c Ratio	0.20	1.00	1.04	0.35	0.59	0.36	1.08	0.97
Control Delay	50.4	61.9	82.4	9.5	69.7	34.2	118.9	69.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	61.9	82.4	9.5	69.7	34.2	118.9	69.5
Queue Length 50th (ft)	12	~354	~396	94	24	83	~186	246
Queue Length 95th (ft)	36	#504	#605	170	#79	142	#342	#445
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	94	1096	555	2268	71	445	241	453
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	1.00	1.04	0.35	0.59	0.36	1.08	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	18	747	299	546	678	66	40	145	5	247	187	230
Future Volume (veh/h)	18	747	299	546	678	66	40	145	5	247	187	230
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	19	786	315	575	714	69	42	153	5	260	197	242
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	35	768	308	557	2028	196	72	430	14	267	183	224
Arrive On Green	0.02	0.31	0.31	0.32	0.61	0.61	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1714	2519	1008	1714	3327	321	914	1830	60	1182	777	955
Grp Volume(v), veh/h	19	563	538	575	387	396	42	0	158	260	0	439
Grp Sat Flow(s),veh/h/ln	1714	1805	1722	1714	1805	1843	914	0	1889	1182	0	1732
Q Serve(g_s), s	1.1	30.5	30.5	32.5	10.7	10.7	0.0	0.0	7.0	16.5	0.0	23.5
Cycle Q Clear(g_c), s	1.1	30.5	30.5	32.5	10.7	10.7	23.5	0.0	7.0	23.5	0.0	23.5
Prop In Lane	1.00		0.59	1.00		0.17	1.00		0.03	1.00		0.55
Lane Grp Cap(c), veh/h	35	551	525	557	1100	1123	72	0	444	267	0	407
V/C Ratio(X)	0.54	1.02	1.02	1.03	0.35	0.35	0.58	0.00	0.36	0.97	0.00	1.08
Avail Cap(c_a), veh/h	94	551	525	557	1100	1123	72	0	444	267	0	407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	34.7	34.8	33.8	9.7	9.7	50.0	0.0	31.9	43.8	0.0	38.3
Incr Delay (d2), s/veh	12.3	44.2	45.6	46.6	0.9	0.9	11.4	0.0	0.5	47.3	0.0	67.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	21.9	21.1	22.5	5.5	5.7	1.4	0.0	3.7	10.7	0.0	18.8
LnGrp Delay(d),s/veh	60.8	79.0	80.3	80.4	10.6	10.6	61.4	0.0	32.4	91.1	0.0	105.6
LnGrp LOS	E	F	F	F	B	B	E		C	F		F
Approach Vol, veh/h		1120			1358			200			699	
Approach Delay, s/veh		79.3			40.1			38.5			100.2	
Approach LOS		E			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	37.0	35.0		28.0	6.6	65.4		28.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	32.5	30.5		23.5	5.5	57.5		23.5
Max Q Clear Time (g_c+I1), s	34.5	32.5		25.5	3.1	12.7		25.5
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	5.8		0.0

Intersection Summary			
HCM 2010 Ctrl Delay		65.5	
HCM 2010 LOS		E	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1800	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.912				0.979	
Flt Protected	0.983		0.950			
Satd. Flow (prot)	1614	0	1710	1900	1860	0
Flt Permitted	0.983		0.950			
Satd. Flow (perm)	1614	0	1710	1900	1860	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	133				16	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

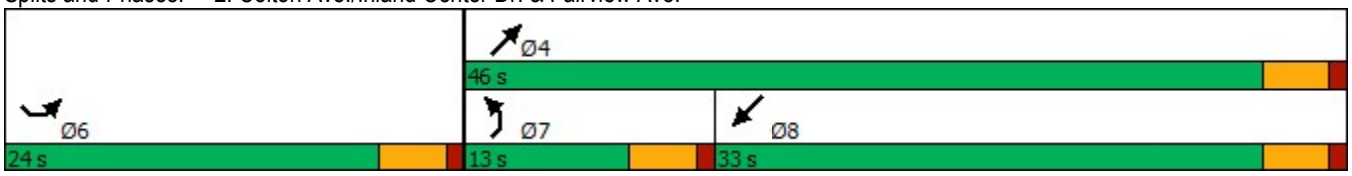
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	71	133	139	920	557	100
Future Volume (vph)	71	133	139	920	557	100
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	75	140	146	968	586	105
Shared Lane Traffic (%)						
Lane Group Flow (vph)	215	0	146	968	691	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	71	139	920	557
Future Volume (vph)	71	139	920	557
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	24.0	13.0	46.0	33.0
Total Split (%)	34.3%	18.6%	65.7%	47.1%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	19.6	8.2	39.8	27.1
Actuated g/C Ratio	0.29	0.12	0.58	0.40
v/c Ratio	0.39	0.71	0.88	0.93
Control Delay	10.9	50.8	23.3	40.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	10.9	50.8	23.3	40.6
LOS	B	D	C	D
Approach Delay	10.9		26.9	40.6
Approach LOS	B		C	D

Intersection Summary			
Cycle Length: 70			
Actuated Cycle Length: 68.4			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 29.9		Intersection LOS: C	
Intersection Capacity Utilization 68.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	215	146	968	691
v/c Ratio	0.39	0.71	0.88	0.93
Control Delay	10.9	50.8	23.3	40.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	10.9	50.8	23.3	40.6
Queue Length 50th (ft)	27	62	309	264
Queue Length 95th (ft)	78	#143	#586	#474
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	556	212	1155	786
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.69	0.84	0.88

Intersection Summary

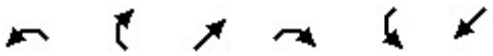
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	71	133	139	920	557	100
Future Volume (veh/h)	71	133	139	920	557	100
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1900	1900
Adj Flow Rate, veh/h	75	140	146	968	586	105
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	160	299	182	1095	633	113
Arrive On Green	0.29	0.29	0.11	0.58	0.40	0.40
Sat Flow, veh/h	552	1031	1714	1900	1569	281
Grp Volume(v), veh/h	216	0	146	968	0	691
Grp Sat Flow(s),veh/h/ln	1590	0	1714	1900	0	1850
Q Serve(g_s), s	7.5	0.0	5.6	29.6	0.0	23.9
Cycle Q Clear(g_c), s	7.5	0.0	5.6	29.6	0.0	23.9
Prop In Lane	0.35	0.65	1.00			0.15
Lane Grp Cap(c), veh/h	461	0	182	1095	0	746
V/C Ratio(X)	0.47	0.00	0.80	0.88	0.00	0.93
Avail Cap(c_a), veh/h	461	0	217	1173	0	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	29.4	12.3	0.0	19.1
Incr Delay (d2), s/veh	3.4	0.0	16.6	7.9	0.0	16.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.5	17.7	0.0	15.5
LnGrp Delay(d),s/veh	23.0	0.0	46.0	20.2	0.0	35.6
LnGrp LOS	C		D	C		D
Approach Vol, veh/h	216			1114	691	
Approach Delay, s/veh	23.0			23.6	35.6	
Approach LOS	C			C	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				43.2		24.0	11.6	31.6
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				41.5		19.5	8.5	28.5
Max Q Clear Time (g_c+I1), s				31.6		9.5	7.6	25.9
Green Ext Time (p_c), s				5.2		0.5	0.0	1.2

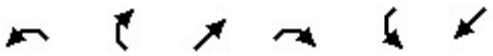
Intersection Summary	
HCM 2010 Ctrl Delay	27.6
HCM 2010 LOS	C

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1900	0	1900	1900
Flt Permitted						
Satd. Flow (perm)	1900	0	1900	0	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	1114	0	0	643
Future Volume (vph)	0	0	1114	0	0	643
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	1173	0	0	677
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1173	0	0	677

Intersection Summary

Intersection	
Int Delay, s/veh	0

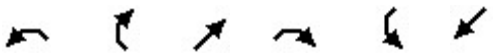
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	1114	0	0	643
Future Vol, veh/h	0	0	1114	0	0	643
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	1173	0	0	677

Major/Minor	Minor2		Major2	
Conflicting Flow All	677	677	0	0
Stage 1	677	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 377	456	-	-
Stage 1	~ 455	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	456	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s		0
HCM LOS	-	

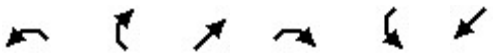
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	1114	0	0	643
Future Volume (vph)	0	0	1114	0	0	643
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	1173	0	0	677
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1173	0	0	677

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	1114	0	0	643
Future Vol, veh/h	0	0	1114	0	0	643
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	1173	0	0	677

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1173	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	236	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	236	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt						0.850						0.850
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1710	0	1710	0	1615	1710	1900	0	1710	1900	1615
Flt Permitted		0.950		0.950			0.118			0.078		
Satd. Flow (perm)	0	1710	0	1710	0	1615	212	1900	0	140	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						88						591
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

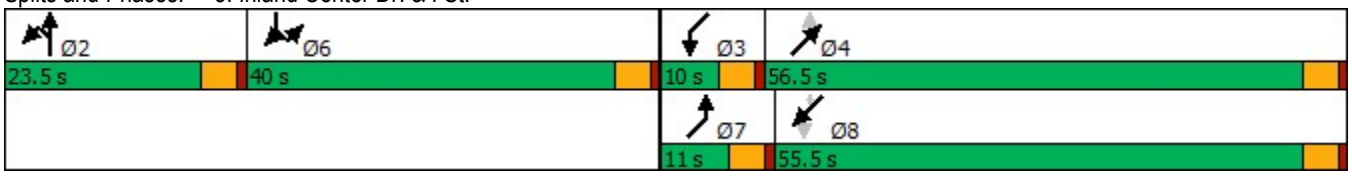
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	2	0	0	589	0	61	94	1019	2	7	582	687
Future Volume (vph)	2	0	0	589	0	61	94	1019	2	7	582	687
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	2	0	0	620	0	64	99	1073	2	7	613	723
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	620	0	64	99	1075	0	7	613	723

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Configurations								
Traffic Volume (vph)	0	589	61	94	1019	7	582	687
Future Volume (vph)	0	589	61	94	1019	7	582	687
Turn Type	NA	Prot	Prot	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	2	6	6	7	4	3	8	
Permitted Phases				4		8		8
Detector Phase	2	6	6	7	4	3	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	23.5	40.0	40.0	11.0	56.5	10.0	55.5	55.5
Total Split (%)	18.1%	30.8%	30.8%	8.5%	43.5%	7.7%	42.7%	42.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.0	35.5	35.5	58.3	57.0	53.4	47.9	47.9
Actuated g/C Ratio	0.15	0.28	0.28	0.46	0.45	0.42	0.38	0.38
v/c Ratio	0.01	1.30	0.12	0.57	1.26	0.06	0.85	0.74
Control Delay	47.5	186.7	3.8	32.8	158.7	19.0	49.3	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	186.7	3.8	32.8	158.7	19.0	49.3	11.2
LOS	D	F	A	C	F	B	D	B
Approach Delay	47.5				148.1		28.6	
Approach LOS	D				F		C	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 127	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.30	
Intersection Signal Delay: 102.5	Intersection LOS: F
Intersection Capacity Utilization 101.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Group Flow (vph)	2	620	64	99	1075	7	613	723
v/c Ratio	0.01	1.30	0.12	0.57	1.26	0.06	0.85	0.74
Control Delay	47.5	186.7	3.8	32.8	158.7	19.0	49.3	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	186.7	3.8	32.8	158.7	19.0	49.3	11.2
Queue Length 50th (ft)	1	~677	0	45	~1089	3	459	77
Queue Length 95th (ft)	10	#908	20	80	#1476	12	620	240
Internal Link Dist (ft)	133				59		387	
Turn Bay Length (ft)				110		50		
Base Capacity (vph)	255	478	514	174	852	127	763	1002
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	1.30	0.12	0.57	1.26	0.06	0.80	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	589	0	61	94	1019	2	7	582	687
Future Volume (veh/h)	2	0	0	589	0	61	94	1019	2	7	582	687
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	0	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	2	0	0	620	0	64	99	1073	2	7	613	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	393	0	0	0	0	0	445	1135	2	141	1052	894
Arrive On Green	0.23	0.00	0.00	0.00	0.00	0.00	0.05	0.60	0.60	0.01	0.55	0.00
Sat Flow, veh/h	1714	0	0		0		1714	1896	4	1714	1900	1615
Grp Volume(v), veh/h	2	0	0		0.0		99	0	1075	7	613	0
Grp Sat Flow(s),veh/h/ln	1714	0	0				1714	0	1899	1714	1900	1615
Q Serve(g_s), s	0.1	0.0	0.0				1.9	0.0	43.4	0.1	17.6	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0				1.9	0.0	43.4	0.1	17.6	0.0
Prop In Lane	1.00		0.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	0	0				445	0	1137	141	1052	894
V/C Ratio(X)	0.01	0.00	0.00				0.22	0.00	0.95	0.05	0.58	0.00
Avail Cap(c_a), veh/h	393	0	0				487	0	1192	239	1169	994
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.6	0.0	0.0				8.7	0.0	15.4	17.6	12.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.2	0.0	14.5	0.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.9	0.0	27.0	0.1	9.4	0.0
LnGrp Delay(d),s/veh	24.7	0.0	0.0				9.0	0.0	29.9	17.7	12.8	0.0
LnGrp LOS	C						A		C	B	B	
Approach Vol, veh/h		2						1174			620	
Approach Delay, s/veh		24.7						28.1			12.8	
Approach LOS		C						C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	5.2	54.1			9.0	50.4
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	52.0			6.5	51.0
Max Q Clear Time (g_c+I1), s		2.1	2.1	45.4			3.9	19.6
Green Ext Time (p_c), s		0.0	0.0	4.3			0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.896			0.999			0.990	
Flt Protected		0.960			0.993		0.950			0.950		
Satd. Flow (prot)	0	1780	0	0	1690	0	1805	1898	0	1805	3574	0
Flt Permitted		0.960			0.993		0.950			0.950		
Satd. Flow (perm)	0	1780	0	0	1690	0	1805	1898	0	1805	3574	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	112	0	24	7	5	39	31	1563	12	21	1244	85
Future Volume (vph)	112	0	24	7	5	39	31	1563	12	21	1244	85
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	118	0	25	7	5	41	33	1645	13	22	1309	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	143	0	0	53	0	33	1658	0	22	1398	0

Intersection Summary

Intersection	
Int Delay, s/veh	1533.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	112	0	24	7	5	39	31	1563	12	21	1244	85
Future Vol, veh/h	112	0	24	7	5	39	31	1563	12	21	1244	85
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	118	0	25	7	5	41	33	1645	13	22	1309	89

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3139	3122	699	2417	3160	1652	1398	0	0	1658	0	0
Stage 1	1398	1398	-	1718	1718	-	-	-	-	-	-	-
Stage 2	1741	1724	-	699	1442	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 6	11	387	20	11	123	495	-	-	394	-	-
Stage 1	151	209	-	115	146	-	-	-	-	-	-	-
Stage 2	~ 112	145	-	401	199	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 2	10	387	17	10	123	495	-	-	394	-	-
Mov Cap-2 Maneuver	~ 2	10	-	17	10	-	-	-	-	-	-	-
Stage 1	141	197	-	107	136	-	-	-	-	-	-	-
Stage 2	~ 67	135	-	354	188	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay	$ 35296.7	$ 384	0.2	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	495	-	-	42	2	394	-	-
HCM Lane V/C Ratio	0.066	-	-	1.278	71.579	0.056	-	-
HCM Control Delay (s)	12.8	-	-	$ 384	$ 35296.7	14.7	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	5.3	20.3	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1800	1900	1900	1700	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.924				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1556	3021	0	0	5187	1615	3133	3610	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1556	3021	0	0	5187	1615	3133	3610	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									126			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	278	373	410	0	574	1192	233	1002	0
Future Volume (vph)	0	0	0	278	373	410	0	574	1192	233	1002	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	293	393	432	0	604	1255	245	1055	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	264	854	0	0	604	1255	245	1055	0

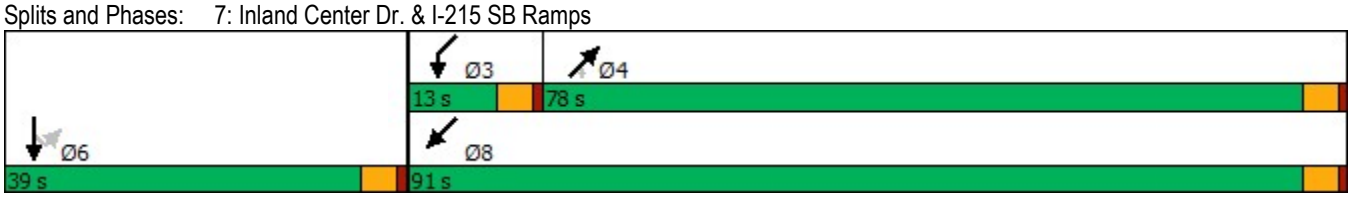
Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	278	373	574	1192	233	1002
Future Volume (vph)	278	373	574	1192	233	1002
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	39.0	39.0	78.0	78.0	13.0	91.0
Total Split (%)	30.0%	30.0%	60.0%	60.0%	10.0%	70.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	34.5	34.5	73.5	73.5	8.5	86.5
Actuated g/C Ratio	0.27	0.27	0.57	0.57	0.07	0.67
v/c Ratio	0.64	1.12dr	0.21	1.30	1.20	0.44
Control Delay	50.5	96.4	14.1	166.9	178.0	11.0
Queue Delay	0.0	0.0	0.0	0.1	0.0	8.5
Total Delay	50.5	96.4	14.1	167.0	178.0	19.5
LOS	D	F	B	F	F	B
Approach Delay		85.5	117.3			49.4
Approach LOS		F	F			D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.30	
Intersection Signal Delay: 88.3	Intersection LOS: F
Intersection Capacity Utilization 156.5%	ICU Level of Service H
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	264	854	604	1255	245	1055
v/c Ratio	0.64	1.12dr	0.21	1.30	1.20	0.44
Control Delay	50.5	96.4	14.1	166.9	178.0	11.0
Queue Delay	0.0	0.0	0.0	0.1	0.0	8.5
Total Delay	50.5	96.4	14.1	167.0	178.0	19.5
Queue Length 50th (ft)	217	~435	87	~1308	~128	204
Queue Length 95th (ft)	325	#572	109	#1577	#215	247
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	412	801	2932	967	204	2402
Starvation Cap Reductn	0	0	0	19	0	1308
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	1.07	0.21	1.32	1.20	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	278	373	410	0	574	1192	233	1002	0
Future Volume (veh/h)	0	0	0	278	373	410	0	574	1192	233	1002	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1800	1800	1800	0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h				293	393	432	0	604	1255	245	1055	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				455	478	406	0	2933	913	205	2402	0
Arrive On Green				0.27	0.27	0.27	0.00	0.57	0.57	0.07	0.67	0.00
Sat Flow, veh/h				1714	1800	1530	0	5358	1615	3141	3705	0
Grp Volume(v), veh/h				293	393	432	0	604	1255	245	1055	0
Grp Sat Flow(s),veh/h/ln				1714	1800	1530	0	1729	1615	1570	1805	0
Q Serve(g_s), s				19.7	26.7	34.5	0.0	7.4	73.5	8.5	18.0	0.0
Cycle Q Clear(g_c), s				19.7	26.7	34.5	0.0	7.4	73.5	8.5	18.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				455	478	406	0	2933	913	205	2402	0
V/C Ratio(X)				0.64	0.82	1.06	0.00	0.21	1.37	1.19	0.44	0.00
Avail Cap(c_a), veh/h				455	478	406	0	2933	913	205	2402	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				42.3	44.9	47.8	0.0	13.9	28.2	60.8	10.3	0.0
Incr Delay (d2), s/veh				6.9	14.8	62.6	0.0	0.0	175.4	124.6	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.1	15.2	21.6	0.0	3.5	77.0	7.2	9.0	0.0
LnGrp Delay(d),s/veh				49.2	59.6	110.4	0.0	13.9	203.7	185.3	10.4	0.0
LnGrp LOS				D	E	F		B	F	F	B	
Approach Vol, veh/h					1118			1859			1300	
Approach Delay, s/veh					76.5			142.0			43.4	
Approach LOS					E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	78.0		39.0		91.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			8.5	73.5		34.5		86.5
Max Q Clear Time (g_c+I1), s			10.5	75.5		36.5		20.0
Green Ext Time (p_c), s			0.0	0.0		0.0		10.4

Intersection Summary	
HCM 2010 Ctrl Delay	94.9
HCM 2010 LOS	F

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.979	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1710	1767	1534	0	0	0	1710	3610	0	0	6536	1615
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1710	1767	1534	0	0	0	1710	3610	0	0	6536	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10	167									55
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

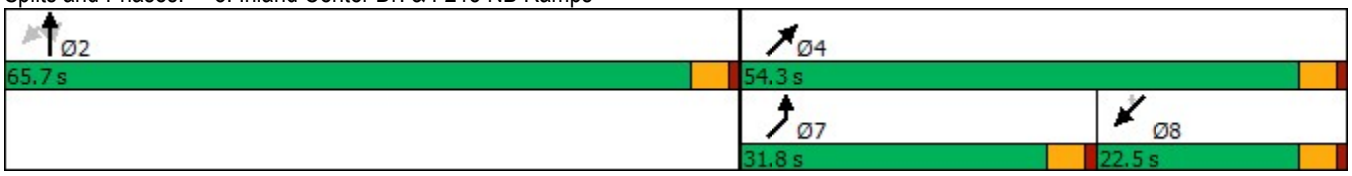
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	805	658	780	0	0	0	354	563	0	0	464	44
Future Volume (vph)	805	658	780	0	0	0	354	563	0	0	464	44
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	847	693	821	0	0	0	373	593	0	0	488	46
Shared Lane Traffic (%)			14%									
Lane Group Flow (vph)	847	808	706	0	0	0	373	593	0	0	488	46

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	805	658	780	354	563	464	44
Future Volume (vph)	805	658	780	354	563	464	44
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	65.7	65.7	65.7	31.8	54.3	22.5	22.5
Total Split (%)	54.8%	54.8%	54.8%	26.5%	45.3%	18.8%	18.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	61.3	61.3	61.3	26.9	45.9	14.5	14.5
Actuated g/C Ratio	0.53	0.53	0.53	0.23	0.40	0.12	0.12
v/c Ratio	0.94	0.86	0.80	0.94	0.42	0.60	0.18
Control Delay	45.7	35.5	25.3	77.3	26.3	51.3	11.2
Queue Delay	0.0	0.0	0.0	47.0	1.7	0.0	0.0
Total Delay	45.7	35.5	25.3	124.4	28.0	51.3	11.2
LOS	D	D	C	F	C	D	B
Approach Delay		36.1			65.2	47.9	
Approach LOS		D			E	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.2	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 45.0	Intersection LOS: D
Intersection Capacity Utilization 156.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	847	808	706	373	593	488	46
v/c Ratio	0.94	0.86	0.80	0.94	0.42	0.60	0.18
Control Delay	45.7	35.5	25.3	77.3	26.3	51.3	11.2
Queue Delay	0.0	0.0	0.0	47.0	1.7	0.0	0.0
Total Delay	45.7	35.5	25.3	124.4	28.0	51.3	11.2
Queue Length 50th (ft)	580	533	349	277	166	102	0
Queue Length 95th (ft)	#906	#853	576	#479	215	132	28
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	901	936	887	402	1548	1013	296
Starvation Cap Reductn	0	0	0	92	745	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.86	0.80	1.20	0.74	0.48	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	805	658	780	0	0	0	354	563	0	0	464	44
Future Volume (veh/h)	805	658	780	0	0	0	354	563	0	0	464	44
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1900	1900				1800	1900	0	0	1900	1900
Adj Flow Rate, veh/h	847	789	757				373	593	0	0	488	46
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	926	1027	873				399	1373	0	0	706	174
Arrive On Green	0.54	0.54	0.54				0.23	0.38	0.00	0.00	0.11	0.11
Sat Flow, veh/h	1714	1900	1615				1714	3705	0	0	6802	1615
Grp Volume(v), veh/h	847	789	757				373	593	0	0	488	46
Grp Sat Flow(s),veh/h/ln	1714	1900	1615				1714	1805	0	0	1634	1615
Q Serve(g_s), s	50.9	37.0	45.9				24.2	13.8	0.0	0.0	8.2	3.0
Cycle Q Clear(g_c), s	50.9	37.0	45.9				24.2	13.8	0.0	0.0	8.2	3.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	926	1027	873				399	1373	0	0	706	174
V/C Ratio(X)	0.91	0.77	0.87				0.94	0.43	0.00	0.00	0.69	0.26
Avail Cap(c_a), veh/h	926	1027	873				413	1587	0	0	1039	257
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	20.5	22.5				42.6	26.0	0.0	0.0	48.7	46.4
Incr Delay (d2), s/veh	15.0	5.5	11.4				28.2	0.2	0.0	0.0	1.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.8	20.9	23.1				14.5	6.9	0.0	0.0	3.8	1.4
LnGrp Delay(d),s/veh	38.6	26.0	33.9				70.9	26.2	0.0	0.0	49.9	47.2
LnGrp LOS	D	C	C				E	C			D	D
Approach Vol, veh/h		2393						966			534	
Approach Delay, s/veh		33.0						43.5			49.7	
Approach LOS		C						D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		65.7		47.6			30.8	16.7
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		61.2		49.8			27.3	18.0
Max Q Clear Time (g_c+I1), s		52.9		15.8			26.2	10.2
Green Ext Time (p_c), s		6.6		4.5			0.2	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	37.9
HCM 2010 LOS	D

Notes

Scenario Report

Scenario:	LR NP_AM
Command:	LR NP_AM
Volume:	LR NP_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	0	Average Delay (sec/veh):	32.2
Optimal Cycle:	132	Level Of Service:	C

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				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 1	1	0	1	0 1	1	0	1	0 0	1	0	1	0 0	1	0
Volume Module:																
Base Vol:	18	747	299		546	678	66		40	145	5		247	187	230	
Growth 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	
Initial Bse:	18	747	299		546	678	66		40	145	5		247	187	230	
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	747	299		546	678	66		40	145	5		247	187	230	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	18	747	299		546	678	66		40	145	5		247	187	230	
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	747	299		546	678	66		40	145	5		247	187	230	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.91	0.91		0.95	0.94	0.94		0.14	1.00	1.00		0.51	0.92	0.92	
Lanes:	1.00	1.43	0.57		1.00	1.82	0.18		1.00	0.97	0.03		1.00	0.45	0.55	
Final Sat.:	1805	2467	988		1805	3247	316		274	1827	63		975	781	961	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.30	0.30		0.30	0.21	0.21		0.15	0.08	0.08		0.25	0.24	0.24	
Crit Moves:		****			****								****			
Green/Cycle:	0.03	0.35	0.35		0.35	0.67	0.67		0.30	0.30	0.30		0.30	0.30	0.30	
Volume/Cap:	0.31	0.86	0.86		0.86	0.31	0.31		0.50	0.27	0.27		0.86	0.81	0.81	
Uniform Del:	47.3	30.1	30.1		30.1	6.8	6.8		29.1	27.0	27.0		33.3	32.7	32.7	
IncremntDel:	3.0	6.3	6.3		11.3	0.1	0.1		4.7	0.3	0.3		21.9	9.4	9.4	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
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	
Delay/Veh:	50.4	36.4	36.4		41.4	6.8	6.8		33.8	27.2	27.2		55.2	42.1	42.1	
User DelAdj:	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:	50.4	36.4	36.4		41.4	6.8	6.8		33.8	27.2	27.2		55.2	42.1	42.1	
LOS by Move:	D	D	D		D	A	A		C	C	C		E	D	D	
HCM2kAvgQ:	1	19	19		18	5	5		2	4	4		10	14	14	

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.615
Loss Time (sec): 0 Average Delay (sec/veh): 32.1
Optimal Cycle: 180 Level Of Service: C

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	71	0	133	139	920	0	0	557	100
Growth 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
Initial Bse:	0	0	0	71	0	133	139	920	0	0	557	100
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	71	0	133	139	920	0	0	557	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	71	0	133	139	920	0	0	557	100
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	71	0	133	139	920	0	0	557	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	1.00	0.82	0.95	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	0.35	0.00	0.65	1.00	1.00	0.00	0.00	0.85	0.15
Final Sat.:	0	0	0	543	0	1018	1805	1900	0	0	1577	283
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.13	0.08	0.48	0.00	0.00	0.35	0.35
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.13	0.00	0.13	0.50	0.87	0.00	0.00	0.37	0.37
Volume/Cap:	0.00	0.00	0.00	0.97	0.00	0.97	0.15	0.56	0.00	0.00	0.97	0.97
Uniform Del:	0.0	0.0	0.0	43.1	0.0	43.1	13.5	1.8	0.0	0.0	31.2	31.2
IncremntDel:	0.0	0.0	0.0	53.5	0.0	53.5	0.1	0.4	0.0	0.0	26.6	26.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	96.6	0.0	96.6	13.6	2.2	0.0	0.0	57.8	57.8
User DelAdj:	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	96.6	0.0	96.6	13.6	2.2	0.0	0.0	57.8	57.8
LOS by Move:	A	A	A	F	A	F	B	A	A	A	E	E
HCM2kAvgQ:	0	0	0	10	0	10	2	8	0	0	26	26

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.586
Loss Time (sec): 0 Average Delay (sec/veh): 0.3
Optimal Cycle: 45 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	1 0	1	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	1114	0	0	643	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	1114	0	0	643	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	0	0	0	0	0	0	1114	0	0	643	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	1114	0	0	643	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	0	0	0	0	0	0	1114	0	0	643	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	1900	0	0	0	0	0	1900	0	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.34	0.00
Crit Moves:								****				
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.34	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	0	0	1	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.586
Loss Time (sec): 0 Average Delay (sec/veh): 0.3
Optimal Cycle: 45 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	1114	0	0	643	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	1114	0	0	643	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	0	0	0	0	0	0	1114	0	0	643	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	1114	0	0	643	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	0	0	0	0	0	0	1114	0	0	643	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	0	0	1900	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.34	0.00
Crit Moves:								****				
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.34	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	0	0	1	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.869
Loss Time (sec): 0 Average Delay (sec/veh): 24.3
Optimal Cycle: 174 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	1	0	1
Volume Module:												
Base Vol:	2	0	0	589	0	61	94	1019	2	7	582	687
Growth 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
Initial Bse:	2	0	0	589	0	61	94	1019	2	7	582	687
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:	2	0	0	589	0	61	94	1019	2	7	582	687
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	0	589	0	61	94	1019	2	7	582	687
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:	2	0	0	589	0	61	94	1019	2	7	582	687
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	0.95	1.00	0.85
Lanes:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1805	0	0	1805	0	1615	1805	1896	4	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.33	0.00	0.04	0.05	0.54	0.54	0.00	0.31	0.43
Crit Moves:	****			****				****		****		
Green/Cycle:	0.00	0.00	0.00	0.38	0.00	0.38	0.62	0.62	0.62	0.56	0.56	0.56
Volume/Cap:	0.87	0.00	0.00	0.87	0.00	0.10	0.23	0.87	0.87	0.08	0.55	0.77
Uniform Del:	49.9	0.0	0.0	28.9	0.0	20.3	10.0	15.7	15.7	19.4	14.3	17.2
IncremntDel:	462.7	0.0	0.0	11.6	0.0	0.1	0.3	7.1	7.1	0.4	0.6	4.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	512.6	0.0	0.0	40.5	0.0	20.3	10.3	22.9	22.9	19.8	14.9	21.2
User DelAdj:	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:	512.6	0.0	0.0	40.5	0.0	20.3	10.3	22.9	22.9	19.8	14.9	21.2
LOS by Move:	F	A	A	D	A	C	B	C	C	B	B	C
HCM2kAvgQ:	1	0	0	20	0	1	1	29	29	0	12	18

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.937
Loss Time (sec): 0 Average Delay (sec/veh): 12.7
Optimal Cycle: 180 Level Of Service: B

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	1! 0	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	7	5	39	112	0	24	31	1563	12	21	1244	85
Growth 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
Initial Bse:	7	5	39	112	0	24	31	1563	12	21	1244	85
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:	7	5	39	112	0	24	31	1563	12	21	1244	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	5	39	112	0	24	31	1563	12	21	1244	85
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:	7	5	39	112	0	24	31	1563	12	21	1244	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.88	0.88	0.67	1.00	0.67	0.20	1.00	1.00	0.05	0.94	0.94
Lanes:	0.14	0.10	0.76	0.82	0.00	0.18	1.00	0.99	0.01	1.00	1.87	0.13
Final Sat.:	231	165	1285	1045	0	224	388	1884	14	86	3345	229
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.11	0.00	0.11	0.08	0.83	0.83	0.25	0.37	0.37
Crit Moves:				****				****				
Green/Cycle:	0.11	0.11	0.11	0.11	0.00	0.11	0.89	0.89	0.89	0.89	0.89	0.89
Volume/Cap:	0.27	0.27	0.27	0.94	0.00	0.94	0.09	0.94	0.94	0.28	0.42	0.42
Uniform Del:	40.4	40.4	40.4	43.9	0.0	43.9	0.7	3.8	3.8	0.9	1.0	1.0
IncremntDel:	0.7	0.7	0.7	55.8	0.0	55.8	0.1	10.5	10.5	2.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	41.2	41.2	41.2	99.8	0.0	99.8	0.8	14.3	14.3	2.9	1.1	1.1
User DelAdj:	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:	41.2	41.2	41.2	99.8	0.0	99.8	0.8	14.3	14.3	2.9	1.1	1.1
LOS by Move:	D	D	D	F	A	F	A	B	B	A	A	A
HCM2kAvgQ:	2	2	2	7	0	7	0	38	38	0	4	4

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.528
Loss Time (sec): 0 Average Delay (sec/veh): 461.2
Optimal Cycle: 52 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	2	0	2 0
Volume Module:												
Base Vol:	0	0	0	278	373	410	0	574	1192	233	1002	0
Growth 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
Initial Bse:	0	0	0	278	373	410	0	574	1192	233	1002	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	0	0	278	373	410	0	574	1192	233	1002	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	373	410	0	574	1192	233	1002	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	0	0	278	373	410	0	574	1192	233	1002	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1634	1634	1634	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.23	0.25	0.00	0.11	0.74	0.07	0.28	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.39	0.39	0.39	0.00	0.17	0.17	0.43	0.61	0.00
Volume/Cap:	0.00	0.00	0.00	0.43	0.58	0.64	0.00	0.64	4.26	0.15	0.46	0.00
Uniform Del:	0.0	0.0	0.0	22.2	23.9	24.6	0.0	38.4	41.3	17.1	10.7	0.0
IncremntDel:	0.0	0.0	0.0	0.1	0.5	0.8	0.0	1.6	1477	0.0	0.2	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	22.4	24.4	25.5	0.0	40.0	1518	17.2	10.8	0.0
User DelAdj:	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	22.4	24.4	25.5	0.0	40.0	1518	17.2	10.8	0.0
LOS by Move:	A	A	A	C	C	C	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	7	10	11	0	7	148	2	9	0

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	0	Average Delay (sec/veh):	22.4
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	805	658	780	0	0	0	354	563	0	0	464	44
Growth 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
Initial Bse:	805	658	780	0	0	0	354	563	0	0	464	44
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:	805	658	780	0	0	0	354	563	0	0	464	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	805	658	780	0	0	0	354	563	0	0	464	44
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:	805	658	780	0	0	0	354	563	0	0	464	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.92	1.08	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1598	1894	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.50	0.41	0.41	0.00	0.00	0.00	0.20	0.16	0.00	0.00	0.07	0.03
Crit Moves:	****						****				****	
Green/Cycle:	0.65	0.65	0.65	0.00	0.00	0.00	0.26	0.35	0.00	0.00	0.09	0.09
Volume/Cap:	0.76	0.63	0.63	0.00	0.00	0.00	0.76	0.45	0.00	0.00	0.76	0.31
Uniform Del:	11.9	10.2	10.2	0.0	0.0	0.0	34.3	25.4	0.0	0.0	44.6	42.7
IncremntDel:	3.3	0.6	0.6	0.0	0.0	0.0	7.3	0.3	0.0	0.0	5.6	1.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	15.2	10.7	10.7	0.0	0.0	0.0	41.5	25.6	0.0	0.0	50.2	44.0
User DelAdj:	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:	15.2	10.7	10.7	0.0	0.0	0.0	41.5	25.6	0.0	0.0	50.2	44.0
LOS by Move:	B	B	B	A	A	A	D	C	A	A	D	D
HCM2kAvgQ:	18	13	13	0	0	0	12	7	0	0	6	2

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

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to RK ENGINEERING GROUP

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.973			0.982			0.993			0.898	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	3513	0	1710	3545	0	1710	1887	0	1710	1706	0
Flt Permitted	0.950			0.950			0.131			0.485		
Satd. Flow (perm)	1710	3513	0	1710	3545	0	236	1887	0	873	1706	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			22			4			155	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	29	1015	227	296	675	93	121	256	13	356	272	578
Future Volume (vph)	29	1015	227	296	675	93	121	256	13	356	272	578
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	31	1068	239	312	711	98	127	269	14	375	286	608
Shared Lane Traffic (%)												
Lane Group Flow (vph)	31	1307	0	312	809	0	127	283	0	375	894	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	29	1015	296	675	121	256	356	272
Future Volume (vph)	29	1015	296	675	121	256	356	272
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.3	30.0	15.0	34.7	35.0	35.0	35.0	35.0
Total Split (%)	12.9%	37.5%	18.8%	43.4%	43.8%	43.8%	43.8%	43.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.7	25.5	10.5	36.4	30.5	30.5	30.5	30.5
Actuated g/C Ratio	0.07	0.32	0.13	0.46	0.38	0.38	0.38	0.38
v/c Ratio	0.25	1.14	1.39	0.50	1.43	0.39	1.13	1.20
Control Delay	40.6	102.5	232.4	17.3	271.9	19.8	116.5	124.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	102.5	232.4	17.3	271.9	19.8	116.5	124.4
LOS	D	F	F	B	F	B	F	F
Approach Delay		101.1		77.1		97.9		122.1
Approach LOS		F		E		F		F

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 80	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay: 100.7	Intersection LOS: F
Intersection Capacity Utilization 124.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	31	1307	312	809	127	283	375	894
v/c Ratio	0.25	1.14	1.39	0.50	1.43	0.39	1.13	1.20
Control Delay	40.6	102.5	232.4	17.3	271.9	19.8	116.5	124.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	102.5	232.4	17.3	271.9	19.8	116.5	124.4
Queue Length 50th (ft)	15	~404	~211	124	~87	99	~220	~501
Queue Length 95th (ft)	41	#534	#363	221	#191	163	#384	#726
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	123	1143	224	1623	89	721	332	746
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	1.14	1.39	0.50	1.43	0.39	1.13	1.20

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	29	1015	227	296	675	93	121	256	13	356	272	578
Future Volume (veh/h)	29	1015	227	296	675	93	121	256	13	356	272	578
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	31	1068	239	312	711	98	127	269	14	375	286	608
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	53	936	208	225	1336	184	90	683	36	377	207	440
Arrive On Green	0.03	0.32	0.32	0.13	0.42	0.42	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1714	2936	654	1714	3188	439	599	1790	93	1055	543	1154
Grp Volume(v), veh/h	31	655	652	312	402	407	127	0	283	375	0	894
Grp Sat Flow(s),veh/h/ln	1714	1805	1785	1714	1805	1822	599	0	1884	1055	0	1696
Q Serve(g_s), s	1.4	25.5	25.5	10.5	13.3	13.4	0.0	0.0	8.8	21.7	0.0	30.5
Cycle Q Clear(g_c), s	1.4	25.5	25.5	10.5	13.3	13.4	30.5	0.0	8.8	30.5	0.0	30.5
Prop In Lane	1.00		0.37	1.00		0.24	1.00		0.05	1.00		0.68
Lane Grp Cap(c), veh/h	53	575	569	225	756	763	90	0	718	377	0	647
V/C Ratio(X)	0.58	1.14	1.15	1.39	0.53	0.53	1.41	0.00	0.39	1.00	0.00	1.38
Avail Cap(c_a), veh/h	124	575	569	225	756	763	90	0	718	377	0	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.2	27.2	27.3	34.8	17.4	17.4	40.0	0.0	18.0	31.7	0.0	24.8
Incr Delay (d2), s/veh	9.6	81.8	85.1	199.1	2.7	2.7	238.3	0.0	0.4	45.0	0.0	181.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	25.7	25.9	17.4	7.2	7.2	7.9	0.0	4.6	12.9	0.0	46.8
LnGrp Delay(d),s/veh	47.9	109.0	112.3	233.8	20.1	20.0	278.3	0.0	18.4	76.7	0.0	206.3
LnGrp LOS	D	F	F	F	C	C	F		B	E		F
Approach Vol, veh/h		1338			1121			410			1269	
Approach Delay, s/veh		109.2			79.5			98.9			168.0	
Approach LOS		F			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	30.0		35.0	7.0	38.0		35.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	25.5		30.5	5.8	30.2		30.5
Max Q Clear Time (g_c+I1), s	12.5	27.5		32.5	3.4	15.4		32.5
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.6		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		118.2
HCM 2010 LOS		F

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1800	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930				0.990	
Flt Protected	0.976		0.950			
Satd. Flow (prot)	1634	0	1710	1900	1881	0
Flt Permitted	0.976		0.950			
Satd. Flow (perm)	1634	0	1710	1900	1881	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	38				8	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

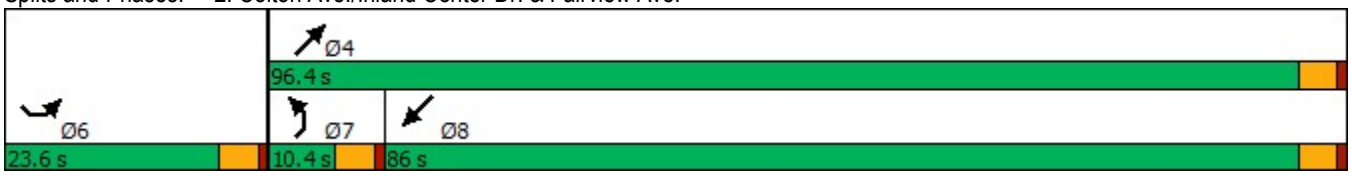
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	57	61	61	738	1133	91
Future Volume (vph)	57	61	61	738	1133	91
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	60	64	64	777	1193	96
Shared Lane Traffic (%)						
Lane Group Flow (vph)	124	0	64	777	1289	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	57	61	738	1133
Future Volume (vph)	57	61	738	1133
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	23.6	10.4	96.4	86.0
Total Split (%)	19.7%	8.7%	80.3%	71.7%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	19.1	5.9	89.8	81.6
Actuated g/C Ratio	0.16	0.05	0.76	0.69
v/c Ratio	0.42	0.74	0.54	0.99
Control Delay	36.0	101.6	7.3	41.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	36.0	101.6	7.3	41.6
LOS	D	F	A	D
Approach Delay	36.0		14.4	41.6
Approach LOS	D		B	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117.9	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 31.2	Intersection LOS: C
Intersection Capacity Utilization 79.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	124	64	777	1289
v/c Ratio	0.42	0.74	0.54	0.99
Control Delay	36.0	101.6	7.3	41.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	36.0	101.6	7.3	41.6
Queue Length 50th (ft)	60	50	202	~943
Queue Length 95th (ft)	122	#129	277	#1310
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	297	86	1483	1304
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.42	0.74	0.52	0.99

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

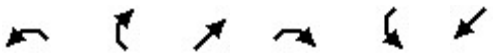
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	57	61	61	738	1133	91
Future Volume (veh/h)	57	61	61	738	1133	91
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1900	1900
Adj Flow Rate, veh/h	60	64	64	777	1193	96
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	124	132	81	1454	1181	95
Arrive On Green	0.16	0.16	0.05	0.77	0.68	0.68
Sat Flow, veh/h	775	827	1714	1900	1736	140
Grp Volume(v), veh/h	125	0	64	777	0	1289
Grp Sat Flow(s),veh/h/ln	1615	0	1714	1900	0	1875
Q Serve(g_s), s	8.4	0.0	4.4	19.4	0.0	81.5
Cycle Q Clear(g_c), s	8.4	0.0	4.4	19.4	0.0	81.5
Prop In Lane	0.48	0.51	1.00			0.07
Lane Grp Cap(c), veh/h	258	0	81	1454	0	1276
V/C Ratio(X)	0.49	0.00	0.79	0.53	0.00	1.01
Avail Cap(c_a), veh/h	258	0	84	1458	0	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.9	0.0	56.5	5.6	0.0	19.1
Incr Delay (d2), s/veh	6.4	0.0	37.2	0.4	0.0	27.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	2.9	10.1	0.0	51.3
LnGrp Delay(d),s/veh	52.3	0.0	93.6	6.0	0.0	46.8
LnGrp LOS	D		F	A		F
Approach Vol, veh/h	125			841	1289	
Approach Delay, s/veh	52.3			12.6	46.8	
Approach LOS	D			B	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				96.2		23.6	10.2	86.0
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				91.9		19.1	5.9	81.5
Max Q Clear Time (g_c+I1), s				21.4		10.4	6.4	83.5
Green Ext Time (p_c), s				7.1		0.2	0.0	0.0

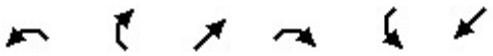
Intersection Summary	
HCM 2010 Ctrl Delay	34.4
HCM 2010 LOS	C

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	1900	0	1900	0	1900	1900
Flt Permitted						
Satd. Flow (perm)	1900	0	1900	0	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	824	0	0	1322
Future Volume (vph)	0	0	824	0	0	1322
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	867	0	0	1392
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	867	0	0	1392

Intersection Summary

Intersection	
Int Delay, s/veh	0

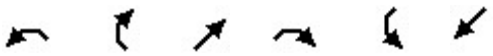
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	824	0	0	1322
Future Vol, veh/h	0	0	824	0	0	1322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	867	0	0	1392

Major/Minor	Minor2		Major2	
Conflicting Flow All	1392	1392	0	0
Stage 1	1392	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 143	176	-	-
Stage 1	~ 211	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	176	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s		0
HCM LOS	-	

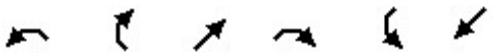
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	0	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1900	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1900	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	0	824	0	0	1322
Future Volume (vph)	0	0	824	0	0	1322
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	0	867	0	0	1392
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	867	0	0	1392

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	824	0	0	1322
Future Vol, veh/h	0	0	824	0	0	1322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	867	0	0	1392

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	867	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	355	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	355	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	0	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.865				0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1557	0	1710	0	1615	1710	1900	0	1800	1900	1615
Flt Permitted				0.950			0.063					
Satd. Flow (perm)	0	1557	0	1710	0	1615	113	1900	0	1800	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		155				88						328
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

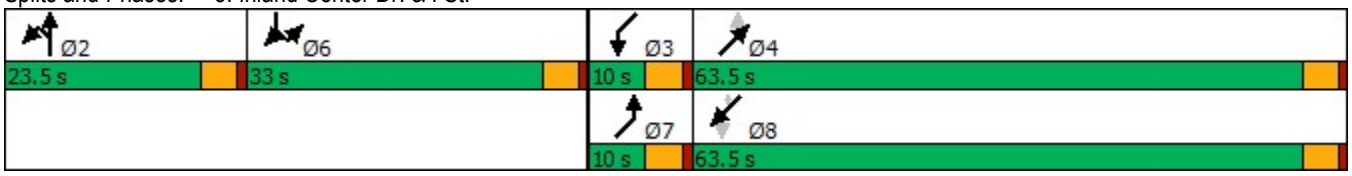
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	2	474	0	105	97	727	0	0	1217	716
Future Volume (vph)	0	0	2	474	0	105	97	727	0	0	1217	716
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	2	499	0	111	102	765	0	0	1281	754
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	499	0	111	102	765	0	0	1281	754

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR	Ø3
Lane Configurations								
Traffic Volume (vph)	0	474	105	97	727	1217	716	
Future Volume (vph)	0	474	105	97	727	1217	716	
Turn Type	NA	Prot	Prot	pm+pt	NA	NA	Perm	
Protected Phases	2	6	6	7	4	8		3
Permitted Phases				4			8	
Detector Phase	2	6	6	7	4	8	8	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5	9.5
Total Split (s)	23.5	33.0	33.0	10.0	63.5	63.5	63.5	10.0
Total Split (%)	18.1%	25.4%	25.4%	7.7%	48.8%	48.8%	48.8%	8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.0	28.5	28.5	69.0	69.0	59.0	59.0	
Actuated g/C Ratio	0.15	0.22	0.22	0.53	0.53	0.45	0.45	
v/c Ratio	0.01	1.33	0.26	0.80	0.76	1.49	0.83	
Control Delay	0.0	207.4	14.2	61.8	30.1	254.2	25.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
Total Delay	0.0	207.4	14.2	61.8	30.1	254.3	25.9	
LOS	A	F	B	E	C	F	C	
Approach Delay					33.8	169.7		
Approach LOS					C	F		

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.49	
Intersection Signal Delay: 136.5	Intersection LOS: F
Intersection Capacity Utilization 114.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	2	499	111	102	765	1281	754
v/c Ratio	0.01	1.33	0.26	0.80	0.76	1.49	0.83
Control Delay	0.0	207.4	14.2	61.8	30.1	254.2	25.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	0.0	207.4	14.2	61.8	30.1	254.3	25.9
Queue Length 50th (ft)	0	~545	15	41	490	~1488	335
Queue Length 95th (ft)	0	#763	66	#137	659	#1752	541
Internal Link Dist (ft)	133				59	387	
Turn Bay Length (ft)				110			
Base Capacity (vph)	359	374	422	127	1008	862	912
Starvation Cap Reductn	0	0	0	0	0	16	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	1.33	0.26	0.80	0.76	1.51	0.83

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	474	0	105	97	727	0	0	1217	716
Future Volume (veh/h)	0	0	2	474	0	105	97	727	0	0	1217	716
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	0	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	0	0	2	499	0	111	102	765	0	0	1281	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	0	302	0	0	0	158	1347	0	423	1166	991
Arrive On Green	0.00	0.00	0.20	0.00	0.00	0.00	0.05	0.71	0.00	0.00	0.61	0.00
Sat Flow, veh/h	0	0	1530		0		1714	1900	0	1714	1900	1615
Grp Volume(v), veh/h	0	0	2		0.0		102	765	0	0	1281	0
Grp Sat Flow(s),veh/h/ln	0	0	1530				1714	1900	0	1714	1900	1615
Q Serve(g_s), s	0.0	0.0	0.1				1.9	18.9	0.0	0.0	59.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1				1.9	18.9	0.0	0.0	59.0	0.0
Prop In Lane	0.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	302				158	1347	0	423	1166	991
V/C Ratio(X)	0.00	0.00	0.01				0.64	0.57	0.00	0.00	1.10	0.00
Avail Cap(c_a), veh/h	0	0	302				173	1347	0	519	1166	991
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	31.0				24.5	6.8	0.0	0.0	18.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				7.1	0.6	0.0	0.0	57.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				2.0	10.0	0.0	0.0	49.1	0.0
LnGrp Delay(d),s/veh	0.0	0.0	31.0				31.6	7.4	0.0	0.0	76.4	0.0
LnGrp LOS			C				C	A			F	
Approach Vol, veh/h		2						867			1281	
Approach Delay, s/veh		31.0						10.2			76.4	
Approach LOS		C						B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	0.0	72.7			9.2	63.5
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	59.0			5.5	59.0
Max Q Clear Time (g_c+I1), s		2.1	0.0	20.9			3.9	61.0
Green Ext Time (p_c), s		0.0	0.0	6.7			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.6
HCM 2010 LOS	D

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.908			0.997			0.989	
Flt Protected		0.966			0.990		0.950			0.950		
Satd. Flow (prot)	0	1769	0	0	1708	0	1805	1894	0	1805	3570	0
Flt Permitted		0.966			0.990		0.950			0.950		
Satd. Flow (perm)	0	1769	0	0	1708	0	1805	1894	0	1805	3570	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	118	6	45	12	8	43	22	1205	28	40	1852	150
Future Volume (vph)	118	6	45	12	8	43	22	1205	28	40	1852	150
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	124	6	47	13	8	45	23	1268	29	42	1949	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	177	0	0	66	0	23	1297	0	42	2107	0

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	118	6	45	12	8	43	22	1205	28	40	1852	150
Future Vol, veh/h	118	6	45	12	8	43	22	1205	28	40	1852	150
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	124	6	47	13	8	45	23	1268	29	42	1949	158

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3467	3455	1054	2391	3520	1283	2107	0	0	1297	0	0
Stage 1	2112	2112	-	1329	1329	-	-	-	-	-	-	-
Stage 2	1355	1343	-	1062	2191	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 3	7	226	21	~ 6	204	264	-	-	541	-	-
Stage 1	~ 53	93	-	193	226	-	-	-	-	-	-	-
Stage 2	186	223	-	242	84	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 6	226	-	~ 5	204	264	-	-	541	-	-
Mov Cap-2 Maneuver	-	~ 6	-	-	~ 5	-	-	-	-	-	-	-
Stage 1	~ 48	86	-	176	206	-	-	-	-	-	-	-
Stage 2	127	204	-	163	77	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s			0.3	0.2
HCM LOS	-	-		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	264	-	-	-	541	-	-
HCM Lane V/C Ratio	0.088	-	-	-	0.078	-	-
HCM Control Delay (s)	19.9	-	-	-	12.2	-	-
HCM Lane LOS	C	-	-	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1800	1900	1900	1700	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.923				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1556	3018	0	0	5187	1615	3133	3610	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1556	3018	0	0	5187	1615	3133	3610	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									128			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	312	448	501	0	702	672	540	1610	0
Future Volume (vph)	0	0	0	312	448	501	0	702	672	540	1610	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	328	472	527	0	739	707	568	1695	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	295	1032	0	0	739	707	568	1695	0

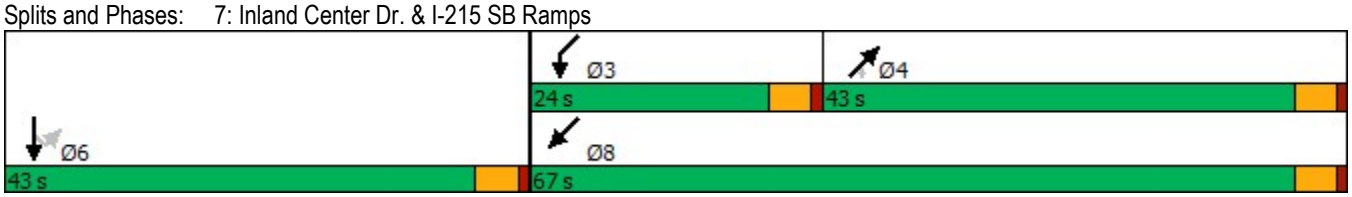
Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	312	448	702	672	540	1610
Future Volume (vph)	312	448	702	672	540	1610
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	43.0	43.0	43.0	43.0	24.0	67.0
Total Split (%)	39.1%	39.1%	39.1%	39.1%	21.8%	60.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	38.5	38.5	38.5	38.5	19.5	62.5
Actuated g/C Ratio	0.35	0.35	0.35	0.35	0.18	0.57
v/c Ratio	0.54	1.04dr	0.41	1.09	1.02	0.83
Control Delay	33.2	58.7	27.9	91.8	89.4	23.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	47.9
Total Delay	33.2	58.7	27.9	91.8	89.4	71.7
LOS	C	E	C	F	F	E
Approach Delay		53.0	59.2			76.1
Approach LOS		D	E			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 65.2	Intersection LOS: E
Intersection Capacity Utilization 166.5%	ICU Level of Service H
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	295	1032	739	707	568	1695
v/c Ratio	0.54	1.04dr	0.41	1.09	1.02	0.83
Control Delay	33.2	58.7	27.9	91.8	89.4	23.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	47.9
Total Delay	33.2	58.7	27.9	91.8	89.4	71.7
Queue Length 50th (ft)	182	392	143	~502	~220	484
Queue Length 95th (ft)	279	#544	180	#733	#330	591
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	544	1056	1815	648	555	2051
Starvation Cap Reductn	0	0	0	0	0	734
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.98	0.41	1.09	1.02	1.29

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	312	448	501	0	702	672	540	1610	0
Future Volume (veh/h)	0	0	0	312	448	501	0	702	672	540	1610	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1800	1800	1800	0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h				328	472	527	0	739	707	568	1695	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				600	630	535	0	1815	565	557	2051	0
Arrive On Green				0.35	0.35	0.35	0.00	0.35	0.35	0.18	0.57	0.00
Sat Flow, veh/h				1714	1800	1530	0	5358	1615	3141	3705	0
Grp Volume(v), veh/h				328	472	527	0	739	707	568	1695	0
Grp Sat Flow(s),veh/h/ln				1714	1800	1530	0	1729	1615	1570	1805	0
Q Serve(g_s), s				16.9	25.4	37.6	0.0	11.9	38.5	19.5	42.0	0.0
Cycle Q Clear(g_c), s				16.9	25.4	37.6	0.0	11.9	38.5	19.5	42.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				600	630	535	0	1815	565	557	2051	0
V/C Ratio(X)				0.55	0.75	0.98	0.00	0.41	1.25	1.02	0.83	0.00
Avail Cap(c_a), veh/h				600	630	535	0	1815	565	557	2051	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				28.7	31.5	35.4	0.0	27.1	35.8	45.3	19.3	0.0
Incr Delay (d2), s/veh				3.6	8.0	35.2	0.0	0.1	127.0	43.3	2.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.6	14.0	21.0	0.0	5.7	37.0	11.8	21.6	0.0
LnGrp Delay(d),s/veh				32.3	39.5	70.6	0.0	27.2	162.7	88.6	22.3	0.0
LnGrp LOS				C	D	E		C	F	F	C	
Approach Vol, veh/h					1327			1446			2263	
Approach Delay, s/veh					50.1			93.5			38.9	
Approach LOS					D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			24.0	43.0		43.0		67.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			19.5	38.5		38.5		62.5
Max Q Clear Time (g_c+I1), s			21.5	40.5		39.6		44.0
Green Ext Time (p_c), s			0.0	0.0		0.0		12.5

Intersection Summary	
HCM 2010 Ctrl Delay	57.5
HCM 2010 LOS	E

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.973	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1710	1756	1534	0	0	0	1710	3610	0	0	6536	1615
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1710	1756	1534	0	0	0	1710	3610	0	0	6536	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16	64									178
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1176	436	555	0	0	0	371	750	0	0	963	426
Future Volume (vph)	1176	436	555	0	0	0	371	750	0	0	963	426
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1238	459	584	0	0	0	391	789	0	0	1014	448
Shared Lane Traffic (%)			17%									
Lane Group Flow (vph)	1238	558	485	0	0	0	391	789	0	0	1014	448

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	1176	436	555	371	750	963	426
Future Volume (vph)	1176	436	555	371	750	963	426
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	64.5	64.5	64.5	23.0	45.5	22.5	22.5
Total Split (%)	58.6%	58.6%	58.6%	20.9%	41.4%	20.5%	20.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	60.0	60.0	60.0	18.5	41.0	18.0	18.0
Actuated g/C Ratio	0.55	0.55	0.55	0.17	0.37	0.16	0.16
v/c Ratio	1.33	0.58	0.56	1.36	0.59	0.95	1.08
Control Delay	180.5	19.1	17.0	220.4	29.9	63.5	96.1
Queue Delay	0.0	0.0	0.0	0.0	23.8	0.0	0.0
Total Delay	180.5	19.1	17.0	220.4	53.7	63.5	96.1
LOS	F	B	B	F	D	E	F
Approach Delay		106.2			108.9	73.5	
Approach LOS		F			F	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.36	
Intersection Signal Delay: 97.2	Intersection LOS: F
Intersection Capacity Utilization 166.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1238	558	485	391	789	1014	448
v/c Ratio	1.33	0.58	0.56	1.36	0.59	0.95	1.08
Control Delay	180.5	19.1	17.0	220.4	29.9	63.5	96.1
Queue Delay	0.0	0.0	0.0	0.0	23.8	0.0	0.0
Total Delay	180.5	19.1	17.0	220.4	53.7	63.5	96.1
Queue Length 50th (ft)	~1137	254	193	~364	232	208	~243
Queue Length 95th (ft)	#1393	366	297	#553	296	#277	#444
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	932	965	865	287	1345	1069	413
Starvation Cap Reductn	0	0	0	0	575	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.33	0.58	0.56	1.36	1.02	0.95	1.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1176	436	555	0	0	0	371	750	0	0	963	426
Future Volume (veh/h)	1176	436	555	0	0	0	371	750	0	0	963	426
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1900	1900				1800	1900	0	0	1900	1900
Adj Flow Rate, veh/h	1238	553	522				391	789	0	0	1014	448
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	935	1036	881				288	1346	0	0	1070	264
Arrive On Green	0.55	0.55	0.55				0.17	0.37	0.00	0.00	0.16	0.16
Sat Flow, veh/h	1714	1900	1615				1714	3705	0	0	6802	1615
Grp Volume(v), veh/h	1238	553	522				391	789	0	0	1014	448
Grp Sat Flow(s),veh/h/ln	1714	1900	1615				1714	1805	0	0	1634	1615
Q Serve(g_s), s	60.0	20.5	23.9				18.5	19.3	0.0	0.0	16.9	18.0
Cycle Q Clear(g_c), s	60.0	20.5	23.9				18.5	19.3	0.0	0.0	16.9	18.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	935	1036	881				288	1346	0	0	1070	264
V/C Ratio(X)	1.32	0.53	0.59				1.36	0.59	0.00	0.00	0.95	1.70
Avail Cap(c_a), veh/h	935	1036	881				288	1346	0	0	1070	264
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	16.0	16.8				45.8	27.7	0.0	0.0	45.5	46.0
Incr Delay (d2), s/veh	153.3	2.0	2.9				181.3	0.7	0.0	0.0	16.5	328.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	67.9	11.3	11.3				23.2	9.8	0.0	0.0	8.8	32.1
LnGrp Delay(d),s/veh	178.3	18.0	19.7				227.0	28.4	0.0	0.0	62.1	374.7
LnGrp LOS	F	B	B				F	C			E	F
Approach Vol, veh/h		2313						1180			1462	
Approach Delay, s/veh		104.2						94.2			157.9	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		64.5		45.5			23.0	22.5
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		60.0		41.0			18.5	18.0
Max Q Clear Time (g_c+I1), s		62.0		21.3			20.5	20.0
Green Ext Time (p_c), s		0.0		5.5			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	117.6
HCM 2010 LOS	F

Notes

Scenario Report

Scenario:	LR NP_PM
Command:	LR NP_PM
Volume:	LR NP_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.016
Loss Time (sec):	0	Average Delay (sec/veh):	50.1
Optimal Cycle:	180	Level Of Service:	D

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	29	1015	227	296	675	93	121	256	13	356	272	578
Growth 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
Initial Bse:	29	1015	227	296	675	93	121	256	13	356	272	578
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:	29	1015	227	296	675	93	121	256	13	356	272	578
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	1015	227	296	675	93	121	256	13	356	272	578
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:	29	1015	227	296	675	93	121	256	13	356	272	578
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	0.93	0.93	0.14	0.99	0.99	0.52	0.90	0.90
Lanes:	1.00	1.63	0.37	1.00	1.76	0.24	1.00	0.95	0.05	1.00	0.32	0.68
Final Sat.:	1805	2871	642	1805	3116	429	264	1796	91	986	546	1160
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	0.35	0.16	0.22	0.22	0.46	0.14	0.14	0.36	0.50	0.50
Crit Moves:		****		****							****	
Green/Cycle:	0.04	0.35	0.35	0.16	0.47	0.47	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.46	1.02	1.02	1.02	0.46	0.46	0.93	0.29	0.29	0.74	1.02	1.02
Uniform Del:	47.3	32.6	32.6	41.9	17.6	17.6	24.0	15.1	15.1	20.3	25.5	25.5
IncremntDel:	5.1	29.7	29.7	56.8	0.2	0.2	59.0	0.2	0.2	5.8	35.1	35.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	52.4	62.3	62.3	98.7	17.8	17.8	82.9	15.3	15.3	26.2	60.6	60.6
User DelAdj:	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:	52.4	62.3	62.3	98.7	17.8	17.8	82.9	15.3	15.3	26.2	60.6	60.6
LOS by Move:	D	E	E	F	B	B	F	B	B	C	E	E
HCM2kAvgQ:	2	28	28	15	8	8	7	5	5	10	35	35

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.761
Loss Time (sec): 0 Average Delay (sec/veh): 9.1
Optimal Cycle: 78 Level Of Service: A

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			Protected			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	0 0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	57	0	61	61	738	0	0	1133	91
Growth 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
Initial Bse:	0	0	0	57	0	61	61	738	0	0	1133	91
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	57	0	61	61	738	0	0	1133	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	57	0	61	61	738	0	0	1133	91
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	57	0	61	61	738	0	0	1133	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.81	1.00	0.81	0.95	1.00	1.00	1.00	0.99	0.99
Lanes:	0.00	0.00	0.00	0.48	0.00	0.52	1.00	1.00	0.00	0.00	0.93	0.07
Final Sat.:	0	0	0	742	0	794	1805	1900	0	0	1741	140
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.08	0.03	0.39	0.00	0.00	0.65	0.65
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.10	0.00	0.10	0.04	0.90	0.00	0.00	0.85	0.85
Volume/Cap:	0.00	0.00	0.00	0.76	0.00	0.76	0.76	0.43	0.00	0.00	0.76	0.76
Uniform Del:	0.0	0.0	0.0	43.8	0.0	43.8	47.3	0.8	0.0	0.0	3.0	3.0
IncremntDel:	0.0	0.0	0.0	19.8	0.0	19.8	34.0	0.2	0.0	0.0	2.2	2.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	63.5	0.0	63.5	81.3	1.0	0.0	0.0	5.2	5.2
User DelAdj:	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	63.5	0.0	63.5	81.3	1.0	0.0	0.0	5.2	5.2
LOS by Move:	A	A	A	E	A	E	F	A	A	A	A	A
HCM2kAvgQ:	0	0	0	5	0	5	3	4	0	0	17	17

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.696
Loss Time (sec): 0 Average Delay (sec/veh): 0.8
Optimal Cycle: 61 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	1 0	1	0	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	824	0	0	1322	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	824	0	0	1322	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	0	0	0	0	0	0	824	0	0	1322	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	824	0	0	1322	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	0	0	0	0	0	0	824	0	0	1322	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Final Sat.:	0	1900	0	0	0	0	0	1900	0	1900	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.70	0.00
Crit Moves:											****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.70	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	0	0	2	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.696
Loss Time (sec):	0	Average Delay (sec/veh):	0.8
Optimal Cycle:	61	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	0	1
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	824	0	0	1322	0
Growth 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
Initial Bse:	0	0	0	0	0	0	0	824	0	0	1322	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	0	0	0	0	0	0	824	0	0	1322	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	824	0	0	1322	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	0	0	0	0	0	0	824	0	0	1322	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	0	0	1900	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.70	0.00
Crit Moves:											****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.70	0.00
Uniform Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.1	0.0
User DelAdj:	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	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.1	0.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	0	0	2	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.958
Loss Time (sec):	0	Average Delay (sec/veh):	26.2
Optimal Cycle:	180	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	0	1	0	1
Volume Module:												
Base Vol:	0	0	2	474	0	105	97	727	0	0	1217	716
Growth 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
Initial Bse:	0	0	2	474	0	105	97	727	0	0	1217	716
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	2	474	0	105	97	727	0	0	1217	716
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	474	0	105	97	727	0	0	1217	716
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	2	474	0	105	97	727	0	0	1217	716
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	0	0	1644	1805	0	1615	1805	1900	0	1900	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.07	0.05	0.38	0.00	0.00	0.64	0.44
Crit Moves:				****	****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.27	0.00	0.27	0.72	0.72	0.00	0.00	0.67	0.67
Volume/Cap:	0.00	0.00	0.00	0.96	0.00	0.24	0.55	0.53	0.00	0.00	0.96	0.66
Uniform Del:	0.0	0.0	49.9	35.7	0.0	28.2	4.0	6.1	0.0	0.0	15.3	9.9
IncremntDel:	0.0	0.0	579.6	30.0	0.0	0.3	3.6	0.4	0.0	0.0	16.2	1.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	629.5	65.7	0.0	28.5	7.6	6.5	0.0	0.0	31.5	11.4
User DelAdj:	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	629.5	65.7	0.0	28.5	7.6	6.5	0.0	0.0	31.5	11.4
LOS by Move:	A	A	F	E	A	C	A	A	A	A	C	B
HCM2kAvgQ:	0	0	1	19	0	3	2	10	0	0	41	14

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.776
Loss Time (sec):	0	Average Delay (sec/veh):	7.6
Optimal Cycle:	64	Level Of Service:	A

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	1! 0	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	12	8	43	118	6	45	22	1205	28	40	1852	150
Growth 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
Initial Bse:	12	8	43	118	6	45	22	1205	28	40	1852	150
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:	12	8	43	118	6	45	22	1205	28	40	1852	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	8	43	118	6	45	22	1205	28	40	1852	150
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:	12	8	43	118	6	45	22	1205	28	40	1852	150
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.71	0.71	0.71	0.09	1.00	1.00	0.11	0.94	0.94
Lanes:	0.19	0.13	0.68	0.70	0.03	0.27	1.00	0.98	0.02	1.00	1.85	0.15
Final Sat.:	315	210	1128	945	48	360	165	1851	43	217	3303	268
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.12	0.12	0.12	0.13	0.65	0.65	0.18	0.56	0.56
Crit Moves:					****			****				
Green/Cycle:	0.16	0.16	0.16	0.16	0.16	0.16	0.84	0.84	0.84	0.84	0.84	0.84
Volume/Cap:	0.24	0.24	0.24	0.78	0.78	0.78	0.16	0.78	0.78	0.22	0.67	0.67
Uniform Del:	36.6	36.6	36.6	40.2	40.2	40.2	1.5	3.7	3.7	1.6	2.9	2.9
IncremntDel:	0.5	0.5	0.5	15.9	15.9	15.9	0.5	2.5	2.5	0.6	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	37.1	37.1	37.1	56.2	56.2	56.2	2.0	6.2	6.2	2.2	3.5	3.5
User DelAdj:	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:	37.1	37.1	37.1	56.2	56.2	56.2	2.0	6.2	6.2	2.2	3.5	3.5
LOS by Move:	D	D	D	E	E	E	A	A	A	A	A	A
HCM2kAvgQ:	2	2	2	7	7	7	0	19	19	0	13	13

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.753
Loss Time (sec):	0	Average Delay (sec/veh):	139.1
Optimal Cycle:	166	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	2	0	2 0
Volume Module:												
Base Vol:	0	0	0	312	448	501	0	702	672	540	1610	0
Growth 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
Initial Bse:	0	0	0	312	448	501	0	702	672	540	1610	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	0	0	312	448	501	0	702	672	540	1610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	312	448	501	0	702	672	540	1610	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	0	0	312	448	501	0	702	672	540	1610	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1634	1634	1634	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.27	0.31	0.00	0.14	0.42	0.15	0.45	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.35	0.35	0.35	0.00	0.15	0.15	0.50	0.65	0.00
Volume/Cap:	0.00	0.00	0.00	0.55	0.79	0.89	0.00	0.89	2.73	0.31	0.68	0.00
Uniform Del:	0.0	0.0	0.0	26.5	29.5	30.9	0.0	41.5	42.4	14.6	10.8	0.0
IncremntDel:	0.0	0.0	0.0	0.3	2.8	7.2	0.0	12.0	790.0	0.1	0.8	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	26.8	32.4	38.1	0.0	53.5	832.4	14.7	11.6	0.0
User DelAdj:	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	26.8	32.4	38.1	0.0	53.5	832.4	14.7	11.6	0.0
LOS by Move:	A	A	A	A	C	C	D	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	9	15	19	0	11	73	5	17	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.197
Loss Time (sec):	0	Average Delay (sec/veh):	69.7
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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 1	0 0	0	0 0	1 0	2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	1176	436	555	0	0	0	371	750	0	0	963	426
Growth 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
Initial Bse:	1176	436	555	0	0	0	371	750	0	0	963	426
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:	1176	436	555	0	0	0	371	750	0	0	963	426
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1176	436	555	0	0	0	371	750	0	0	963	426
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:	1176	436	555	0	0	0	371	750	0	0	963	426
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.88	1.12	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1531	1949	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.73	0.28	0.28	0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.14	0.26
Crit Moves:	****						****					****
Green/Cycle:	0.61	0.61	0.61	0.00	0.00	0.00	0.17	0.39	0.00	0.00	0.22	0.22
Volume/Cap:	1.20	0.47	0.47	0.00	0.00	0.00	1.20	0.53	0.00	0.00	0.63	1.20
Uniform Del:	19.6	10.7	10.7	0.0	0.0	0.0	41.4	23.3	0.0	0.0	35.3	39.0
IncremntDel:	98.8	0.2	0.2	0.0	0.0	0.0	116.0	0.4	0.0	0.0	0.9	112.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	118.4	10.9	10.9	0.0	0.0	0.0	157.4	23.7	0.0	0.0	36.2	151.9
User DelAdj:	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:	118.4	10.9	10.9	0.0	0.0	0.0	157.4	23.7	0.0	0.0	36.2	151.9
LOS by Move:	F	B	B	A	A	A	F	C	A	A	D	F
HCM2kAvgQ:	62	8	8	0	0	0	22	10	0	0	8	25

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

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Appendix M

Long-Range (2040) With Project Conditions Intersection Analysis Worksheets

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.957			0.987			0.996			0.917	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	3455	0	1710	3563	0	1710	1892	0	1710	1742	0
Flt Permitted	0.950			0.950			0.163			0.557		
Satd. Flow (perm)	1710	3455	0	1710	3563	0	293	1892	0	1003	1742	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		62			17			1			58	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

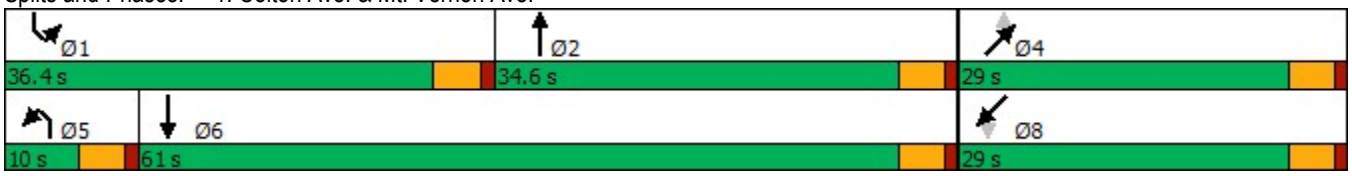
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	18	747	302	549	678	66	40	155	5	247	188	230
Future Volume (vph)	18	747	302	549	678	66	40	155	5	247	188	230
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	19	786	318	578	714	69	42	163	5	260	198	242
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	1104	0	578	783	0	42	168	0	260	440	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	18	747	549	678	40	155	247	188
Future Volume (vph)	18	747	549	678	40	155	247	188
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.0	34.6	36.4	61.0	29.0	29.0	29.0	29.0
Total Split (%)	10.0%	34.6%	36.4%	61.0%	29.0%	29.0%	29.0%	29.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.5	30.1	31.9	62.5	24.5	24.5	24.5	24.5
Actuated g/C Ratio	0.06	0.30	0.32	0.62	0.24	0.24	0.24	0.24
v/c Ratio	0.20	1.02	1.06	0.35	0.59	0.36	1.06	0.94
Control Delay	50.4	65.9	90.0	10.0	69.2	33.8	112.9	61.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	65.9	90.0	10.0	69.2	33.8	112.9	61.7
LOS	D	E	F	A	E	C	F	E
Approach Delay		65.6		44.0		40.9		80.7
Approach LOS		E		D		D		F

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 58.5	Intersection LOS: E
Intersection Capacity Utilization 105.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.



Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	19	1104	578	783	42	168	260	440
v/c Ratio	0.20	1.02	1.06	0.35	0.59	0.36	1.06	0.94
Control Delay	50.4	65.9	90.0	10.0	69.2	33.8	112.9	61.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	65.9	90.0	10.0	69.2	33.8	112.9	61.7
Queue Length 50th (ft)	12	~367	~407	98	24	88	~183	244
Queue Length 95th (ft)	36	#512	#615	174	#79	149	#339	#435
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	94	1083	545	2233	71	464	245	470
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	1.02	1.06	0.35	0.59	0.36	1.06	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	18	747	302	549	678	66	40	155	5	247	188	230
Future Volume (veh/h)	18	747	302	549	678	66	40	155	5	247	188	230
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	19	786	318	578	714	69	42	163	5	260	198	242
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	35	756	305	547	1995	193	72	449	14	273	191	233
Arrive On Green	0.02	0.30	0.30	0.32	0.60	0.60	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1714	2511	1015	1714	3327	321	913	1834	56	1172	779	953
Grp Volume(v), veh/h	19	565	539	578	387	396	42	0	168	260	0	440
Grp Sat Flow(s),veh/h/ln	1714	1805	1721	1714	1805	1843	913	0	1890	1172	0	1732
Q Serve(g_s), s	1.1	30.1	30.1	31.9	10.9	11.0	0.0	0.0	7.4	17.1	0.0	24.5
Cycle Q Clear(g_c), s	1.1	30.1	30.1	31.9	10.9	11.0	24.5	0.0	7.4	24.5	0.0	24.5
Prop In Lane	1.00		0.59	1.00		0.17	1.00		0.03	1.00		0.55
Lane Grp Cap(c), veh/h	35	543	518	547	1082	1105	72	0	463	273	0	424
V/C Ratio(X)	0.54	1.04	1.04	1.06	0.36	0.36	0.58	0.00	0.36	0.95	0.00	1.04
Avail Cap(c_a), veh/h	94	543	518	547	1082	1105	72	0	463	273	0	424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.5	35.0	35.0	34.0	10.2	10.2	50.0	0.0	31.3	43.4	0.0	37.8
Incr Delay (d2), s/veh	12.3	49.2	50.7	54.4	0.9	0.9	11.4	0.0	0.5	41.8	0.0	53.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	22.4	21.5	23.3	5.7	5.8	1.4	0.0	3.9	10.3	0.0	18.0
LnGrp Delay(d),s/veh	60.8	84.2	85.6	88.5	11.1	11.1	61.4	0.0	31.8	85.2	0.0	91.3
LnGrp LOS	E	F	F	F	B	B	E		C	F		F
Approach Vol, veh/h		1123			1361			210			700	
Approach Delay, s/veh		84.5			44.0			37.7			89.0	
Approach LOS		F			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	36.4	34.6		29.0	6.6	64.4		29.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	31.9	30.1		24.5	5.5	56.5		24.5
Max Q Clear Time (g_c+I1), s	33.9	32.1		26.5	3.1	13.0		26.5
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	5.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.3
HCM 2010 LOS	E

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1800	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.912				0.980	
Flt Protected	0.983		0.950			
Satd. Flow (prot)	1614	0	1710	1900	1862	0
Flt Permitted	0.983		0.950			
Satd. Flow (perm)	1614	0	1710	1900	1862	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	133				15	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

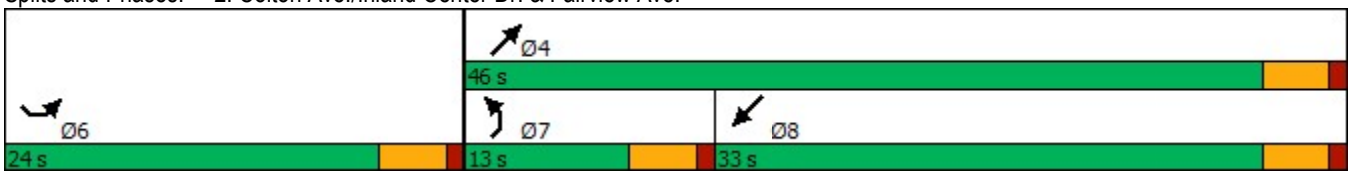
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	71	133	139	935	559	100
Future Volume (vph)	71	133	139	935	559	100
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	75	140	146	984	588	105
Shared Lane Traffic (%)						
Lane Group Flow (vph)	215	0	146	984	693	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	71	139	935	559
Future Volume (vph)	71	139	935	559
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	24.0	13.0	46.0	33.0
Total Split (%)	34.3%	18.6%	65.7%	47.1%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	19.5	8.2	39.8	27.1
Actuated g/C Ratio	0.29	0.12	0.58	0.40
v/c Ratio	0.39	0.71	0.89	0.93
Control Delay	10.9	50.8	24.6	40.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	10.9	50.8	24.6	40.9
LOS	B	D	C	D
Approach Delay	10.9		28.0	40.9
Approach LOS	B		C	D

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 68.4	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 30.6	Intersection LOS: C
Intersection Capacity Utilization 69.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	215	146	984	693
v/c Ratio	0.39	0.71	0.89	0.93
Control Delay	10.9	50.8	24.6	40.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	10.9	50.8	24.6	40.9
Queue Length 50th (ft)	27	62	319	265
Queue Length 95th (ft)	78	#143	#602	#477
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	556	212	1155	785
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.69	0.85	0.88

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	71	133	139	935	559	100
Future Volume (veh/h)	71	133	139	935	559	100
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1900	1900
Adj Flow Rate, veh/h	75	140	146	984	588	105
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	160	299	182	1096	634	113
Arrive On Green	0.29	0.29	0.11	0.58	0.40	0.40
Sat Flow, veh/h	552	1031	1714	1900	1570	280
Grp Volume(v), veh/h	216	0	146	984	0	693
Grp Sat Flow(s),veh/h/ln	1590	0	1714	1900	0	1851
Q Serve(g_s), s	7.5	0.0	5.6	30.6	0.0	24.0
Cycle Q Clear(g_c), s	7.5	0.0	5.6	30.6	0.0	24.0
Prop In Lane	0.35	0.65	1.00			0.15
Lane Grp Cap(c), veh/h	461	0	182	1096	0	747
V/C Ratio(X)	0.47	0.00	0.80	0.90	0.00	0.93
Avail Cap(c_a), veh/h	461	0	216	1171	0	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	29.4	12.5	0.0	19.1
Incr Delay (d2), s/veh	3.4	0.0	16.7	9.1	0.0	16.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.5	18.6	0.0	15.6
LnGrp Delay(d),s/veh	23.0	0.0	46.1	21.6	0.0	35.8
LnGrp LOS	C		D	C		D
Approach Vol, veh/h	216			1130	693	
Approach Delay, s/veh	23.0			24.7	35.8	
Approach LOS	C			C	D	

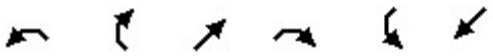
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				43.3		24.0	11.6	31.7
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				41.5		19.5	8.5	28.5
Max Q Clear Time (g_c+I1), s				32.6		9.5	7.6	26.0
Green Ext Time (p_c), s				4.9		0.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Notes

Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.910		0.999			
Flt Protected	0.984				0.950	
Satd. Flow (prot)	1701	0	1898	0	1805	1900
Flt Permitted	0.984				0.950	
Satd. Flow (perm)	1701	0	1898	0	1805	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	2	4	1122	8	69	643
Future Volume (vph)	2	4	1122	8	69	643
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	2	4	1181	8	73	677
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	0	1189	0	73	677

Intersection Summary

Intersection	
Int Delay, s/veh	459.7

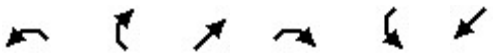
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	2	4	1122	8	69	643
Future Vol, veh/h	2	4	1122	8	69	643
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	4	1181	8	73	677

Major/Minor	Minor2		Major2	
Conflicting Flow All	823	677	0	0
Stage 1	823	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 311	456	-	-
Stage 1	~ 391	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	456	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s	$ 749.3	
HCM LOS	F	

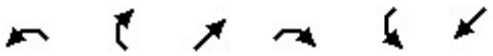
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	456	-	-
HCM Lane V/C Ratio	2.608	-	-
HCM Control Delay (s)	$ 749.3	-	-
HCM Lane LOS	F	-	-
HCM 95th %tile Q(veh)	96.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.865	0.999			
Flt Protected						
Satd. Flow (prot)	0	1644	1898	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1644	1898	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	4	1118	8	0	712
Future Volume (vph)	0	4	1118	8	0	712
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	4	1177	8	0	749
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	4	1185	0	0	749

Intersection Summary

Intersection	
Int Delay, s/veh	0

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	4	1118	8	0	712
Future Vol, veh/h	0	4	1118	8	0	712
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	4	1177	8	0	749

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1181	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	234	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	234	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	20.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	234	-
HCM Lane V/C Ratio	-	-	0.018	-
HCM Control Delay (s)	-	-	20.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt						0.850						0.850
Flt Protected		0.950		0.950			0.950			0.950		
Satd. Flow (prot)	0	1710	0	1710	0	1615	1710	1900	0	1710	1900	1615
Flt Permitted		0.950		0.950			0.075			0.075		
Satd. Flow (perm)	0	1710	0	1710	0	1615	135	1900	0	135	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						88						540
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

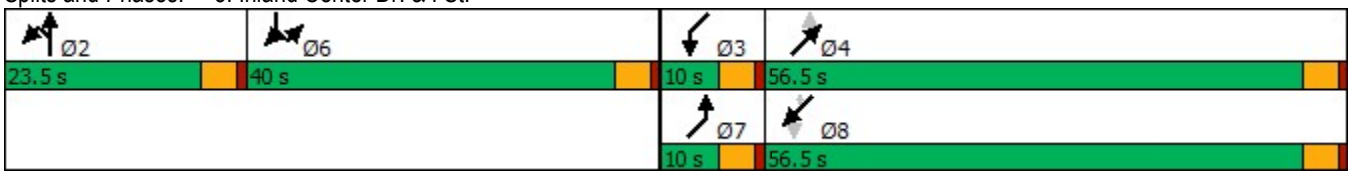
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	2	0	0	589	0	66	95	1027	2	7	646	687
Future Volume (vph)	2	0	0	589	0	66	95	1027	2	7	646	687
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	2	0	0	620	0	69	100	1081	2	7	680	723
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	620	0	69	100	1083	0	7	680	723

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Configurations								
Traffic Volume (vph)	0	589	66	95	1027	7	646	687
Future Volume (vph)	0	589	66	95	1027	7	646	687
Turn Type	NA	Prot	Prot	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	2	6	6	7	4	3	8	
Permitted Phases				4		8		8
Detector Phase	2	6	6	7	4	3	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	23.5	40.0	40.0	10.0	56.5	10.0	56.5	56.5
Total Split (%)	18.1%	30.8%	30.8%	7.7%	43.5%	7.7%	43.5%	43.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.0	35.5	35.5	59.1	58.0	55.5	49.9	49.9
Actuated g/C Ratio	0.15	0.28	0.28	0.46	0.45	0.43	0.39	0.39
v/c Ratio	0.01	1.31	0.14	0.77	1.26	0.06	0.92	0.75
Control Delay	47.5	191.2	4.7	57.6	157.5	18.9	55.6	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	191.2	4.7	57.6	157.5	18.9	55.6	13.4
LOS	D	F	A	E	F	B	E	B
Approach Delay	47.5				149.1		33.8	
Approach LOS	D				F		C	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 128	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.31	
Intersection Signal Delay: 104.4	Intersection LOS: F
Intersection Capacity Utilization 101.5%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWL	SWT	SWR
Lane Group Flow (vph)	2	620	69	100	1083	7	680	723
v/c Ratio	0.01	1.31	0.14	0.77	1.26	0.06	0.92	0.75
Control Delay	47.5	191.2	4.7	57.6	157.5	18.9	55.6	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	191.2	4.7	57.6	157.5	18.9	55.6	13.4
Queue Length 50th (ft)	1	~677	0	46	~1103	3	530	126
Queue Length 95th (ft)	10	#908	25	#136	#1490	12	#762	295
Internal Link Dist (ft)	133				59		387	
Turn Bay Length (ft)				110		50		
Base Capacity (vph)	253	474	511	130	861	126	772	977
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	1.31	0.14	0.77	1.26	0.06	0.88	0.74

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	589	0	66	95	1027	2	7	646	687
Future Volume (veh/h)	2	0	0	589	0	66	95	1027	2	7	646	687
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	0	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	2	0	0	620	0	69	100	1081	2	7	680	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	391	0	0	0	0	0	404	1139	2	137	1055	897
Arrive On Green	0.23	0.00	0.00	0.00	0.00	0.00	0.05	0.60	0.60	0.01	0.56	0.00
Sat Flow, veh/h	1714	0	0		0		1714	1896	4	1714	1900	1615
Grp Volume(v), veh/h	2	0	0		0.0		100	0	1083	7	680	0
Grp Sat Flow(s),veh/h/ln	1714	0	0				1714	0	1899	1714	1900	1615
Q Serve(g_s), s	0.1	0.0	0.0				1.9	0.0	44.1	0.1	20.6	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0				1.9	0.0	44.1	0.1	20.6	0.0
Prop In Lane	1.00		0.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	391	0	0				404	0	1141	137	1055	897
V/C Ratio(X)	0.01	0.00	0.00				0.25	0.00	0.95	0.05	0.64	0.00
Avail Cap(c_a), veh/h	391	0	0				425	0	1186	235	1187	1009
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.8	0.0	0.0				9.6	0.0	15.4	17.8	12.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				0.3	0.0	15.3	0.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				0.9	0.0	27.7	0.1	11.1	0.0
LnGrp Delay(d),s/veh	24.8	0.0	0.0				9.9	0.0	30.7	18.0	13.8	0.0
LnGrp LOS	C						A		C	B	B	
Approach Vol, veh/h		2						1183			687	
Approach Delay, s/veh		24.8						29.0			13.9	
Approach LOS		C						C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	5.2	54.5			9.0	50.7
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	52.0			5.5	52.0
Max Q Clear Time (g_c+I1), s		2.1	2.1	46.1			3.9	22.6
Green Ext Time (p_c), s		0.0	0.0	3.9			0.0	5.3

Intersection Summary	
HCM 2010 Ctrl Delay	23.4
HCM 2010 LOS	C

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.896			0.999			0.991	
Flt Protected		0.960			0.993		0.950			0.950		
Satd. Flow (prot)	0	1780	0	0	1690	0	1805	1898	0	1805	3578	0
Flt Permitted		0.960			0.993		0.950			0.950		
Satd. Flow (perm)	0	1780	0	0	1690	0	1805	1898	0	1805	3578	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	112	0	24	7	5	39	31	1571	12	21	1308	85
Future Volume (vph)	112	0	24	7	5	39	31	1571	12	21	1308	85
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	118	0	25	7	5	41	33	1654	13	22	1377	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	143	0	0	53	0	33	1667	0	22	1466	0

Intersection Summary

Intersection	
Int Delay, s/veh	1500.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	112	0	24	7	5	39	31	1571	12	21	1308	85
Future Vol, veh/h	112	0	24	7	5	39	31	1571	12	21	1308	85
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	118	0	25	7	5	41	33	1654	13	22	1377	89

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3216	3199	733	2460	3237	1661	1466	0	0	1667	0	0
Stage 1	1466	1466	-	1727	1727	-	-	-	-	-	-	-
Stage 2	1750	1733	-	733	1510	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 5	10	368	18	10	122	467	-	-	391	-	-
Stage 1	137	194	-	114	145	-	-	-	-	-	-	-
Stage 2	~ 110	144	-	383	185	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 2	9	368	15	9	122	467	-	-	391	-	-
Mov Cap-2 Maneuver	~ 2	9	-	15	9	-	-	-	-	-	-	-
Stage 1	127	183	-	106	135	-	-	-	-	-	-	-
Stage 2	~ 65	134	-	337	175	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay	$ 35296.7	$ 455	0.3	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	467	-	-	38	2	391	-	-
HCM Lane V/C Ratio	0.07	-	-	1.413	71.579	0.057	-	-
HCM Control Delay (s)	13.3	-	-	$ 455	$ 35296.7	14.8	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	5.6	20.3	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1800	1900	1900	1700	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.922				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1556	3014	0	0	5187	1615	3133	3610	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1556	3014	0	0	5187	1615	3133	3610	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									134			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	278	373	436	0	578	1196	233	1040	0
Future Volume (vph)	0	0	0	278	373	436	0	578	1196	233	1040	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	293	393	459	0	608	1259	245	1095	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	264	881	0	0	608	1259	245	1095	0

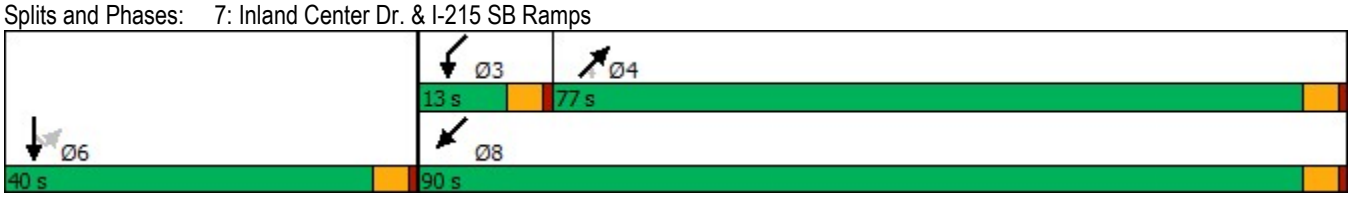
Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	278	373	578	1196	233	1040
Future Volume (vph)	278	373	578	1196	233	1040
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	40.0	40.0	77.0	77.0	13.0	90.0
Total Split (%)	30.8%	30.8%	59.2%	59.2%	10.0%	69.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	35.5	35.5	72.5	72.5	8.5	85.5
Actuated g/C Ratio	0.27	0.27	0.56	0.56	0.07	0.66
v/c Ratio	0.62	1.16dr	0.21	1.31	1.20	0.46
Control Delay	48.9	96.8	14.6	173.5	178.0	11.7
Queue Delay	0.0	0.0	0.0	0.1	0.0	12.3
Total Delay	48.9	96.8	14.6	173.6	178.0	24.0
LOS	D	F	B	F	F	C
Approach Delay		85.8	121.8			52.2
Approach LOS		F	F			D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.31	
Intersection Signal Delay: 90.9	Intersection LOS: F
Intersection Capacity Utilization 157.4%	ICU Level of Service H
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	264	881	608	1259	245	1095
v/c Ratio	0.62	1.16dr	0.21	1.31	1.20	0.46
Control Delay	48.9	96.8	14.6	173.5	178.0	11.7
Queue Delay	0.0	0.0	0.0	0.1	0.0	12.3
Total Delay	48.9	96.8	14.6	173.6	178.0	24.0
Queue Length 50th (ft)	215	~451	90	~1319	~128	221
Queue Length 95th (ft)	321	#589	112	#1585	#215	266
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	424	823	2892	959	204	2374
Starvation Cap Reductn	0	0	0	17	0	1267
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	1.07	0.21	1.34	1.20	0.99

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	278	373	436	0	578	1196	233	1040	0
Future Volume (veh/h)	0	0	0	278	373	436	0	578	1196	233	1040	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1800	1800	1800	0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h				293	393	459	0	608	1259	245	1095	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				468	492	418	0	2893	901	205	2374	0
Arrive On Green				0.27	0.27	0.27	0.00	0.56	0.56	0.07	0.66	0.00
Sat Flow, veh/h				1714	1800	1530	0	5358	1615	3141	3705	0
Grp Volume(v), veh/h				293	393	459	0	608	1259	245	1095	0
Grp Sat Flow(s),veh/h/ln				1714	1800	1530	0	1729	1615	1570	1805	0
Q Serve(g_s), s				19.5	26.4	35.5	0.0	7.6	72.5	8.5	19.4	0.0
Cycle Q Clear(g_c), s				19.5	26.4	35.5	0.0	7.6	72.5	8.5	19.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				468	492	418	0	2893	901	205	2374	0
V/C Ratio(X)				0.63	0.80	1.10	0.00	0.21	1.40	1.19	0.46	0.00
Avail Cap(c_a), veh/h				468	492	418	0	2893	901	205	2374	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				41.4	43.9	47.3	0.0	14.4	28.8	60.8	10.9	0.0
Incr Delay (d2), s/veh				6.2	12.8	73.4	0.0	0.0	185.8	124.6	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.0	14.8	23.5	0.0	3.7	78.5	7.2	9.6	0.0
LnGrp Delay(d),s/veh				47.6	56.7	120.6	0.0	14.4	214.5	185.3	11.1	0.0
LnGrp LOS				D	E	F		B	F	F	B	
Approach Vol, veh/h					1145			1867			1340	
Approach Delay, s/veh					80.0			149.4			42.9	
Approach LOS					F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	77.0		40.0		90.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			8.5	72.5		35.5		85.5
Max Q Clear Time (g_c+I1), s			10.5	74.5		37.5		21.4
Green Ext Time (p_c), s			0.0	0.0		0.0		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	98.4
HCM 2010 LOS	F

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.979	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1710	1767	1534	0	0	0	1710	3610	0	0	6536	1615
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1710	1767	1534	0	0	0	1710	3610	0	0	6536	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10	161									55
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

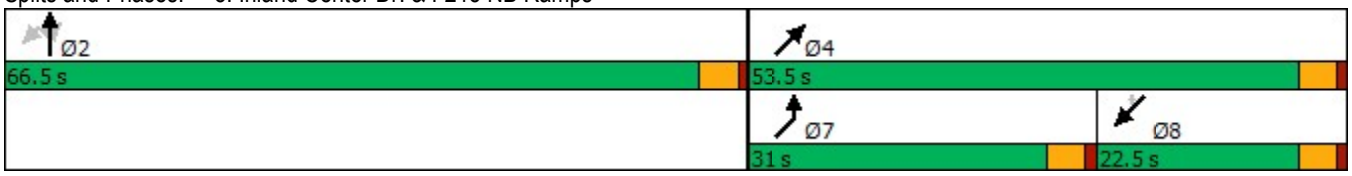
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	838	658	780	0	0	0	357	564	0	0	469	44
Future Volume (vph)	838	658	780	0	0	0	357	564	0	0	469	44
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	882	693	821	0	0	0	376	594	0	0	494	46
Shared Lane Traffic (%)			14%									
Lane Group Flow (vph)	882	808	706	0	0	0	376	594	0	0	494	46

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	838	658	780	357	564	469	44
Future Volume (vph)	838	658	780	357	564	469	44
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	66.5	66.5	66.5	31.0	53.5	22.5	22.5
Total Split (%)	55.4%	55.4%	55.4%	25.8%	44.6%	18.8%	18.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	62.0	62.0	62.0	26.5	45.6	14.6	14.6
Actuated g/C Ratio	0.53	0.53	0.53	0.23	0.39	0.13	0.13
v/c Ratio	0.97	0.86	0.79	0.97	0.42	0.61	0.18
Control Delay	51.1	34.4	25.0	84.0	26.9	51.5	11.2
Queue Delay	0.0	0.0	0.0	41.0	1.8	0.0	0.0
Total Delay	51.1	34.4	25.0	125.1	28.7	51.5	11.2
LOS	D	C	C	F	C	D	B
Approach Delay		37.8			66.0	48.1	
Approach LOS		D			E	D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.6	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 46.2	Intersection LOS: D
Intersection Capacity Utilization 157.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	882	808	706	376	594	494	46
v/c Ratio	0.97	0.86	0.79	0.97	0.42	0.61	0.18
Control Delay	51.1	34.4	25.0	84.0	26.9	51.5	11.2
Queue Delay	0.0	0.0	0.0	41.0	1.8	0.0	0.0
Total Delay	51.1	34.4	25.0	125.1	28.7	51.5	11.2
Queue Length 50th (ft)	620	526	348	283	168	103	0
Queue Length 95th (ft)	#956	#844	573	#495	218	134	28
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	909	944	891	388	1517	1009	296
Starvation Cap Reductn	0	0	0	83	725	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.86	0.79	1.23	0.75	0.49	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	838	658	780	0	0	0	357	564	0	0	469	44
Future Volume (veh/h)	838	658	780	0	0	0	357	564	0	0	469	44
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1900	1900				1800	1900	0	0	1900	1900
Adj Flow Rate, veh/h	882	789	757				376	594	0	0	494	46
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	929	1030	875				397	1370	0	0	709	175
Arrive On Green	0.54	0.54	0.54				0.23	0.38	0.00	0.00	0.11	0.11
Sat Flow, veh/h	1714	1900	1615				1714	3705	0	0	6802	1615
Grp Volume(v), veh/h	882	789	757				376	594	0	0	494	46
Grp Sat Flow(s),veh/h/ln	1714	1900	1615				1714	1805	0	0	1634	1615
Q Serve(g_s), s	55.5	37.2	46.2				24.7	14.0	0.0	0.0	8.3	3.0
Cycle Q Clear(g_c), s	55.5	37.2	46.2				24.7	14.0	0.0	0.0	8.3	3.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	929	1030	875				397	1370	0	0	709	175
V/C Ratio(X)	0.95	0.77	0.87				0.95	0.43	0.00	0.00	0.70	0.26
Avail Cap(c_a), veh/h	929	1030	875				397	1546	0	0	1028	254
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	20.5	22.6				43.3	26.4	0.0	0.0	49.2	46.8
Incr Delay (d2), s/veh	19.6	5.5	11.1				31.8	0.2	0.0	0.0	1.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.3	21.1	23.1				15.2	7.0	0.0	0.0	3.8	1.4
LnGrp Delay(d),s/veh	44.3	26.0	33.7				75.1	26.6	0.0	0.0	50.4	47.6
LnGrp LOS	D	C	C				E	C			D	D
Approach Vol, veh/h		2428						970			540	
Approach Delay, s/veh		35.1						45.4			50.2	
Approach LOS		D						D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		66.5		47.9			31.0	16.9
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		62.0		49.0			26.5	18.0
Max Q Clear Time (g_c+I1), s		57.5		16.0			26.7	10.3
Green Ext Time (p_c), s		3.8		4.5			0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	39.7
HCM 2010 LOS	D

Notes

Scenario Report

Scenario:	LR+P_AM
Command:	LR+P_AM
Volume:	LR+P_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.867
Loss Time (sec):	0	Average Delay (sec/veh):	32.6
Optimal Cycle:	140	Level Of Service:	C

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				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 1	1	0	1	0 1	1	0	1	0 0	1	0	1	0 0	1	0
Volume Module:																
Base Vol:	18	747	302		549	678	66		40	155	5		247	188	230	
Growth 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	
Initial Bse:	18	747	302		549	678	66		40	155	5		247	188	230	
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	747	302		549	678	66		40	155	5		247	188	230	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	18	747	302		549	678	66		40	155	5		247	188	230	
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	747	302		549	678	66		40	155	5		247	188	230	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.91	0.91		0.95	0.94	0.94		0.15	1.00	1.00		0.50	0.92	0.92	
Lanes:	1.00	1.42	0.58		1.00	1.82	0.18		1.00	0.97	0.03		1.00	0.45	0.55	
Final Sat.:	1805	2460	995		1805	3247	316		287	1831	59		952	784	960	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.30	0.30		0.30	0.21	0.21		0.14	0.08	0.08		0.26	0.24	0.24	
Crit Moves:		****			****								****			
Green/Cycle:	0.03	0.35	0.35		0.35	0.67	0.67		0.30	0.30	0.30		0.30	0.30	0.30	
Volume/Cap:	0.31	0.87	0.87		0.87	0.31	0.31		0.47	0.28	0.28		0.87	0.80	0.80	
Uniform Del:	47.3	30.3	30.3		30.3	6.9	6.9		28.5	26.8	26.8		33.2	32.3	32.3	
IncremntDel:	3.1	6.9	6.9		12.2	0.1	0.1		4.0	0.3	0.3		23.4	8.6	8.6	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
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	
Delay/Veh:	50.4	37.2	37.2		42.5	7.0	7.0		32.5	27.1	27.1		56.5	40.9	40.9	
User DelAdj:	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:	50.4	37.2	37.2		42.5	7.0	7.0		32.5	27.1	27.1		56.5	40.9	40.9	
LOS by Move:	D	D	D		D	A	A		C	C	C		E	D	D	
HCM2kAvgQ:	1	19	19		19	5	5		2	4	4		10	14	14	

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.623
Loss Time (sec):	0	Average Delay (sec/veh):	33.0
Optimal Cycle:	180	Level Of Service:	C

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	71	0	133	139	935	0	0	559	100
Growth 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
Initial Bse:	0	0	0	71	0	133	139	935	0	0	559	100
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	71	0	133	139	935	0	0	559	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	71	0	133	139	935	0	0	559	100
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	71	0	133	139	935	0	0	559	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	1.00	0.82	0.95	1.00	1.00	1.00	0.98	0.98
Lanes:	0.00	0.00	0.00	0.35	0.00	0.65	1.00	1.00	0.00	0.00	0.85	0.15
Final Sat.:	0	0	0	543	0	1018	1805	1900	0	0	1578	282
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.13	0.08	0.49	0.00	0.00	0.35	0.35
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.13	0.00	0.13	0.50	0.87	0.00	0.00	0.36	0.36
Volume/Cap:	0.00	0.00	0.00	0.98	0.00	0.98	0.15	0.57	0.00	0.00	0.98	0.98
Uniform Del:	0.0	0.0	0.0	43.2	0.0	43.2	13.3	1.7	0.0	0.0	31.4	31.4
IncremntDel:	0.0	0.0	0.0	56.5	0.0	56.5	0.1	0.5	0.0	0.0	28.7	28.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	99.7	0.0	99.7	13.4	2.2	0.0	0.0	60.2	60.2
User DelAdj:	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	99.7	0.0	99.7	13.4	2.2	0.0	0.0	60.2	60.2
LOS by Move:	A	A	A	F	A	F	B	A	A	A	E	E
HCM2kAvgQ:	0	0	0	10	0	10	2	8	0	0	26	26

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.599
Loss Time (sec):	0	Average Delay (sec/veh):	0.8
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	0 1	0	1	0 1 0
Volume Module:												
Base Vol:	2	0	4	0	0	0	0	1122	8	69	643	0
Growth 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
Initial Bse:	2	0	4	0	0	0	0	1122	8	69	643	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:	2	0	4	0	0	0	0	1122	8	69	643	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	4	0	0	0	0	1122	8	69	643	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:	2	0	4	0	0	0	0	1122	8	69	643	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	0.44	1.00	1.00
Lanes:	0.33	0.00	0.67	0.00	0.00	0.00	0.00	0.99	0.01	1.00	1.00	0.00
Final Sat.:	567	0	1134	0	0	0	0	1885	13	834	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.08	0.34	0.00
Crit Moves:	****							****				
Green/Cycle:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.99	0.99	0.99	0.99	0.00
Volume/Cap:	0.60	0.00	0.60	0.00	0.00	0.00	0.00	0.60	0.60	0.08	0.34	0.00
Uniform Del:	49.6	0.0	49.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	72.4	0.0	72.4	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	122.0	0.0	122.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.1	0.0
User DelAdj:	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:	122.0	0.0	122.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.1	0.0
LOS by Move:	F	A	F	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	1	0	1	0	0	0	0	2	2	0	1	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.596
Loss Time (sec): 0 Average Delay (sec/veh): 0.7
Optimal Cycle: 46 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	0	1
Volume Module:												
Base Vol:	0	0	4	0	0	0	0	1118	8	0	712	0
Growth 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
Initial Bse:	0	0	4	0	0	0	0	1118	8	0	712	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	0	4	0	0	0	0	1118	8	0	712	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	4	0	0	0	0	1118	8	0	712	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	0	4	0	0	0	0	1118	8	0	712	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.99	0.01	0.00	1.00	0.00
Final Sat.:	0	0	1644	0	0	0	0	1885	13	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.59	0.00	0.37	0.00
Crit Moves:			****					****				
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Volume/Cap:	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.60	0.60	0.00	0.38	0.00
Uniform Del:	0.0	0.0	49.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IncremntDel:	0.0	0.0	96.3	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	146.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.1	0.0
User DelAdj:	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	146.0	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.1	0.0
LOS by Move:	A	A	F	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	1	0	0	0	0	2	2	0	1	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.873
Loss Time (sec): 0 Average Delay (sec/veh): 24.5
Optimal Cycle: 179 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	1	0	1
Volume Module:												
Base Vol:	2	0	0	589	0	66	95	1027	2	7	646	687
Growth 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
Initial Bse:	2	0	0	589	0	66	95	1027	2	7	646	687
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:	2	0	0	589	0	66	95	1027	2	7	646	687
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	0	0	589	0	66	95	1027	2	7	646	687
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:	2	0	0	589	0	66	95	1027	2	7	646	687
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	0.85	0.95	1.00	1.00	0.95	1.00	0.85
Lanes:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1805	0	0	1805	0	1615	1805	1896	4	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.33	0.00	0.04	0.05	0.54	0.54	0.00	0.34	0.43
Crit Moves:	****			****				****			****	
Green/Cycle:	0.00	0.00	0.00	0.37	0.00	0.37	0.62	0.62	0.62	0.56	0.56	0.56
Volume/Cap:	0.87	0.00	0.00	0.87	0.00	0.11	0.26	0.87	0.87	0.08	0.61	0.76
Uniform Del:	49.9	0.0	0.0	29.1	0.0	20.4	10.9	15.7	15.7	19.6	14.9	17.1
IncremntDel:	468.0	0.0	0.0	12.1	0.0	0.1	0.4	7.4	7.4	0.4	1.1	4.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	517.9	0.0	0.0	41.2	0.0	20.5	11.3	23.1	23.1	20.0	16.0	21.1
User DelAdj:	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:	517.9	0.0	0.0	41.2	0.0	20.5	11.3	23.1	23.1	20.0	16.0	21.1
LOS by Move:	F	A	A	D	A	C	B	C	C	C	B	C
HCM2kAvgQ:	1	0	0	20	0	1	2	29	29	0	14	18

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.941
Loss Time (sec):	0	Average Delay (sec/veh):	12.8
Optimal Cycle:	180	Level Of Service:	B

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	1! 0	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	7	5	39	112	0	24	31	1571	12	21	1308	85
Growth 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
Initial Bse:	7	5	39	112	0	24	31	1571	12	21	1308	85
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:	7	5	39	112	0	24	31	1571	12	21	1308	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	5	39	112	0	24	31	1571	12	21	1308	85
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:	7	5	39	112	0	24	31	1571	12	21	1308	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.88	0.88	0.67	1.00	0.67	0.19	1.00	1.00	0.05	0.94	0.94
Lanes:	0.14	0.10	0.76	0.82	0.00	0.18	1.00	0.99	0.01	1.00	1.88	0.12
Final Sat.:	231	165	1285	1043	0	224	361	1884	14	86	3359	218
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.11	0.00	0.11	0.09	0.83	0.83	0.25	0.39	0.39
Crit Moves:				****				****				
Green/Cycle:	0.11	0.11	0.11	0.11	0.00	0.11	0.89	0.89	0.89	0.89	0.89	0.89
Volume/Cap:	0.27	0.27	0.27	0.94	0.00	0.94	0.10	0.94	0.94	0.28	0.44	0.44
Uniform Del:	40.5	40.5	40.5	44.0	0.0	44.0	0.7	3.9	3.9	0.9	1.1	1.1
IncremntDel:	0.7	0.7	0.7	57.2	0.0	57.2	0.1	11.0	11.0	2.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	41.2	41.2	41.2	101.2	0.0	101.2	0.8	14.9	14.9	2.9	1.2	1.2
User DelAdj:	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:	41.2	41.2	41.2	101.2	0.0	101.2	0.8	14.9	14.9	2.9	1.2	1.2
LOS by Move:	D	D	D	F	A	F	A	B	B	A	A	A
HCM2kAvgQ:	2	2	2	7	0	7	0	39	39	0	5	5

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.555
Loss Time (sec):	0	Average Delay (sec/veh):	476.9
Optimal Cycle:	56	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	1	2	0 2
Volume Module:												
Base Vol:	0	0	0	278	373	436	0	578	1196	233	1040	0
Growth 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
Initial Bse:	0	0	0	278	373	436	0	578	1196	233	1040	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	0	0	278	373	436	0	578	1196	233	1040	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	373	436	0	578	1196	233	1040	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	0	0	278	373	436	0	578	1196	233	1040	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1632	1632	1632	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.23	0.27	0.00	0.11	0.74	0.07	0.29	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.40	0.40	0.40	0.00	0.17	0.17	0.43	0.60	0.00
Volume/Cap:	0.00	0.00	0.00	0.43	0.57	0.67	0.00	0.67	4.43	0.15	0.48	0.00
Uniform Del:	0.0	0.0	0.0	21.6	23.3	24.5	0.0	39.0	41.6	17.3	11.3	0.0
IncremntDel:	0.0	0.0	0.0	0.1	0.4	1.1	0.0	2.0	1552	0.0	0.2	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	21.8	23.7	25.6	0.0	41.0	1593	17.3	11.4	0.0
User DelAdj:	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	21.8	23.7	25.6	0.0	41.0	1593	17.3	11.4	0.0
LOS by Move:	A	A	A	C	C	C	A	D	F	B	B	A
HCM2kAvgQ:	0	0	0	7	10	12	0	7	150	2	9	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.784
Loss Time (sec):	0	Average Delay (sec/veh):	22.8
Optimal Cycle:	86	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0 0	0 0	1	0 2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	838	658	780	0	0	0	357	564	0	0	469	44
Growth 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
Initial Bse:	838	658	780	0	0	0	357	564	0	0	469	44
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:	838	658	780	0	0	0	357	564	0	0	469	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	838	658	780	0	0	0	357	564	0	0	469	44
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:	838	658	780	0	0	0	357	564	0	0	469	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.92	1.08	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1598	1894	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.52	0.41	0.41	0.00	0.00	0.00	0.20	0.16	0.00	0.00	0.07	0.03
Crit Moves:	****						****				****	
Green/Cycle:	0.66	0.66	0.66	0.00	0.00	0.00	0.25	0.34	0.00	0.00	0.09	0.09
Volume/Cap:	0.78	0.62	0.62	0.00	0.00	0.00	0.78	0.46	0.00	0.00	0.78	0.32
Uniform Del:	11.9	9.7	9.7	0.0	0.0	0.0	34.9	25.9	0.0	0.0	44.8	42.9
IncremntDel:	3.9	0.5	0.5	0.0	0.0	0.0	8.7	0.3	0.0	0.0	6.8	1.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	15.8	10.3	10.3	0.0	0.0	0.0	43.6	26.2	0.0	0.0	51.5	44.2
User DelAdj:	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:	15.8	10.3	10.3	0.0	0.0	0.0	43.6	26.2	0.0	0.0	51.5	44.2
LOS by Move:	B	B	B	A	A	A	D	C	A	A	D	D
HCM2kAvgQ:	20	13	13	0	0	0	12	7	0	0	6	2

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

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Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	85		0	110		0	60		0	75		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.973			0.982			0.993			0.899	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	3513	0	1710	3545	0	1710	1887	0	1710	1708	0
Flt Permitted	0.950			0.950			0.131			0.483		
Satd. Flow (perm)	1710	3513	0	1710	3545	0	236	1887	0	869	1708	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			22			4			150	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1449			1659			785			1569	
Travel Time (s)		32.9			37.7			17.8			35.7	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	29	1015	227	296	675	93	121	257	13	358	281	580
Future Volume (vph)	29	1015	227	296	675	93	121	257	13	358	281	580
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	31	1068	239	312	711	98	127	271	14	377	296	611
Shared Lane Traffic (%)												
Lane Group Flow (vph)	31	1307	0	312	809	0	127	285	0	377	907	0

Intersection Summary

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	29	1015	296	675	121	257	358	281
Future Volume (vph)	29	1015	296	675	121	257	358	281
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		4		8
Permitted Phases					4		8	
Detector Phase	5	2	1	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	10.3	30.0	15.0	34.7	35.0	35.0	35.0	35.0
Total Split (%)	12.9%	37.5%	18.8%	43.4%	43.8%	43.8%	43.8%	43.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	None	None	None	None
Act Effct Green (s)	5.7	25.5	10.5	36.4	30.5	30.5	30.5	30.5
Actuated g/C Ratio	0.07	0.32	0.13	0.46	0.38	0.38	0.38	0.38
v/c Ratio	0.25	1.14	1.39	0.50	1.43	0.40	1.14	1.22
Control Delay	40.6	102.5	232.4	17.3	271.9	19.8	119.9	133.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	102.5	232.4	17.3	271.9	19.8	119.9	133.8
LOS	D	F	F	B	F	B	F	F
Approach Delay		101.1		77.1		97.5		129.7
Approach LOS		F		E		F		F

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 80	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay: 103.1	Intersection LOS: F
Intersection Capacity Utilization 125.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: Colton Ave. & Mt. Vernon Ave.

Lane Group	NBL	NBT	SBL	SBT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	31	1307	312	809	127	285	377	907
v/c Ratio	0.25	1.14	1.39	0.50	1.43	0.40	1.14	1.22
Control Delay	40.6	102.5	232.4	17.3	271.9	19.8	119.9	133.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	102.5	232.4	17.3	271.9	19.8	119.9	133.8
Queue Length 50th (ft)	15	~404	~211	124	~87	100	~223	~518
Queue Length 95th (ft)	41	#534	#363	221	#191	164	#387	#743
Internal Link Dist (ft)		1369		1579		705		1489
Turn Bay Length (ft)	85		110		60		75	
Base Capacity (vph)	123	1143	224	1623	89	721	331	743
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	1.14	1.39	0.50	1.43	0.40	1.14	1.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	29	1015	227	296	675	93	121	257	13	358	281	580
Future Volume (veh/h)	29	1015	227	296	675	93	121	257	13	358	281	580
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	31	1068	239	312	711	98	127	271	14	377	296	611
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	53	936	208	225	1336	184	90	683	35	375	211	436
Arrive On Green	0.03	0.32	0.32	0.13	0.42	0.42	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1714	2936	654	1714	3188	439	592	1791	93	1053	554	1144
Grp Volume(v), veh/h	31	655	652	312	402	407	127	0	285	377	0	907
Grp Sat Flow(s),veh/h/ln	1714	1805	1785	1714	1805	1822	592	0	1884	1053	0	1698
Q Serve(g_s), s	1.4	25.5	25.5	10.5	13.3	13.4	0.0	0.0	8.8	21.7	0.0	30.5
Cycle Q Clear(g_c), s	1.4	25.5	25.5	10.5	13.3	13.4	30.5	0.0	8.8	30.5	0.0	30.5
Prop In Lane	1.00		0.37	1.00		0.24	1.00		0.05	1.00		0.67
Lane Grp Cap(c), veh/h	53	575	569	225	756	763	90	0	718	375	0	647
V/C Ratio(X)	0.58	1.14	1.15	1.39	0.53	0.53	1.41	0.00	0.40	1.00	0.00	1.40
Avail Cap(c_a), veh/h	124	575	569	225	756	763	90	0	718	375	0	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.2	27.2	27.3	34.8	17.4	17.4	40.0	0.0	18.0	31.8	0.0	24.8
Incr Delay (d2), s/veh	9.6	81.8	85.1	199.1	2.7	2.7	238.3	0.0	0.4	47.6	0.0	189.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	25.7	25.9	17.4	7.2	7.2	7.9	0.0	4.7	13.2	0.0	48.3
LnGrp Delay(d),s/veh	47.9	109.0	112.3	233.8	20.1	20.0	278.3	0.0	18.4	79.4	0.0	214.4
LnGrp LOS	D	F	F	F	C	C	F		B	F		F
Approach Vol, veh/h		1338			1121			412			1284	
Approach Delay, s/veh		109.2			79.5			98.5			174.8	
Approach LOS		F			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	30.0		35.0	7.0	38.0		35.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	10.5	25.5		30.5	5.8	30.2		30.5
Max Q Clear Time (g_c+I1), s	12.5	27.5		32.5	3.4	15.4		32.5
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.6		0.0

Intersection Summary		
HCM 2010 Ctrl Delay	120.4	
HCM 2010 LOS	F	

Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Ideal Flow (vphpl)	1800	1800	1800	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	65			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.930				0.990	
Flt Protected	0.976		0.950			
Satd. Flow (prot)	1634	0	1710	1900	1881	0
Flt Permitted	0.976		0.950			
Satd. Flow (perm)	1634	0	1710	1900	1881	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	38				7	
Link Speed (mph)	30			30	30	
Link Distance (ft)	506			1569	2598	
Travel Time (s)	11.5			35.7	59.0	

Intersection Summary	
Area Type:	Other

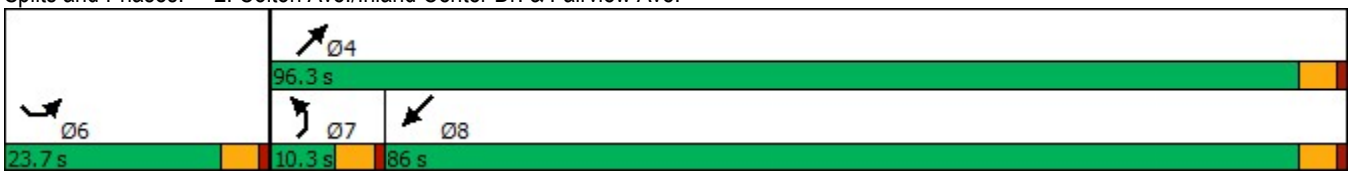
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Traffic Volume (vph)	57	61	61	740	1146	91
Future Volume (vph)	57	61	61	740	1146	91
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	60	64	64	779	1206	96
Shared Lane Traffic (%)						
Lane Group Flow (vph)	124	0	64	779	1302	0

Intersection Summary

Lane Group	SEL	NEL	NET	SWT
Lane Configurations				
Traffic Volume (vph)	57	61	740	1146
Future Volume (vph)	57	61	740	1146
Turn Type	Prot	Prot	NA	NA
Protected Phases	6	7	4	8
Permitted Phases				
Detector Phase	6	7	4	8
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5
Total Split (s)	23.7	10.3	96.3	86.0
Total Split (%)	19.8%	8.6%	80.3%	71.7%
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	Max	None	None	None
Act Effct Green (s)	19.2	5.8	91.8	81.5
Actuated g/C Ratio	0.16	0.05	0.76	0.68
v/c Ratio	0.42	0.78	0.54	1.02
Control Delay	36.2	108.4	7.2	49.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	36.2	108.4	7.2	49.9
LOS	D	F	A	D
Approach Delay	36.2		14.9	49.9
Approach LOS	D		B	D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 36.2	Intersection LOS: D
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Colton Ave./Inland Center Dr. & Fairview Ave.



Lane Group	SEL	NEL	NET	SWT
Lane Group Flow (vph)	124	64	779	1302
v/c Ratio	0.42	0.78	0.54	1.02
Control Delay	36.2	108.4	7.2	49.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	36.2	108.4	7.2	49.9
Queue Length 50th (ft)	60	50	204	~1066
Queue Length 95th (ft)	121	#130	279	#1332
Internal Link Dist (ft)	426		1489	2518
Turn Bay Length (ft)		65		
Base Capacity (vph)	293	82	1453	1279
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.42	0.78	0.54	1.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

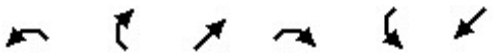
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (veh/h)	57	61	61	740	1146	91
Future Volume (veh/h)	57	61	61	740	1146	91
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1900	1900	1900
Adj Flow Rate, veh/h	60	64	64	779	1206	96
Adj No. of Lanes	0	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	124	132	81	1453	1181	94
Arrive On Green	0.16	0.16	0.05	0.76	0.68	0.68
Sat Flow, veh/h	775	827	1714	1900	1737	138
Grp Volume(v), veh/h	125	0	64	779	0	1302
Grp Sat Flow(s),veh/h/ln	1615	0	1714	1900	0	1876
Q Serve(g_s), s	8.4	0.0	4.4	19.6	0.0	81.5
Cycle Q Clear(g_c), s	8.4	0.0	4.4	19.6	0.0	81.5
Prop In Lane	0.48	0.51	1.00			0.07
Lane Grp Cap(c), veh/h	259	0	81	1453	0	1275
V/C Ratio(X)	0.48	0.00	0.79	0.54	0.00	1.02
Avail Cap(c_a), veh/h	259	0	83	1455	0	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.8	0.0	56.5	5.6	0.0	19.2
Incr Delay (d2), s/veh	6.3	0.0	38.2	0.4	0.0	30.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	3.0	10.3	0.0	52.3
LnGrp Delay(d),s/veh	52.1	0.0	94.7	6.0	0.0	49.8
LnGrp LOS	D		F	A		F
Approach Vol, veh/h	125			843	1302	
Approach Delay, s/veh	52.1			12.7	49.8	
Approach LOS	D			B	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				96.2		23.7	10.2	86.0
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				91.8		19.2	5.8	81.5
Max Q Clear Time (g_c+I1), s				21.6		10.4	6.4	83.5
Green Ext Time (p_c), s				7.2		0.2	0.0	0.0

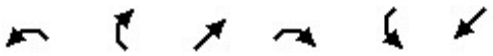
Intersection Summary	
HCM 2010 Ctrl Delay	36.2
HCM 2010 LOS	D

Notes



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	65	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.906					
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1696	0	1900	0	1805	1900
Flt Permitted	0.985				0.950	
Satd. Flow (perm)	1696	0	1900	0	1805	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	190		2598			452
Travel Time (s)	4.3		59.0			10.3

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	13	30	825	1	9	1322
Future Volume (vph)	13	30	825	1	9	1322
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	14	32	868	1	9	1392
Shared Lane Traffic (%)						
Lane Group Flow (vph)	46	0	869	0	9	1392

Intersection Summary

Intersection	
Int Delay, s/veh	698.4

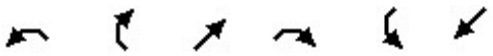
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	13	30	825	1	9	1322
Future Vol, veh/h	13	30	825	1	9	1322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	-	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	32	868	1	9	1392

Major/Minor	Minor2		Major2	
Conflicting Flow All	1410	1392	0	0
Stage 1	1410	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.5	6.2	4.1	-
Critical Hdwy Stg 1	5.5	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	4	3.3	2.2	-
Pot Cap-1 Maneuver	~ 140	176	-	-
Stage 1	~ 207	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	0	176	-	-
Mov Cap-2 Maneuver	0	-	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-

Approach	NE	SW
HCM Control Delay, s	$ 1823.8	
HCM LOS	F	

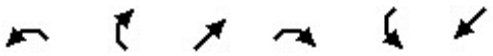
Minor Lane/Major Mvmt	NELn1	SWL	SWT
Capacity (veh/h)	176	-	-
HCM Lane V/C Ratio	4.94	-	-
HCM Control Delay (s)	$ 1823.8	-	-
HCM Lane LOS	F	-	-
HCM 95th %tile Q(veh)	90.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	0	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1644	1900	0	0	1900
Flt Permitted						
Satd. Flow (perm)	0	1644	1900	0	0	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	180		452			139
Travel Time (s)	4.1		10.3			3.2

Intersection Summary	
Area Type:	Other



Lane Group	NWL	NWR	NET	NER	SWL	SWT
Traffic Volume (vph)	0	30	854	1	0	1331
Future Volume (vph)	0	30	854	1	0	1331
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	0	32	899	1	0	1401
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	32	900	0	0	1401

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	30	854	1	0	1331
Future Vol, veh/h	0	30	854	1	0	1331
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	32	899	1	0	1401

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	900	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.2	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	340	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	340	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	16.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWT
Capacity (veh/h)	-	-	340	-
HCM Lane V/C Ratio	-	-	0.093	-
HCM Control Delay (s)	-	-	16.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	50		0
Storage Lanes	0		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.865				0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	1557	0	1710	0	1615	1710	1900	0	1800	1900	1615
Flt Permitted				0.950			0.063					
Satd. Flow (perm)	0	1557	0	1710	0	1615	113	1900	0	1800	1900	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		142				88						326
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		213			799			139			467	
Travel Time (s)		4.8			18.2			3.2			10.6	

Intersection Summary	
Area Type:	Other

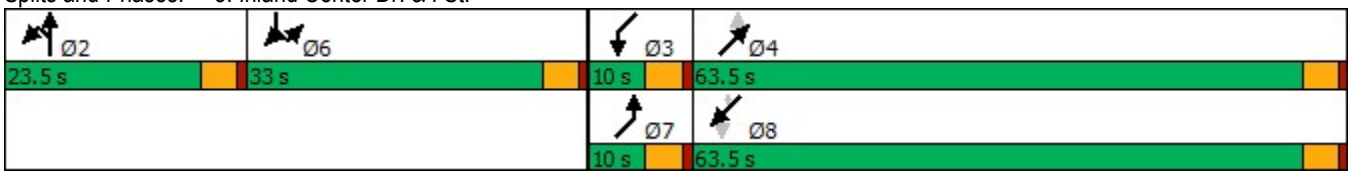
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	2	474	0	106	101	783	0	0	1225	716
Future Volume (vph)	0	0	2	474	0	106	101	783	0	0	1225	716
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	2	499	0	112	106	824	0	0	1289	754
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	499	0	112	106	824	0	0	1289	754

Intersection Summary

Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR	Ø3
Lane Configurations								
Traffic Volume (vph)	0	474	106	101	783	1225	716	
Future Volume (vph)	0	474	106	101	783	1225	716	
Turn Type	NA	Prot	Prot	pm+pt	NA	NA	Perm	
Protected Phases	2	6	6	7	4	8		3
Permitted Phases				4			8	
Detector Phase	2	6	6	7	4	8	8	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5	9.5
Total Split (s)	23.5	33.0	33.0	10.0	63.5	63.5	63.5	10.0
Total Split (%)	18.1%	25.4%	25.4%	7.7%	48.8%	48.8%	48.8%	8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	None	None	None	None	None	None	None
Act Effct Green (s)	19.0	28.5	28.5	69.0	69.0	59.0	59.0	
Actuated g/C Ratio	0.15	0.22	0.22	0.53	0.53	0.45	0.45	
v/c Ratio	0.01	1.33	0.27	0.83	0.82	1.50	0.83	
Control Delay	0.0	207.4	14.3	67.1	33.5	258.2	26.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
Total Delay	0.0	207.4	14.3	67.1	33.5	258.3	26.1	
LOS	A	F	B	E	C	F	C	
Approach Delay					37.3	172.6		
Approach LOS					D	F		

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.50	
Intersection Signal Delay: 137.3	Intersection LOS: F
Intersection Capacity Utilization 115.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 5: Inland Center Dr. & I St.



Lane Group	NBT	SBL	SBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	2	499	112	106	824	1289	754
v/c Ratio	0.01	1.33	0.27	0.83	0.82	1.50	0.83
Control Delay	0.0	207.4	14.3	67.1	33.5	258.2	26.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	0.0	207.4	14.3	67.1	33.5	258.3	26.1
Queue Length 50th (ft)	0	~545	16	43	556	~1502	337
Queue Length 95th (ft)	0	#763	68	#148	750	#1766	543
Internal Link Dist (ft)	133				59	387	
Turn Bay Length (ft)				110			
Base Capacity (vph)	348	374	422	127	1008	862	911
Starvation Cap Reductn	0	0	0	0	0	16	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	1.33	0.27	0.83	0.82	1.52	0.83

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	474	0	106	101	783	0	0	1225	716
Future Volume (veh/h)	0	0	2	474	0	106	101	783	0	0	1225	716
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	0	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	0	0	2	499	0	112	106	824	0	0	1289	0
Adj No. of Lanes	0	1	0	1	0	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	0	302	0	0	0	159	1347	0	388	1165	990
Arrive On Green	0.00	0.00	0.20	0.00	0.00	0.00	0.05	0.71	0.00	0.00	0.61	0.00
Sat Flow, veh/h	0	0	1530		0		1714	1900	0	1714	1900	1615
Grp Volume(v), veh/h	0	0	2		0.0		106	824	0	0	1289	0
Grp Sat Flow(s),veh/h/ln	0	0	1530				1714	1900	0	1714	1900	1615
Q Serve(g_s), s	0.0	0.0	0.1				2.0	21.4	0.0	0.0	59.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1				2.0	21.4	0.0	0.0	59.0	0.0
Prop In Lane	0.00		1.00				1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	302				159	1347	0	388	1165	990
V/C Ratio(X)	0.00	0.00	0.01				0.67	0.61	0.00	0.00	1.11	0.00
Avail Cap(c_a), veh/h	0	0	302				173	1347	0	484	1165	990
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	31.0				24.5	7.2	0.0	0.0	18.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0				8.5	0.8	0.0	0.0	60.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0				2.2	11.3	0.0	0.0	50.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	31.1				33.0	8.0	0.0	0.0	79.1	0.0
LnGrp LOS			C				C	A			F	
Approach Vol, veh/h		2						930			1289	
Approach Delay, s/veh		31.1						10.9			79.1	
Approach LOS		C						B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4			7	8
Phs Duration (G+Y+Rc), s		23.5	0.0	72.7			9.2	63.5
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s		19.0	5.5	59.0			5.5	59.0
Max Q Clear Time (g_c+I1), s		2.1	0.0	23.4			4.0	61.0
Green Ext Time (p_c), s		0.0	0.0	7.4			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	50.5
HCM 2010 LOS	D

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.908			0.997			0.989	
Flt Protected		0.966			0.990		0.950			0.950		
Satd. Flow (prot)	0	1769	0	0	1708	0	1805	1894	0	1805	3570	0
Flt Permitted		0.966			0.990		0.950			0.950		
Satd. Flow (perm)	0	1769	0	0	1708	0	1805	1894	0	1805	3570	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	118	6	45	12	8	43	22	1261	28	40	1860	150
Future Volume (vph)	118	6	45	12	8	43	22	1261	28	40	1860	150
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	124	6	47	13	8	45	23	1327	29	42	1958	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	177	0	0	66	0	23	1356	0	42	2116	0

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	118	6	45	12	8	43	22	1261	28	40	1860	150
Future Vol, veh/h	118	6	45	12	8	43	22	1261	28	40	1860	150
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	50	-	-	60	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	124	6	47	13	8	45	23	1327	29	42	1958	158

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3535	3523	1058	2454	3588	1342	2116	0	0	1356	0	0
Stage 1	2121	2121	-	1388	1388	-	-	-	-	-	-	-
Stage 2	1414	1402	-	1066	2200	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 3	~ 6	224	19	~ 6	188	262	-	-	514	-	-
Stage 1	~ 53	92	-	178	212	-	-	-	-	-	-	-
Stage 2	172	209	-	241	84	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 5	224	-	~ 5	188	262	-	-	514	-	-
Mov Cap-2 Maneuver	-	~ 5	-	-	~ 5	-	-	-	-	-	-	-
Stage 1	~ 48	84	-	162	193	-	-	-	-	-	-	-
Stage 2	~ 114	191	-	161	77	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s			0.3	0.2
HCM LOS	-	-		

Minor Lane/Major Mvmt	NEL	NET	NERNWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	262	-	-	-	514	-	-
HCM Lane V/C Ratio	0.088	-	-	-	0.082	-	-
HCM Control Delay (s)	20.1	-	-	-	12.6	-	-
HCM Lane LOS	C	-	-	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1800	1900	1900	1700	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	1		0	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.923				0.850			
Flt Protected				0.950	0.998					0.950		
Satd. Flow (prot)	0	0	0	1556	3018	0	0	5187	1615	3133	3610	0
Flt Permitted				0.950	0.998					0.950		
Satd. Flow (perm)	0	0	0	1556	3018	0	0	5187	1615	3133	3610	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									121			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	312	448	504	0	729	701	540	1615	0
Future Volume (vph)	0	0	0	312	448	504	0	729	701	540	1615	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	328	472	531	0	767	738	568	1700	0
Shared Lane Traffic (%)				10%								
Lane Group Flow (vph)	0	0	0	295	1036	0	0	767	738	568	1700	0

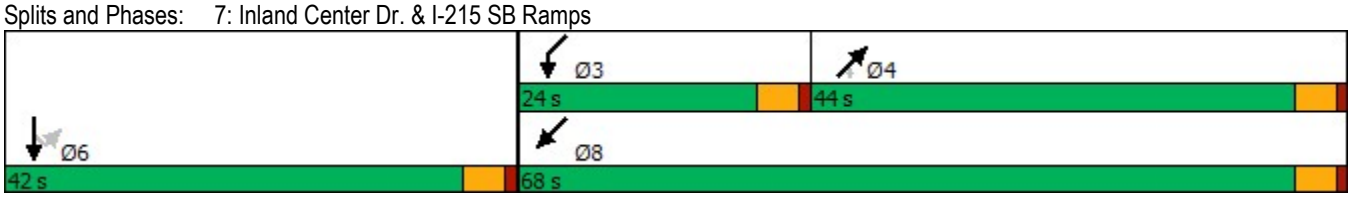
Intersection Summary

Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	312	448	729	701	540	1615
Future Volume (vph)	312	448	729	701	540	1615
Turn Type	Perm	NA	NA	Perm	Prot	NA
Protected Phases		6	4		3	8
Permitted Phases	6			4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	42.0	42.0	44.0	44.0	24.0	68.0
Total Split (%)	38.2%	38.2%	40.0%	40.0%	21.8%	61.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	37.5	37.5	39.5	39.5	19.5	63.5
Actuated g/C Ratio	0.34	0.34	0.36	0.36	0.18	0.58
v/c Ratio	0.56	1.07dr	0.41	1.12	1.02	0.82
Control Delay	34.4	66.7	27.4	103.1	89.4	22.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	47.9
Total Delay	34.4	66.7	27.4	103.1	89.4	70.6
LOS	C	E	C	F	F	E
Approach Delay		59.5	64.5			75.3
Approach LOS		E	E			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 68.0	Intersection LOS: E
Intersection Capacity Utilization 168.6%	ICU Level of Service H
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBL	SBT	NET	NER	SWL	SWT
Lane Group Flow (vph)	295	1036	767	738	568	1700
v/c Ratio	0.56	1.07dr	0.41	1.12	1.02	0.82
Control Delay	34.4	66.7	27.4	103.1	89.4	22.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	47.9
Total Delay	34.4	66.7	27.4	103.1	89.4	70.6
Queue Length 50th (ft)	184	~404	147	~546	~220	475
Queue Length 95th (ft)	283	#558	184	#781	#330	580
Internal Link Dist (ft)		485	266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	530	1028	1862	657	555	2083
Starvation Cap Reductn	0	0	0	0	0	748
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	1.01	0.41	1.12	1.02	1.27

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	312	448	504	0	729	701	540	1615	0
Future Volume (veh/h)	0	0	0	312	448	504	0	729	701	540	1615	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1800	1800	1800	0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h				328	472	531	0	767	738	568	1700	0
Adj No. of Lanes				1	2	0	0	3	1	2	2	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				584	614	522	0	1863	580	557	2084	0
Arrive On Green				0.34	0.34	0.34	0.00	0.36	0.36	0.18	0.58	0.00
Sat Flow, veh/h				1714	1800	1530	0	5358	1615	3141	3705	0
Grp Volume(v), veh/h				328	472	531	0	767	738	568	1700	0
Grp Sat Flow(s),veh/h/ln				1714	1800	1530	0	1729	1615	1570	1805	0
Q Serve(g_s), s				17.2	25.8	37.5	0.0	12.2	39.5	19.5	41.4	0.0
Cycle Q Clear(g_c), s				17.2	25.8	37.5	0.0	12.2	39.5	19.5	41.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				584	614	522	0	1863	580	557	2084	0
V/C Ratio(X)				0.56	0.77	1.02	0.00	0.41	1.27	1.02	0.82	0.00
Avail Cap(c_a), veh/h				584	614	522	0	1863	580	557	2084	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				29.5	32.4	36.3	0.0	26.5	35.3	45.3	18.6	0.0
Incr Delay (d2), s/veh				3.9	9.0	44.0	0.0	0.1	135.7	43.3	2.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.7	14.3	22.2	0.0	5.8	39.4	11.8	21.1	0.0
LnGrp Delay(d),s/veh				33.4	41.4	80.3	0.0	26.7	171.0	88.6	21.2	0.0
LnGrp LOS				C	D	F		C	F	F	C	
Approach Vol, veh/h					1331			1505			2268	
Approach Delay, s/veh					54.9			97.4			38.1	
Approach LOS					D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			24.0	44.0		42.0		68.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			19.5	39.5		37.5		63.5
Max Q Clear Time (g_c+I1), s			21.5	41.5		39.5		43.4
Green Ext Time (p_c), s			0.0	0.0		0.0		13.4

Intersection Summary	
HCM 2010 Ctrl Delay	60.0
HCM 2010 LOS	E

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt		0.973	0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1710	1756	1534	0	0	0	1710	3610	0	0	6536	1615
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1710	1756	1534	0	0	0	1710	3610	0	0	6536	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15	68									178
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

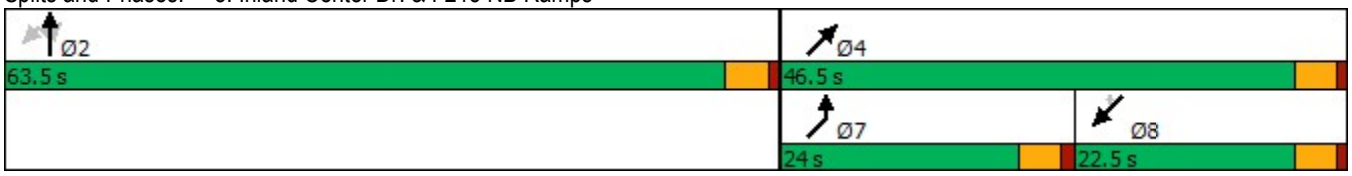
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1180	436	555	0	0	0	394	754	0	0	964	426
Future Volume (vph)	1180	436	555	0	0	0	394	754	0	0	964	426
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1242	459	584	0	0	0	415	794	0	0	1015	448
Shared Lane Traffic (%)			17%									
Lane Group Flow (vph)	1242	558	485	0	0	0	415	794	0	0	1015	448

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	1180	436	555	394	754	964	426
Future Volume (vph)	1180	436	555	394	754	964	426
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	63.5	63.5	63.5	24.0	46.5	22.5	22.5
Total Split (%)	57.7%	57.7%	57.7%	21.8%	42.3%	20.5%	20.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	59.0	59.0	59.0	19.5	42.0	18.0	18.0
Actuated g/C Ratio	0.54	0.54	0.54	0.18	0.38	0.16	0.16
v/c Ratio	1.35	0.59	0.57	1.37	0.58	0.95	1.08
Control Delay	192.1	19.9	17.5	222.0	29.0	63.7	96.1
Queue Delay	0.0	0.0	0.0	0.2	22.2	0.0	0.0
Total Delay	192.1	19.9	17.5	222.3	51.1	63.7	96.1
LOS	F	B	B	F	D	E	F
Approach Delay		113.0			109.9	73.6	
Approach LOS		F			F	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.37	
Intersection Signal Delay: 100.6	Intersection LOS: F
Intersection Capacity Utilization 168.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	1242	558	485	415	794	1015	448
v/c Ratio	1.35	0.59	0.57	1.37	0.58	0.95	1.08
Control Delay	192.1	19.9	17.5	222.0	29.0	63.7	96.1
Queue Delay	0.0	0.0	0.0	0.2	22.2	0.0	0.0
Total Delay	192.1	19.9	17.5	222.3	51.1	63.7	96.1
Queue Length 50th (ft)	~1154	261	196	~388	230	208	~243
Queue Length 95th (ft)	#1412	375	303	#581	293	#277	#444
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	917	948	854	303	1378	1069	413
Starvation Cap Reductn	0	0	0	6	599	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.35	0.59	0.57	1.40	1.02	0.95	1.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1180	436	555	0	0	0	394	754	0	0	964	426
Future Volume (veh/h)	1180	436	555	0	0	0	394	754	0	0	964	426
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1900	1900				1800	1900	0	0	1900	1900
Adj Flow Rate, veh/h	1242	553	522				415	794	0	0	1015	448
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	919	1019	866				304	1378	0	0	1070	264
Arrive On Green	0.54	0.54	0.54				0.18	0.38	0.00	0.00	0.16	0.16
Sat Flow, veh/h	1714	1900	1615				1714	3705	0	0	6802	1615
Grp Volume(v), veh/h	1242	553	522				415	794	0	0	1015	448
Grp Sat Flow(s),veh/h/ln	1714	1900	1615				1714	1805	0	0	1634	1615
Q Serve(g_s), s	59.0	20.9	24.4				19.5	19.2	0.0	0.0	16.9	18.0
Cycle Q Clear(g_c), s	59.0	20.9	24.4				19.5	19.2	0.0	0.0	16.9	18.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	919	1019	866				304	1378	0	0	1070	264
V/C Ratio(X)	1.35	0.54	0.60				1.37	0.58	0.00	0.00	0.95	1.70
Avail Cap(c_a), veh/h	919	1019	866				304	1378	0	0	1070	264
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	16.7	17.5				45.3	26.9	0.0	0.0	45.5	46.0
Incr Delay (d2), s/veh	165.1	2.1	3.1				184.3	0.6	0.0	0.0	16.7	328.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	69.7	11.5	11.5				24.8	9.6	0.0	0.0	8.9	32.1
LnGrp Delay(d),s/veh	190.6	18.8	20.6				229.5	27.5	0.0	0.0	62.2	374.7
LnGrp LOS	F	B	C				F	C			E	F
Approach Vol, veh/h		2317						1209			1463	
Approach Delay, s/veh		111.3						96.9			157.9	
Approach LOS		F						F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		63.5		46.5			24.0	22.5
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		59.0		42.0			19.5	18.0
Max Q Clear Time (g_c+I1), s		61.0		21.2			21.5	20.0
Green Ext Time (p_c), s		0.0		5.6			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	121.4
HCM 2010 LOS	F

Notes

Scenario Report

Scenario:	LR+P_PM
Command:	LR+P_PM
Volume:	LR+P_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Mount Vernon Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.022
Loss Time (sec):	0	Average Delay (sec/veh):	51.4
Optimal Cycle:	180	Level Of Service:	D

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			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	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	29	1015	227	296	675	93	121	257	13	358	281	580
Growth 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
Initial Bse:	29	1015	227	296	675	93	121	257	13	358	281	580
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:	29	1015	227	296	675	93	121	257	13	358	281	580
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	1015	227	296	675	93	121	257	13	358	281	580
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:	29	1015	227	296	675	93	121	257	13	358	281	580
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.92	0.92	0.95	0.93	0.93	0.13	0.99	0.99	0.52	0.90	0.90
Lanes:	1.00	1.63	0.37	1.00	1.76	0.24	1.00	0.95	0.05	1.00	0.33	0.67
Final Sat.:	1805	2871	642	1805	3116	429	255	1796	91	984	557	1151
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	0.35	0.16	0.22	0.22	0.48	0.14	0.14	0.36	0.50	0.50
Crit Moves:		****		****							****	
Green/Cycle:	0.03	0.35	0.35	0.16	0.47	0.47	0.49	0.49	0.49	0.49	0.49	0.49
Volume/Cap:	0.46	1.02	1.02	1.02	0.46	0.46	0.96	0.29	0.29	0.74	1.02	1.02
Uniform Del:	47.3	32.7	32.7	42.0	17.8	17.8	24.5	15.0	15.0	20.2	25.3	25.3
IncremntDel:	5.2	31.4	31.4	58.5	0.2	0.2	68.6	0.2	0.2	5.9	36.6	36.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	52.5	64.1	64.1	100.5	18.0	18.0	93.1	15.1	15.1	26.0	61.9	61.9
User DelAdj:	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:	52.5	64.1	64.1	100.5	18.0	18.0	93.1	15.1	15.1	26.0	61.9	61.9
LOS by Move:	D	E	E	F	B	B	F	B	B	C	E	E
HCM2kAvgQ:	2	28	28	15	8	8	7	5	5	10	35	35

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Fairview Ave (NS) / Colton Ave (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.768
Loss Time (sec):	0	Average Delay (sec/veh):	9.3
Optimal Cycle:	80	Level Of Service:	A

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			Protected			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	0	0	0	1! 0	1	0	1 0	0	0	0 1 0
Volume Module:												
Base Vol:	0	0	0	57	0	61	61	740	0	0	1146	91
Growth 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
Initial Bse:	0	0	0	57	0	61	61	740	0	0	1146	91
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	57	0	61	61	740	0	0	1146	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	57	0	61	61	740	0	0	1146	91
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	57	0	61	61	740	0	0	1146	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.81	1.00	0.81	0.95	1.00	1.00	1.00	0.99	0.99
Lanes:	0.00	0.00	0.00	0.48	0.00	0.52	1.00	1.00	0.00	0.00	0.93	0.07
Final Sat.:	0	0	0	742	0	794	1805	1900	0	0	1743	138
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.08	0.03	0.39	0.00	0.00	0.66	0.66
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.10	0.00	0.10	0.04	0.90	0.00	0.00	0.86	0.86
Volume/Cap:	0.00	0.00	0.00	0.77	0.00	0.77	0.77	0.43	0.00	0.00	0.77	0.77
Uniform Del:	0.0	0.0	0.0	43.9	0.0	43.9	47.3	0.8	0.0	0.0	3.0	3.0
IncremntDel:	0.0	0.0	0.0	20.8	0.0	20.8	35.6	0.2	0.0	0.0	2.3	2.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	64.6	0.0	64.6	82.9	1.0	0.0	0.0	5.3	5.3
User DelAdj:	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	64.6	0.0	64.6	82.9	1.0	0.0	0.0	5.3	5.3
LOS by Move:	A	A	A	E	A	E	F	A	A	A	A	A
HCM2kAvgQ:	0	0	0	5	0	5	4	4	0	0	18	18

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Project Dwy 1 (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	0	Average Delay (sec/veh):	2.7
Optimal Cycle:	67	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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 0	0	0	0 1	0	1	0 1 0
Volume Module:												
Base Vol:	13	0	30	0	0	0	0	825	1	9	1322	0
Growth 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
Initial Bse:	13	0	30	0	0	0	0	825	1	9	1322	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:	13	0	30	0	0	0	0	825	1	9	1322	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	0	30	0	0	0	0	825	1	9	1322	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:	13	0	30	0	0	0	0	825	1	9	1322	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	0.89	1.00	1.00	1.00	1.00	1.00	1.00	0.80	1.00	1.00
Lanes:	0.30	0.00	0.70	0.00	0.00	0.00	0.00	0.99	0.01	1.00	1.00	0.00
Final Sat.:	513	0	1183	0	0	0	0	1898	2	1518	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.43	0.43	0.01	0.70	0.00
Crit Moves:			****								****	
Green/Cycle:	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.96	0.96	0.96	0.96	0.00
Volume/Cap:	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.45	0.45	0.01	0.72	0.00
Uniform Del:	47.8	0.0	47.8	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0
IncremntDel:	34.8	0.0	34.8	0.0	0.0	0.0	0.0	0.2	0.2	0.0	1.4	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	82.6	0.0	82.6	0.0	0.0	0.0	0.0	0.3	0.3	0.1	1.6	0.0
User DelAdj:	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:	82.6	0.0	82.6	0.0	0.0	0.0	0.0	0.3	0.3	0.1	1.6	0.0
LOS by Move:	F	A	F	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	3	0	3	0	0	0	0	2	2	0	7	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Project Dwy 2 (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.719
Loss Time (sec): 0 Average Delay (sec/veh): 2.3
Optimal Cycle: 66 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			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	0	0	1	0	0	0	0	0	1	0	0	1	0	0
Volume Module:												
Base Vol:	0	0	30	0	0	0	0	854	1	0	1331	0
Growth 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
Initial Bse:	0	0	30	0	0	0	0	854	1	0	1331	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	0	30	0	0	0	0	854	1	0	1331	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	30	0	0	0	0	854	1	0	1331	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	0	30	0	0	0	0	854	1	0	1331	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.99	0.01	0.00	1.00	0.00
Final Sat.:	0	0	1644	0	0	0	0	1898	2	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.45	0.45	0.00	0.70	0.00
Crit Moves:			****								****	
Green/Cycle:	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.97	0.97	0.00	0.97	0.00
Volume/Cap:	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.46	0.46	0.00	0.72	0.00
Uniform Del:	0.0	0.0	48.4	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
IncremntDel:	0.0	0.0	45.8	0.0	0.0	0.0	0.0	0.2	0.2	0.0	1.4	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	94.2	0.0	0.0	0.0	0.0	0.2	0.2	0.0	1.5	0.0
User DelAdj:	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	94.2	0.0	0.0	0.0	0.0	0.2	0.2	0.0	1.5	0.0
LOS by Move:	A	A	F	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	2	0	0	0	0	2	2	0	6	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 I St (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.965
Loss Time (sec): 0 Average Delay (sec/veh): 26.7
Optimal Cycle: 180 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Prot+Permit			Prot+Permit		
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	0	0	1	1	0	0	0	1	1	0	0	1	0	1
Volume Module:												
Base Vol:	0	0	2	474	0	106	101	783	0	0	1225	716
Growth 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
Initial Bse:	0	0	2	474	0	106	101	783	0	0	1225	716
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	2	474	0	106	101	783	0	0	1225	716
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	2	474	0	106	101	783	0	0	1225	716
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	2	474	0	106	101	783	0	0	1225	716
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.87	0.95	1.00	0.85	0.95	1.00	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	0	0	1644	1805	0	1615	1805	1900	0	1900	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.07	0.06	0.41	0.00	0.00	0.64	0.44
Crit Moves:				****	****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.27	0.00	0.27	0.73	0.73	0.00	0.00	0.67	0.67
Volume/Cap:	0.00	0.00	0.00	0.96	0.00	0.24	0.56	0.57	0.00	0.00	0.96	0.66
Uniform Del:	0.0	0.0	49.9	35.9	0.0	28.3	4.0	6.4	0.0	0.0	15.5	9.9
IncremntDel:	0.0	0.0	588.2	31.6	0.0	0.3	3.9	0.6	0.0	0.0	17.4	1.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	638.1	67.5	0.0	28.6	7.9	6.9	0.0	0.0	32.9	11.4
User DelAdj:	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	638.1	67.5	0.0	28.6	7.9	6.9	0.0	0.0	32.9	11.4
LOS by Move:	A	A	F	E	A	C	A	A	A	A	C	B
HCM2kAvgQ:	0	0	1	20	0	3	2	11	0	0	42	14

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.806
Loss Time (sec): 0 Average Delay (sec/veh): 7.9
Optimal Cycle: 74 Level Of Service: A

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	1! 0	1	0	0 1	0	1	0 0
Volume Module:												
Base Vol:	12	8	43	118	6	45	22	1261	28	40	1860	150
Growth 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
Initial Bse:	12	8	43	118	6	45	22	1261	28	40	1860	150
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:	12	8	43	118	6	45	22	1261	28	40	1860	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	8	43	118	6	45	22	1261	28	40	1860	150
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:	12	8	43	118	6	45	22	1261	28	40	1860	150
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.71	0.71	0.71	0.09	1.00	1.00	0.09	0.94	0.94
Lanes:	0.19	0.13	0.68	0.70	0.03	0.27	1.00	0.98	0.02	1.00	1.85	0.15
Final Sat.:	315	210	1128	937	48	357	165	1853	41	177	3304	266
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.13	0.13	0.13	0.13	0.68	0.68	0.23	0.56	0.56
Crit Moves:					****			****				
Green/Cycle:	0.16	0.16	0.16	0.16	0.16	0.16	0.84	0.84	0.84	0.84	0.84	0.84
Volume/Cap:	0.24	0.24	0.24	0.81	0.81	0.81	0.16	0.81	0.81	0.27	0.67	0.67
Uniform Del:	37.0	37.0	37.0	40.7	40.7	40.7	1.4	3.8	3.8	1.6	2.8	2.8
IncremntDel:	0.5	0.5	0.5	20.1	20.1	20.1	0.5	3.1	3.1	1.0	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	37.5	37.5	37.5	60.8	60.8	60.8	1.9	6.9	6.9	2.5	3.4	3.4
User DelAdj:	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:	37.5	37.5	37.5	60.8	60.8	60.8	1.9	6.9	6.9	2.5	3.4	3.4
LOS by Move:	D	D	D	E	E	E	A	A	A	A	A	A
HCM2kAvgQ:	2	2	2	7	7	7	0	21	21	1	12	12

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.756
Loss Time (sec): 0 Average Delay (sec/veh): 145.1
Optimal Cycle: 179 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0 0	1	1	0 1	0	0	3 0	1	2	0 2 0
Volume Module:												
Base Vol:	0	0	0	312	448	504	0	729	701	540	1615	0
Growth 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
Initial Bse:	0	0	0	312	448	504	0	729	701	540	1615	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	0	0	312	448	504	0	729	701	540	1615	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	312	448	504	0	729	701	540	1615	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	0	0	312	448	504	0	729	701	540	1615	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1634	1634	1634	0	5187	1615	3502	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.27	0.31	0.00	0.14	0.43	0.15	0.45	0.00
Crit Moves:						****					****	
Green/Cycle:	0.00	0.00	0.00	0.34	0.34	0.34	0.00	0.16	0.16	0.50	0.66	0.00
Volume/Cap:	0.00	0.00	0.00	0.55	0.80	0.90	0.00	0.90	2.77	0.31	0.68	0.00
Uniform Del:	0.0	0.0	0.0	26.6	29.6	31.1	0.0	41.4	42.2	14.8	10.7	0.0
IncremntDel:	0.0	0.0	0.0	0.3	2.9	7.9	0.0	12.6	806.7	0.1	0.8	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	26.9	32.5	39.0	0.0	53.9	848.8	14.9	11.5	0.0
User DelAdj:	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	26.9	32.5	39.0	0.0	53.9	848.8	14.9	11.5	0.0
LOS by Move:	A	A	A	A	C	C	D	A	D	F	B	B A
HCM2kAvgQ:	0	0	0	9	15	19	0	11	77	5	17	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	1.213
Loss Time (sec):	0	Average Delay (sec/veh):	72.8
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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 1	0 0	0	0 0	1 0	2	0 0	0 0	4	0 1
Volume Module:												
Base Vol:	1180	436	555	0	0	0	394	754	0	0	964	426
Growth 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
Initial Bse:	1180	436	555	0	0	0	394	754	0	0	964	426
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:	1180	436	555	0	0	0	394	754	0	0	964	426
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1180	436	555	0	0	0	394	754	0	0	964	426
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:	1180	436	555	0	0	0	394	754	0	0	964	426
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.92	0.92	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.00	0.88	1.12	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	1615	1531	1949	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:												
Vol/Sat:	0.73	0.28	0.28	0.00	0.00	0.00	0.22	0.21	0.00	0.00	0.14	0.26
Crit Moves:	****						****					****
Green/Cycle:	0.60	0.60	0.60	0.00	0.00	0.00	0.18	0.40	0.00	0.00	0.22	0.22
Volume/Cap:	1.21	0.47	0.47	0.00	0.00	0.00	1.21	0.53	0.00	0.00	0.64	1.21
Uniform Del:	19.9	11.0	11.0	0.0	0.0	0.0	41.0	22.9	0.0	0.0	35.6	39.1
IncremntDel:	105.3	0.2	0.2	0.0	0.0	0.0	120.7	0.4	0.0	0.0	0.9	119.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	125.2	11.2	11.2	0.0	0.0	0.0	161.7	23.3	0.0	0.0	36.5	158.3
User DelAdj:	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:	125.2	11.2	11.2	0.0	0.0	0.0	161.7	23.3	0.0	0.0	36.5	158.3
LOS by Move:	F	B	B	A	A	A	F	C	A	A	D	F
HCM2kAvgQ:	63	9	9	0	0	0	24	9	0	0	8	25

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

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Appendix N

Mitigated Long-Range (2040) With Project Conditions Intersection Analysis Worksheets

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.976			0.896			0.999			0.991	
Flt Protected		0.960			0.993		0.950			0.950		
Satd. Flow (prot)	0	1687	0	0	1602	0	1710	1898	0	1710	3578	0
Flt Permitted		0.748			0.969		0.154			0.039		
Satd. Flow (perm)	0	1314	0	0	1563	0	277	1898	0	70	3578	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			41			1			16	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

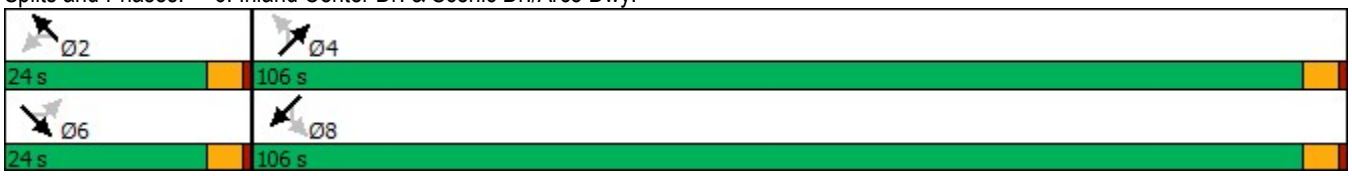
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	112	0	24	7	5	39	31	1571	12	21	1308	85
Future Volume (vph)	112	0	24	7	5	39	31	1571	12	21	1308	85
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	118	0	25	7	5	41	33	1654	13	22	1377	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	143	0	0	53	0	33	1667	0	22	1466	0

Intersection Summary

Lane Group	SEL	SET	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	112	0	7	5	31	1571	21	1308
Future Volume (vph)	112	0	7	5	31	1571	21	1308
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	24.0	24.0	24.0	24.0	106.0	106.0	106.0	106.0
Total Split (%)	18.5%	18.5%	18.5%	18.5%	81.5%	81.5%	81.5%	81.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	None	None	None	None
Act Effct Green (s)		16.5		16.5	101.6	101.6	101.6	101.6
Actuated g/C Ratio		0.13		0.13	0.80	0.80	0.80	0.80
v/c Ratio		0.79		0.22	0.15	1.10	0.40	0.51
Control Delay		77.5		21.5	5.2	71.0	28.9	5.3
Queue Delay		0.0		0.0	0.0	0.7	0.0	3.5
Total Delay		77.5		21.5	5.2	71.7	28.9	8.8
LOS		E		C	A	E	C	A
Approach Delay		77.5		21.5		70.4		9.1
Approach LOS		E		C		E		A

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 127.1	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 43.0	Intersection LOS: D
Intersection Capacity Utilization 105.7%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 6: Inland Center Dr. & Scenic Dr./Arco Dwy.



Lane Group	SET	NWT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	143	53	33	1667	22	1466
v/c Ratio	0.79	0.22	0.15	1.10	0.40	0.51
Control Delay	77.5	21.5	5.2	71.0	28.9	5.3
Queue Delay	0.0	0.0	0.0	0.7	0.0	3.5
Total Delay	77.5	21.5	5.2	71.7	28.9	8.8
Queue Length 50th (ft)	105	9	6	~1603	5	192
Queue Length 95th (ft)	#197	48	16	#1894	#52	240
Internal Link Dist (ft)	19	155		387		266
Turn Bay Length (ft)			50		60	
Base Capacity (vph)	213	274	221	1517	55	2863
Starvation Cap Reductn	0	0	0	87	0	1275
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.19	0.15	1.17	0.40	0.92

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	112	0	24	7	5	39	31	1571	12	21	1308	85
Future Volume (veh/h)	112	0	24	7	5	39	31	1571	12	21	1308	85
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	118	0	25	7	5	41	33	1654	13	22	1377	89
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	189	0	29	44	31	144	297	1531	12	58	2801	181
Arrive On Green	0.11	0.00	0.11	0.11	0.11	0.11	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	1191	0	252	98	271	1261	348	1883	15	287	3444	222
Grp Volume(v), veh/h	143	0	0	53	0	0	33	0	1667	22	720	746
Grp Sat Flow(s),veh/h/ln	1443	0	0	1630	0	0	348	0	1897	287	1805	1861
Q Serve(g_s), s	8.2	0.0	0.0	0.0	0.0	0.0	4.1	0.0	101.5	0.0	15.4	15.6
Cycle Q Clear(g_c), s	12.0	0.0	0.0	3.8	0.0	0.0	19.7	0.0	101.5	101.5	15.4	15.6
Prop In Lane	0.83		0.17	0.13		0.77	1.00		0.01	1.00		0.12
Lane Grp Cap(c), veh/h	218	0	0	219	0	0	297	0	1543	58	1468	1514
V/C Ratio(X)	0.66	0.00	0.00	0.24	0.00	0.00	0.11	0.00	1.08	0.38	0.49	0.49
Avail Cap(c_a), veh/h	274	0	0	283	0	0	297	0	1543	58	1468	1514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	0.0	0.0	50.6	0.0	0.0	6.7	0.0	11.6	62.4	3.6	3.6
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.6	0.0	0.0	0.2	0.0	47.9	4.1	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	0.0	1.7	0.0	0.0	0.4	0.0	72.0	0.8	7.7	8.0
LnGrp Delay(d),s/veh	57.8	0.0	0.0	51.2	0.0	0.0	6.8	0.0	59.5	66.5	3.9	3.9
LnGrp LOS	E			D			A		F	E	A	A
Approach Vol, veh/h		143			53			1700			1488	
Approach Delay, s/veh		57.8			51.2			58.5			4.8	
Approach LOS		E			D			E			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		18.8		106.0		18.8		106.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		19.5		101.5		19.5		101.5
Max Q Clear Time (g_c+I1), s		5.8		103.5		14.0		103.5
Green Ext Time (p_c), s		0.1		0.0		0.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1900	1800	1900	1900	1700	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	0		1	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.91	0.91	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.980	0.850			0.850			
Flt Protected					0.982					0.950		
Satd. Flow (prot)	0	0	0	0	3153	1470	0	5187	1615	3133	3610	0
Flt Permitted					0.982					0.950		
Satd. Flow (perm)	0	0	0	0	3153	1470	0	5187	1615	3133	3610	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									102			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

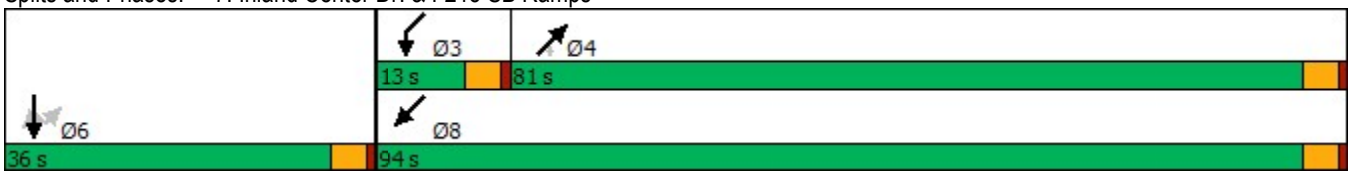
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	278	373	436	0	578	1196	233	1040	0
Future Volume (vph)	0	0	0	278	373	436	0	578	1196	233	1040	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	293	393	459	0	608	1259	245	1095	0
Shared Lane Traffic (%)						23%						
Lane Group Flow (vph)	0	0	0	0	792	353	0	608	1259	245	1095	0

Intersection Summary

Lane Group	SBT	SBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	373	436	578	1196	233	1040
Future Volume (vph)	373	436	578	1196	233	1040
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	6		4		3	8
Permitted Phases		6		4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	36.0	36.0	81.0	81.0	13.0	94.0
Total Split (%)	27.7%	27.7%	62.3%	62.3%	10.0%	72.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	31.5	31.5	76.5	76.5	8.5	89.5
Actuated g/C Ratio	0.24	0.24	0.59	0.59	0.07	0.69
v/c Ratio	1.04	0.99	0.20	1.27	1.20	0.44
Control Delay	90.5	94.8	12.7	154.1	178.0	9.7
Queue Delay	0.0	0.0	0.5	0.6	0.0	7.5
Total Delay	90.5	94.8	13.2	154.7	178.0	17.2
LOS	F	F	B	F	F	B
Approach Delay	91.9		108.6			46.6
Approach LOS	F		F			D

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 130	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.27	
Intersection Signal Delay: 85.1	Intersection LOS: F
Intersection Capacity Utilization 156.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps



Lane Group	SBT	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	792	353	608	1259	245	1095
v/c Ratio	1.04	0.99	0.20	1.27	1.20	0.44
Control Delay	90.5	94.8	12.7	154.1	178.0	9.7
Queue Delay	0.0	0.0	0.5	0.6	0.0	7.5
Total Delay	90.5	94.8	13.2	154.7	178.0	17.2
Queue Length 50th (ft)	~394	327	83	~1305	~128	198
Queue Length 95th (ft)	#529	#550	104	#1572	#215	239
Internal Link Dist (ft)	485		266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	763	356	3052	992	204	2485
Starvation Cap Reductn	0	0	1938	115	0	1342
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.99	0.55	1.44	1.20	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	278	373	436	0	578	1196	233	1040	0
Future Volume (veh/h)	0	0	0	278	373	436	0	578	1196	233	1040	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1800	1800	1900	0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h				293	563	346	0	608	1259	245	1095	0
Adj No. of Lanes				0	2	1	0	3	1	2	2	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				280	578	391	0	3052	950	205	2485	0
Arrive On Green				0.24	0.24	0.24	0.00	0.59	0.59	0.07	0.69	0.00
Sat Flow, veh/h				1156	2386	1615	0	5358	1615	3141	3705	0
Grp Volume(v), veh/h				442	414	346	0	608	1259	245	1095	0
Grp Sat Flow(s),veh/h/ln				1742	1800	1615	0	1729	1615	1570	1805	0
Q Serve(g_s), s				31.5	29.5	26.9	0.0	7.1	76.5	8.5	17.6	0.0
Cycle Q Clear(g_c), s				31.5	29.5	26.9	0.0	7.1	76.5	8.5	17.6	0.0
Prop In Lane				0.66		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				422	436	391	0	3052	950	205	2485	0
V/C Ratio(X)				1.05	0.95	0.88	0.00	0.20	1.32	1.19	0.44	0.00
Avail Cap(c_a), veh/h				422	436	391	0	3052	950	205	2485	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				49.3	48.5	47.5	0.0	12.5	26.7	60.8	9.1	0.0
Incr Delay (d2), s/veh				56.3	32.3	24.0	0.0	0.0	153.5	124.6	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				21.7	18.5	14.6	0.0	3.4	74.3	7.2	8.7	0.0
LnGrp Delay(d),s/veh				105.6	80.7	71.5	0.0	12.5	180.2	185.3	9.2	0.0
LnGrp LOS				F	F	E		B	F	F	A	
Approach Vol, veh/h					1202			1867			1340	
Approach Delay, s/veh					87.2			125.6			41.4	
Approach LOS					F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	81.0		36.0		94.0
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			8.5	76.5		31.5		89.5
Max Q Clear Time (g_c+I1), s			10.5	78.5		33.5		19.6
Green Ext Time (p_c), s			0.0	0.0		0.0		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	89.5
HCM 2010 LOS	F

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected	0.950	0.993					0.950					
Satd. Flow (prot)	1624	1698	1615	0	0	0	1710	3610	0	0	6536	1615
Flt Permitted	0.950	0.993					0.950					
Satd. Flow (perm)	1624	1698	1615	0	0	0	1710	3610	0	0	6536	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			189									65
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

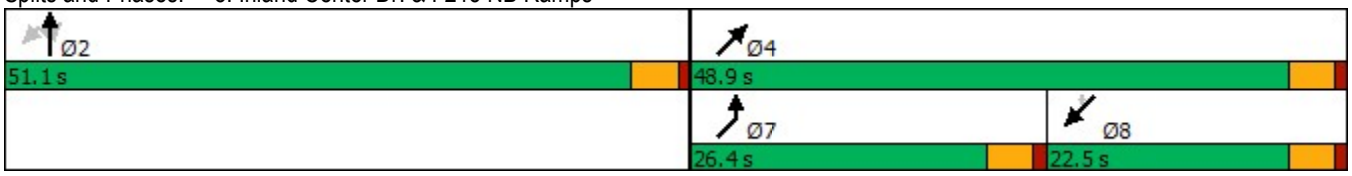
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	838	658	780	0	0	0	357	564	0	0	469	44
Future Volume (vph)	838	658	780	0	0	0	357	564	0	0	469	44
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	882	693	821	0	0	0	376	594	0	0	494	46
Shared Lane Traffic (%)	13%											
Lane Group Flow (vph)	767	808	821	0	0	0	376	594	0	0	494	46

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	838	658	780	357	564	469	44
Future Volume (vph)	838	658	780	357	564	469	44
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	51.1	51.1	51.1	26.4	48.9	22.5	22.5
Total Split (%)	51.1%	51.1%	51.1%	26.4%	48.9%	22.5%	22.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	46.6	46.6	46.6	21.9	39.6	13.1	13.1
Actuated g/C Ratio	0.49	0.49	0.49	0.23	0.42	0.14	0.14
v/c Ratio	0.96	0.97	0.93	0.96	0.40	0.55	0.17
Control Delay	49.8	50.7	35.9	73.9	20.3	40.6	6.6
Queue Delay	0.0	0.0	0.0	29.0	0.7	0.0	0.0
Total Delay	49.8	50.7	35.9	102.9	21.0	40.6	6.6
LOS	D	D	D	F	C	D	A
Approach Delay		45.3			52.7	37.7	
Approach LOS		D			D	D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 95.2	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 46.1	Intersection LOS: D
Intersection Capacity Utilization 156.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	767	808	821	376	594	494	46
v/c Ratio	0.96	0.97	0.93	0.96	0.40	0.55	0.17
Control Delay	49.8	50.7	35.9	73.9	20.3	40.6	6.6
Queue Delay	0.0	0.0	0.0	29.0	0.7	0.0	0.0
Total Delay	49.8	50.7	35.9	102.9	21.0	40.6	6.6
Queue Length 50th (ft)	454	483	367	226	128	81	0
Queue Length 95th (ft)	#772	#808	#681	#425	172	109	20
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	795	831	887	393	1685	1236	358
Starvation Cap Reductn	0	0	0	40	701	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.97	0.93	1.07	0.60	0.40	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	838	658	780	0	0	0	357	564	0	0	469	44
Future Volume (veh/h)	838	658	780	0	0	0	357	564	0	0	469	44
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1900				1800	1900	0	0	1900	1900
Adj Flow Rate, veh/h	788	825	821				376	594	0	0	494	46
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	858	901	809				403	1453	0	0	777	192
Arrive On Green	0.50	0.50	0.50				0.24	0.40	0.00	0.00	0.12	0.12
Sat Flow, veh/h	1714	1800	1615				1714	3705	0	0	6802	1615
Grp Volume(v), veh/h	788	825	821				376	594	0	0	494	46
Grp Sat Flow(s),veh/h/ln	1714	1800	1615				1714	1805	0	0	1634	1615
Q Serve(g_s), s	39.5	39.3	46.6				20.0	11.0	0.0	0.0	6.7	2.4
Cycle Q Clear(g_c), s	39.5	39.3	46.6				20.0	11.0	0.0	0.0	6.7	2.4
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	858	901	809				403	1453	0	0	777	192
V/C Ratio(X)	0.92	0.92	1.02				0.93	0.41	0.00	0.00	0.64	0.24
Avail Cap(c_a), veh/h	858	901	809				403	1722	0	0	1264	312
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	21.4	23.2				34.9	19.9	0.0	0.0	39.1	37.2
Incr Delay (d2), s/veh	16.3	15.4	35.5				28.4	0.2	0.0	0.0	0.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.5	23.3	28.6				12.6	5.5	0.0	0.0	3.1	1.1
LnGrp Delay(d),s/veh	37.8	36.8	58.7				63.2	20.1	0.0	0.0	39.9	37.8
LnGrp LOS	D	D	F				E	C			D	D
Approach Vol, veh/h		2434						970			540	
Approach Delay, s/veh		44.5						36.8			39.8	
Approach LOS		D						D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		51.1		42.0			26.4	15.6
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		46.6		44.4			21.9	18.0
Max Q Clear Time (g_c+I1), s		48.6		13.0			22.0	8.7
Green Ext Time (p_c), s		0.0		4.5			0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	42.0
HCM 2010 LOS	D

Notes

Scenario Report

Scenario:	LR+P_AM
Command:	LR+P_AM
Volume:	LR+P_AM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.941
Loss Time (sec):	0	Average Delay (sec/veh):	12.8
Optimal Cycle:	180	Level Of Service:	B

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	1	0	0	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	7	5	39		112	0	24		31	1571	12		21	1308	85	
Growth 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	
Initial Bse:	7	5	39		112	0	24		31	1571	12		21	1308	85	
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:	7	5	39		112	0	24		31	1571	12		21	1308	85	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	7	5	39		112	0	24		31	1571	12		21	1308	85	
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:	7	5	39		112	0	24		31	1571	12		21	1308	85	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.88	0.88	0.88		0.67	1.00	0.67		0.19	1.00	1.00		0.05	0.94	0.94	
Lanes:	0.14	0.10	0.76		0.82	0.00	0.18		1.00	0.99	0.01		1.00	1.88	0.12	
Final Sat.:	231	165	1285		1043	0	224		361	1884	14		86	3359	218	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.03	0.03		0.11	0.00	0.11		0.09	0.83	0.83		0.25	0.39	0.39	
Crit Moves:					****					****						
Green/Cycle:	0.11	0.11	0.11		0.11	0.00	0.11		0.89	0.89	0.89		0.89	0.89	0.89	
Volume/Cap:	0.27	0.27	0.27		0.94	0.00	0.94		0.10	0.94	0.94		0.28	0.44	0.44	
Uniform Del:	40.5	40.5	40.5		44.0	0.0	44.0		0.7	3.9	3.9		0.9	1.1	1.1	
IncremntDel:	0.7	0.7	0.7		57.2	0.0	57.2		0.1	11.0	11.0		2.0	0.1	0.1	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Delay Adj:	1.00	1.00	1.00		1.00	0.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Delay/Veh:	41.2	41.2	41.2		101.2	0.0	101.2		0.8	14.9	14.9		2.9	1.2	1.2	
User DelAdj:	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:	41.2	41.2	41.2		101.2	0.0	101.2		0.8	14.9	14.9		2.9	1.2	1.2	
LOS by Move:	D	D	D		F	A	F		A	B	B		A	A	A	
HCM2kAvgQ:	2	2	2		7	0	7		0	39	39		0	5	5	

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.510
Loss Time (sec):	0	Average Delay (sec/veh):	437.6
Optimal Cycle:	49	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0	0	1	0	1	1	0	0	3	0	1	2	0	2	0	0
Volume Module:																		
Base Vol:	0	0	0	278	373	436	0	578	1196	233	1040	0
Growth 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
Initial Bse:	0	0	0	278	373	436	0	578	1196	233	1040	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	0	0	278	373	436	0	578	1196	233	1040	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	278	373	436	0	578	1196	233	1040	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	0	0	278	373	436	0	578	1196	233	1040	0
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	0.77	1.03	1.20	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1252	1680	1964	0	5187	1615	3502	3610	0
Capacity Analysis Module:																		
Vol/Sat:	0.00	0.00	0.00	0.22	0.22	0.22	0.00	0.11	0.74	0.07	0.29	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.36	0.36	0.36	0.00	0.18	0.18	0.46	0.64	0.00
Volume/Cap:	0.00	0.00	0.00	0.62	0.62	0.62	0.00	0.62	4.13	0.14	0.45	0.00
Uniform Del:	0.0	0.0	0.0	26.6	26.6	26.6	0.0	37.9	41.0	15.4	9.0	0.0
IncremntDel:	0.0	0.0	0.0	0.7	0.7	0.7	0.0	1.3	1417	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	27.3	27.3	27.3	0.0	39.2	1458	15.5	9.1	0.0
User DelAdj:	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	27.3	27.3	27.3	0.0	39.2	1458	15.5	9.1	0.0
LOS by Move:	A	A	A	C	C	C	A	D	F	B	A	A
HCM2kAvgQ:	0	0	0	10	10	10	0	7	148	2	8	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.749
Loss Time (sec):	0	Average Delay (sec/veh):	22.2
Optimal Cycle:	74	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			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	1	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	4	0	1
Volume Module:																		
Base Vol:	838	658	780	0	0	0	357	564	0	0	469	44
Growth 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
Initial Bse:	838	658	780	0	0	0	357	564	0	0	469	44
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:	838	658	780	0	0	0	357	564	0	0	469	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	838	658	780	0	0	0	357	564	0	0	469	44
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:	838	658	780	0	0	0	357	564	0	0	469	44
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.12	0.88	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	2012	1579	1615	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:																		
Vol/Sat:	0.42	0.42	0.48	0.00	0.00	0.00	0.20	0.16	0.00	0.00	0.07	0.03
Crit Moves:				****				****				****		
Green/Cycle:	0.65	0.65	0.65	0.00	0.00	0.00	0.26	0.35	0.00	0.00	0.09	0.09
Volume/Cap:	0.65	0.65	0.75	0.00	0.00	0.00	0.75	0.44	0.00	0.00	0.75	0.30
Uniform Del:	10.8	10.8	12.2	0.0	0.0	0.0	33.7	24.7	0.0	0.0	44.4	42.5
IncremntDel:	0.6	0.6	3.0	0.0	0.0	0.0	6.5	0.2	0.0	0.0	5.0	1.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	11.4	11.4	15.2	0.0	0.0	0.0	40.2	24.9	0.0	0.0	49.3	43.7
User DelAdj:	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:	11.4	11.4	15.2	0.0	0.0	0.0	40.2	24.9	0.0	0.0	49.3	43.7
LOS by Move:	B	B	B	A	A	A	D	C	A	A	D	D
HCM2kAvgQ:	14	14	18	0	0	0	12	7	0	0	6	2

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

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	50		0	60		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.964			0.908			0.997			0.989	
Flt Protected		0.966			0.990		0.950			0.950		
Satd. Flow (prot)	0	1676	0	0	1618	0	1710	1894	0	1710	3570	0
Flt Permitted		0.799			0.942		0.064			0.064		
Satd. Flow (perm)	0	1386	0	0	1540	0	115	1894	0	115	3570	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			45			3			22	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		99			235			467			346	
Travel Time (s)		2.3			5.3			10.6			7.9	

Intersection Summary	
Area Type:	Other

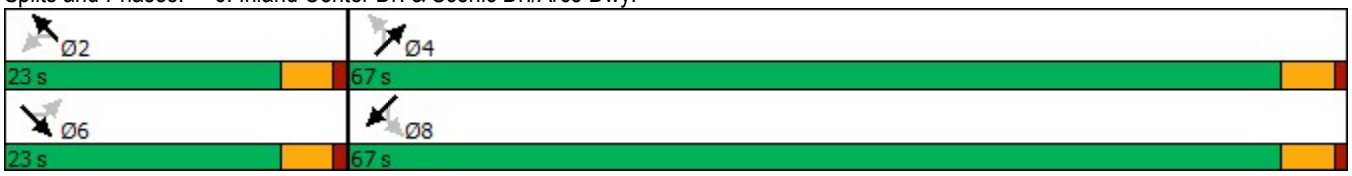
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	118	6	45	12	8	43	22	1261	28	40	1860	150
Future Volume (vph)	118	6	45	12	8	43	22	1261	28	40	1860	150
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	124	6	47	13	8	45	23	1327	29	42	1958	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	177	0	0	66	0	23	1356	0	42	2116	0

Intersection Summary

Lane Group	SEL	SET	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations								
Traffic Volume (vph)	118	6	12	8	22	1261	40	1860
Future Volume (vph)	118	6	12	8	22	1261	40	1860
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		6		2		4		8
Permitted Phases	6		2		4		8	
Detector Phase	6	6	2	2	4	4	8	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.0	23.0	23.0	23.0	67.0	67.0	67.0	67.0
Total Split (%)	25.6%	25.6%	25.6%	25.6%	74.4%	74.4%	74.4%	74.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Min	Min	Min	Min	None	None	None	None
Act Effct Green (s)		14.5		14.5	62.6	62.6	62.6	62.6
Actuated g/C Ratio		0.17		0.17	0.73	0.73	0.73	0.73
v/c Ratio		0.72		0.22	0.28	0.98	0.51	0.81
Control Delay		46.8		15.9	15.3	34.9	33.7	11.9
Queue Delay		0.0		0.0	0.0	39.4	0.0	38.1
Total Delay		46.8		15.9	15.3	74.3	33.7	50.0
LOS		D		B	B	E	C	D
Approach Delay		46.8		15.9		73.3		49.7
Approach LOS		D		B		E		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 86.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 57.6	Intersection LOS: E
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 6: Inland Center Dr. & Scenic Dr./Arco Dwy.



Lane Group	SET	NWT	NEL	NET	SWL	SWT
Lane Group Flow (vph)	177	66	23	1356	42	2116
v/c Ratio	0.72	0.22	0.28	0.98	0.51	0.81
Control Delay	46.8	15.9	15.3	34.9	33.7	11.9
Queue Delay	0.0	0.0	0.0	39.4	0.0	38.1
Total Delay	46.8	15.9	15.3	74.3	33.7	50.0
Queue Length 50th (ft)	82	10	4	606	8	343
Queue Length 95th (ft)	151	44	23	#1090	#69	525
Internal Link Dist (ft)	19	155		387		266
Turn Bay Length (ft)			50		60	
Base Capacity (vph)	312	367	83	1378	83	2602
Starvation Cap Reductn	0	0	0	170	0	641
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.18	0.28	1.12	0.51	1.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	118	6	45	12	8	43	22	1261	28	40	1860	150
Future Volume (veh/h)	118	6	45	12	8	43	22	1261	28	40	1860	150
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	124	6	47	13	8	45	23	1327	29	42	1958	158
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	218	11	56	76	52	162	158	1384	30	128	2531	201
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	996	77	388	167	355	1117	185	1852	40	387	3388	270
Grp Volume(v), veh/h	177	0	0	66	0	0	23	0	1356	42	1031	1085
Grp Sat Flow(s),veh/h/ln	1461	0	0	1639	0	0	185	0	1893	387	1805	1852
Q Serve(g_s), s	6.6	0.0	0.0	0.0	0.0	0.0	7.3	0.0	53.5	9.0	28.2	29.9
Cycle Q Clear(g_c), s	9.7	0.0	0.0	3.1	0.0	0.0	37.2	0.0	53.5	62.5	28.2	29.9
Prop In Lane	0.70		0.27	0.20		0.68	1.00		0.02	1.00		0.15
Lane Grp Cap(c), veh/h	286	0	0	290	0	0	158	0	1414	128	1348	1384
V/C Ratio(X)	0.62	0.00	0.00	0.23	0.00	0.00	0.15	0.00	0.96	0.33	0.76	0.78
Avail Cap(c_a), veh/h	389	0	0	404	0	0	158	0	1414	128	1348	1384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	0.0	31.9	0.0	0.0	17.8	0.0	9.4	37.3	6.2	6.5
Incr Delay (d2), s/veh	2.2	0.0	0.0	0.4	0.0	0.0	0.4	0.0	15.2	1.5	2.7	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	1.4	0.0	0.0	0.4	0.0	33.1	1.0	14.7	15.9
LnGrp Delay(d),s/veh	36.6	0.0	0.0	32.3	0.0	0.0	18.2	0.0	24.7	38.8	8.9	9.5
LnGrp LOS	D			C			B		C	D	A	A
Approach Vol, veh/h		177			66			1379			2158	
Approach Delay, s/veh		36.6			32.3			24.6			9.8	
Approach LOS		D			C			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		16.7		67.0		16.7		67.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.5		62.5		18.5		62.5
Max Q Clear Time (g_c+I1), s		5.1		55.5		11.7		64.5
Green Ext Time (p_c), s		0.2		5.9		0.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1900	1800	1900	1900	1700	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		50	0		0
Storage Lanes	0		0	0		1	0		1	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.91	0.91	1.00	0.91	1.00	0.97	0.95	1.00
Ped Bike Factor												
Frt					0.980	0.850			0.850			
Flt Protected					0.983					0.950		
Satd. Flow (prot)	0	0	0	0	3156	1470	0	5187	1615	3133	3610	0
Flt Permitted					0.983					0.950		
Satd. Flow (perm)	0	0	0	0	3156	1470	0	5187	1615	3133	3610	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)									92			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		680			565			346			310	
Travel Time (s)		15.5			12.8			7.9			7.0	

Intersection Summary	
Area Type:	Other

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	0	0	0	312	448	504	0	729	701	540	1615	0
Future Volume (vph)	0	0	0	312	448	504	0	729	701	540	1615	0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	0	328	472	531	0	767	738	568	1700	0
Shared Lane Traffic (%)						23%						
Lane Group Flow (vph)	0	0	0	0	922	409	0	767	738	568	1700	0

Intersection Summary

Lane Group	SBT	SBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	448	504	729	701	540	1615
Future Volume (vph)	448	504	729	701	540	1615
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	6		4		3	8
Permitted Phases		6		4		
Detector Phase	6	6	4	4	3	8
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5
Total Split (s)	34.6	34.6	43.0	43.0	22.4	65.4
Total Split (%)	34.6%	34.6%	43.0%	43.0%	22.4%	65.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	Max	Max	None	None	None	None
Act Effct Green (s)	30.1	30.1	38.5	38.5	17.9	60.9
Actuated g/C Ratio	0.30	0.30	0.38	0.38	0.18	0.61
v/c Ratio	0.97	0.93	0.38	1.09	1.01	0.77
Control Delay	58.5	63.1	22.9	88.7	83.4	17.6
Queue Delay	0.0	0.0	0.6	6.1	0.0	48.0
Total Delay	58.5	63.1	23.5	94.8	83.4	65.6
LOS	E	E	C	F	F	E
Approach Delay	59.9		58.4			70.0
Approach LOS	E		E			E

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 64.0	Intersection LOS: E
Intersection Capacity Utilization 148.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 7: Inland Center Dr. & I-215 SB Ramps

Lane Group	SBT	SBR	NET	NER	SWL	SWT
Lane Group Flow (vph)	922	409	767	738	568	1700
v/c Ratio	0.97	0.93	0.38	1.09	1.01	0.77
Control Delay	58.5	63.1	22.9	88.7	83.4	17.6
Queue Delay	0.0	0.0	0.6	6.1	0.0	48.0
Total Delay	58.5	63.1	23.5	94.8	83.4	65.6
Queue Length 50th (ft)	318	276	127	~494	~191	389
Queue Length 95th (ft)	#458	#479	161	#722	#304	484
Internal Link Dist (ft)	485		266			230
Turn Bay Length (ft)				50		
Base Capacity (vph)	949	442	1996	678	560	2198
Starvation Cap Reductn	0	0	770	131	0	773
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.93	0.63	1.35	1.01	1.19

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	312	448	504	0	729	701	540	1615	0
Future Volume (veh/h)	0	0	0	312	448	504	0	729	701	540	1615	0
Number				1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1800	1800	1900	0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h				328	674	396	0	767	738	568	1700	0
Adj No. of Lanes				0	2	1	0	3	1	2	2	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				332	735	486	0	1997	622	562	2198	0
Arrive On Green				0.30	0.30	0.30	0.00	0.38	0.38	0.18	0.61	0.00
Sat Flow, veh/h				1104	2441	1615	0	5358	1615	3141	3705	0
Grp Volume(v), veh/h				518	484	396	0	767	738	568	1700	0
Grp Sat Flow(s),veh/h/ln				1745	1800	1615	0	1729	1615	1570	1805	0
Q Serve(g_s), s				29.5	25.7	22.7	0.0	10.7	38.5	17.9	34.8	0.0
Cycle Q Clear(g_c), s				29.5	25.7	22.7	0.0	10.7	38.5	17.9	34.8	0.0
Prop In Lane				0.63		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h				525	542	486	0	1997	622	562	2198	0
V/C Ratio(X)				0.99	0.89	0.81	0.00	0.38	1.19	1.01	0.77	0.00
Avail Cap(c_a), veh/h				525	542	486	0	1997	622	562	2198	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				34.8	33.4	32.4	0.0	22.2	30.8	41.0	14.4	0.0
Incr Delay (d2), s/veh				36.2	19.7	13.9	0.0	0.1	99.6	40.5	1.8	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				19.5	15.7	12.0	0.0	5.1	34.3	10.9	17.8	0.0
LnGrp Delay(d),s/veh				70.9	53.1	46.3	0.0	22.3	130.4	81.6	16.2	0.0
LnGrp LOS				E	D	D		C	F	F	B	
Approach Vol, veh/h					1398			1505			2268	
Approach Delay, s/veh					57.8			75.3			32.6	
Approach LOS					E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			22.4	43.0		34.6		65.4
Change Period (Y+Rc), s			4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s			17.9	38.5		30.1		60.9
Max Q Clear Time (g_c+I1), s			19.9	40.5		31.5		36.8
Green Ext Time (p_c), s			0.0	0.0		0.0		15.1

Intersection Summary	
HCM 2010 Ctrl Delay	51.8
HCM 2010 LOS	D

Notes

Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1800	1800	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	1		1	0		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.86	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected	0.950	0.977					0.950					
Satd. Flow (prot)	1624	1671	1615	0	0	0	1710	3610	0	0	6536	1615
Flt Permitted	0.950	0.977					0.950					
Satd. Flow (perm)	1624	1671	1615	0	0	0	1710	3610	0	0	6536	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			100									200
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			468			310			1611	
Travel Time (s)		14.8			10.6			7.0			36.6	

Intersection Summary	
Area Type:	Other

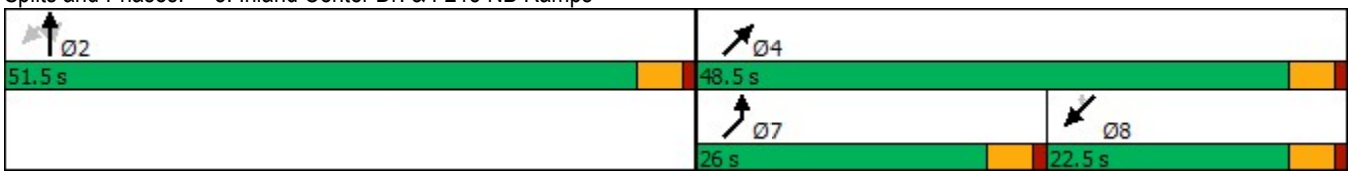
Lane Group	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Traffic Volume (vph)	1180	436	555	0	0	0	394	754	0	0	964	426
Future Volume (vph)	1180	436	555	0	0	0	394	754	0	0	964	426
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	1242	459	584	0	0	0	415	794	0	0	1015	448
Shared Lane Traffic (%)	32%											
Lane Group Flow (vph)	845	856	584	0	0	0	415	794	0	0	1015	448

Intersection Summary

Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Configurations							
Traffic Volume (vph)	1180	436	555	394	754	964	426
Future Volume (vph)	1180	436	555	394	754	964	426
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		2		7	4	8	
Permitted Phases	2		2				8
Detector Phase	2	2	2	7	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	51.5	51.5	51.5	26.0	48.5	22.5	22.5
Total Split (%)	51.5%	51.5%	51.5%	26.0%	48.5%	22.5%	22.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	Max	Max	Max	None	None	None	None
Act Effct Green (s)	47.0	47.0	47.0	21.5	44.0	18.0	18.0
Actuated g/C Ratio	0.47	0.47	0.47	0.22	0.44	0.18	0.18
v/c Ratio	1.11	1.09	0.72	1.13	0.50	0.86	0.99
Control Delay	93.5	87.0	23.4	124.9	21.5	48.6	63.2
Queue Delay	0.0	0.0	0.0	1.0	5.0	0.0	0.0
Total Delay	93.5	87.0	23.4	125.9	26.5	48.6	63.2
LOS	F	F	C	F	C	D	E
Approach Delay		73.2			60.6	53.1	
Approach LOS		E			E	D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 64.2	Intersection LOS: E
Intersection Capacity Utilization 148.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Inland Center Dr. & I-215 NB Ramps



Lane Group	NBL	NBT	NBR	NEL	NET	SWT	SWR
Lane Group Flow (vph)	845	856	584	415	794	1015	448
v/c Ratio	1.11	1.09	0.72	1.13	0.50	0.86	0.99
Control Delay	93.5	87.0	23.4	124.9	21.5	48.6	63.2
Queue Delay	0.0	0.0	0.0	1.0	5.0	0.0	0.0
Total Delay	93.5	87.0	23.4	125.9	26.5	48.6	63.2
Queue Length 50th (ft)	~650	~650	241	~308	185	184	170
Queue Length 95th (ft)	#894	#896	379	#494	240	#229	#375
Internal Link Dist (ft)		572			230	1531	
Turn Bay Length (ft)							50
Base Capacity (vph)	763	785	812	367	1588	1176	454
Starvation Cap Reductn	0	0	0	32	713	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	1.09	0.72	1.24	0.91	0.86	0.99

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1180	436	555	0	0	0	394	754	0	0	964	426
Future Volume (veh/h)	1180	436	555	0	0	0	394	754	0	0	964	426
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1900				1800	1900	0	0	1900	1900
Adj Flow Rate, veh/h	850	1007	584				415	794	0	0	1015	448
Adj No. of Lanes	1	1	1				1	2	0	0	4	1
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	806	846	759				369	1588	0	0	1176	291
Arrive On Green	0.47	0.47	0.47				0.22	0.44	0.00	0.00	0.18	0.18
Sat Flow, veh/h	1714	1800	1615				1714	3705	0	0	6802	1615
Grp Volume(v), veh/h	850	1007	584				415	794	0	0	1015	448
Grp Sat Flow(s),veh/h/ln	1714	1800	1615				1714	1805	0	0	1634	1615
Q Serve(g_s), s	47.0	47.0	30.0				21.5	15.8	0.0	0.0	15.1	18.0
Cycle Q Clear(g_c), s	47.0	47.0	30.0				21.5	15.8	0.0	0.0	15.1	18.0
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	806	846	759				369	1588	0	0	1176	291
V/C Ratio(X)	1.05	1.19	0.77				1.13	0.50	0.00	0.00	0.86	1.54
Avail Cap(c_a), veh/h	806	846	759				369	1588	0	0	1176	291
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	26.5	22.0				39.3	20.1	0.0	0.0	39.8	41.0
Incr Delay (d2), s/veh	47.2	97.3	7.4				85.6	0.2	0.0	0.0	6.8	260.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	32.7	46.1	14.9				18.9	7.9	0.0	0.0	7.3	29.0
LnGrp Delay(d),s/veh	73.7	123.8	29.4				124.8	20.3	0.0	0.0	46.6	301.0
LnGrp LOS	F	F	C				F	C			D	F
Approach Vol, veh/h		2441						1209			1463	
Approach Delay, s/veh		83.8						56.2			124.5	
Approach LOS		F						E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		51.5		48.5			26.0	22.5
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5
Max Green Setting (Gmax), s		47.0		44.0			21.5	18.0
Max Q Clear Time (g_c+I1), s		49.0		17.8			23.5	20.0
Green Ext Time (p_c), s		0.0		6.1			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	88.9
HCM 2010 LOS	F

Notes

Scenario Report

Scenario:	LR+P_PM
Command:	LR+P_PM
Volume:	LR+P_PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Scenic Dr (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.806
Loss Time (sec):	0	Average Delay (sec/veh):	7.9
Optimal Cycle:	74	Level Of Service:	A

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	1! 0	0	1	0 0 1	0	1	0 1 0
Volume Module:												
Base Vol:	12	8	43	118	6	45	22	1261	28	40	1860	150
Growth 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
Initial Bse:	12	8	43	118	6	45	22	1261	28	40	1860	150
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:	12	8	43	118	6	45	22	1261	28	40	1860	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	8	43	118	6	45	22	1261	28	40	1860	150
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:	12	8	43	118	6	45	22	1261	28	40	1860	150
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	0.71	0.71	0.71	0.09	1.00	1.00	0.09	0.94	0.94
Lanes:	0.19	0.13	0.68	0.70	0.03	0.27	1.00	0.98	0.02	1.00	1.85	0.15
Final Sat.:	315	210	1128	937	48	357	165	1853	41	177	3304	266
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.13	0.13	0.13	0.13	0.68	0.68	0.23	0.56	0.56
Crit Moves:					****			****				
Green/Cycle:	0.16	0.16	0.16	0.16	0.16	0.16	0.84	0.84	0.84	0.84	0.84	0.84
Volume/Cap:	0.24	0.24	0.24	0.81	0.81	0.81	0.16	0.81	0.81	0.27	0.67	0.67
Uniform Del:	37.0	37.0	37.0	40.7	40.7	40.7	1.4	3.8	3.8	1.6	2.8	2.8
IncremntDel:	0.5	0.5	0.5	20.1	20.1	20.1	0.5	3.1	3.1	1.0	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	37.5	37.5	37.5	60.8	60.8	60.8	1.9	6.9	6.9	2.5	3.4	3.4
User DelAdj:	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:	37.5	37.5	37.5	60.8	60.8	60.8	1.9	6.9	6.9	2.5	3.4	3.4
LOS by Move:	D	D	D	E	E	E	A	A	A	A	A	A
HCM2kAvgQ:	2	2	2	7	7	7	0	21	21	1	12	12

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

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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 I-215 SB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	0	Average Delay (sec/veh):	133.8
Optimal Cycle:	121	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Protected		
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	0	0	1	0	1	1	0	0	3	0	1	2	0	2	0	0
Volume Module:																		
Base Vol:	0	0	0	312	448	504	0	729	701	540	1615	0
Growth 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
Initial Bse:	0	0	0	312	448	504	0	729	701	540	1615	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	0	0	312	448	504	0	729	701	540	1615	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	312	448	504	0	729	701	540	1615	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	0	0	312	448	504	0	729	701	540	1615	0
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.86	0.86	0.86	1.00	0.91	0.85	0.92	0.95	1.00
Lanes:	0.00	0.00	0.00	0.74	1.06	1.20	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1210	1737	1955	0	5187	1615	3502	3610	0
Capacity Analysis Module:																		
Vol/Sat:	0.00	0.00	0.00	0.26	0.26	0.26	0.00	0.14	0.43	0.15	0.45	0.00
Crit Moves:					****						****	
Green/Cycle:	0.00	0.00	0.00	0.30	0.30	0.30	0.00	0.17	0.17	0.53	0.70	0.00
Volume/Cap:	0.00	0.00	0.00	0.85	0.85	0.85	0.00	0.85	2.61	0.29	0.64	0.00
Uniform Del:	0.0	0.0	0.0	32.6	32.6	32.6	0.0	40.4	41.7	13.1	8.4	0.0
IncremntDel:	0.0	0.0	0.0	4.7	4.7	4.7	0.0	7.7	736.0	0.1	0.6	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	37.2	37.2	37.2	0.0	48.2	777.6	13.2	9.0	0.0
User DelAdj:	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	37.2	37.2	37.2	0.0	48.2	777.6	13.2	9.0	0.0
LOS by Move:	A	A	A	D	D	D	A	D	F	B	A	A
HCM2kAvgQ:	0	0	0	15	15	15	0	11	75	5	15	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 I-215 NB Ramps (NS) / Inland Center Dr (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.945
Loss Time (sec):	0	Average Delay (sec/veh):	35.1
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			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	1	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	4	0	1
Volume Module:																		
Base Vol:	1180	436	555	0	0	0	394	754	0	0	964	426
Growth 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
Initial Bse:	1180	436	555	0	0	0	394	754	0	0	964	426
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:	1180	436	555	0	0	0	394	754	0	0	964	426
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1180	436	555	0	0	0	394	754	0	0	964	426
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:	1180	436	555	0	0	0	394	754	0	0	964	426
Saturation Flow Module:																		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.85	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	0.85
Lanes:	1.46	0.54	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	2547	941	1615	0	0	0	1805	3610	0	0	6916	1615
Capacity Analysis Module:																		
Vol/Sat:	0.46	0.46	0.34	0.00	0.00	0.00	0.22	0.21	0.00	0.00	0.14	0.26
Crit Moves:		****						****				****
Green/Cycle:	0.49	0.49	0.49	0.00	0.00	0.00	0.23	0.51	0.00	0.00	0.28	0.28
Volume/Cap:	0.95	0.95	0.70	0.00	0.00	0.00	0.95	0.41	0.00	0.00	0.50	0.95
Uniform Del:	24.2	24.2	19.8	0.0	0.0	0.0	37.8	15.2	0.0	0.0	30.2	35.3
IncremntDel:	11.3	11.3	2.8	0.0	0.0	0.0	30.5	0.1	0.0	0.0	0.2	29.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	35.6	35.6	22.6	0.0	0.0	0.0	68.3	15.3	0.0	0.0	30.4	64.3
User DelAdj:	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:	35.6	35.6	22.6	0.0	0.0	0.0	68.3	15.3	0.0	0.0	30.4	64.3
LOS by Move:	D	D	C	A	A	A	E	B	A	A	C	E
HCM2kAvgQ:	29	29	14	0	0	0	17	8	0	0	7	18

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